

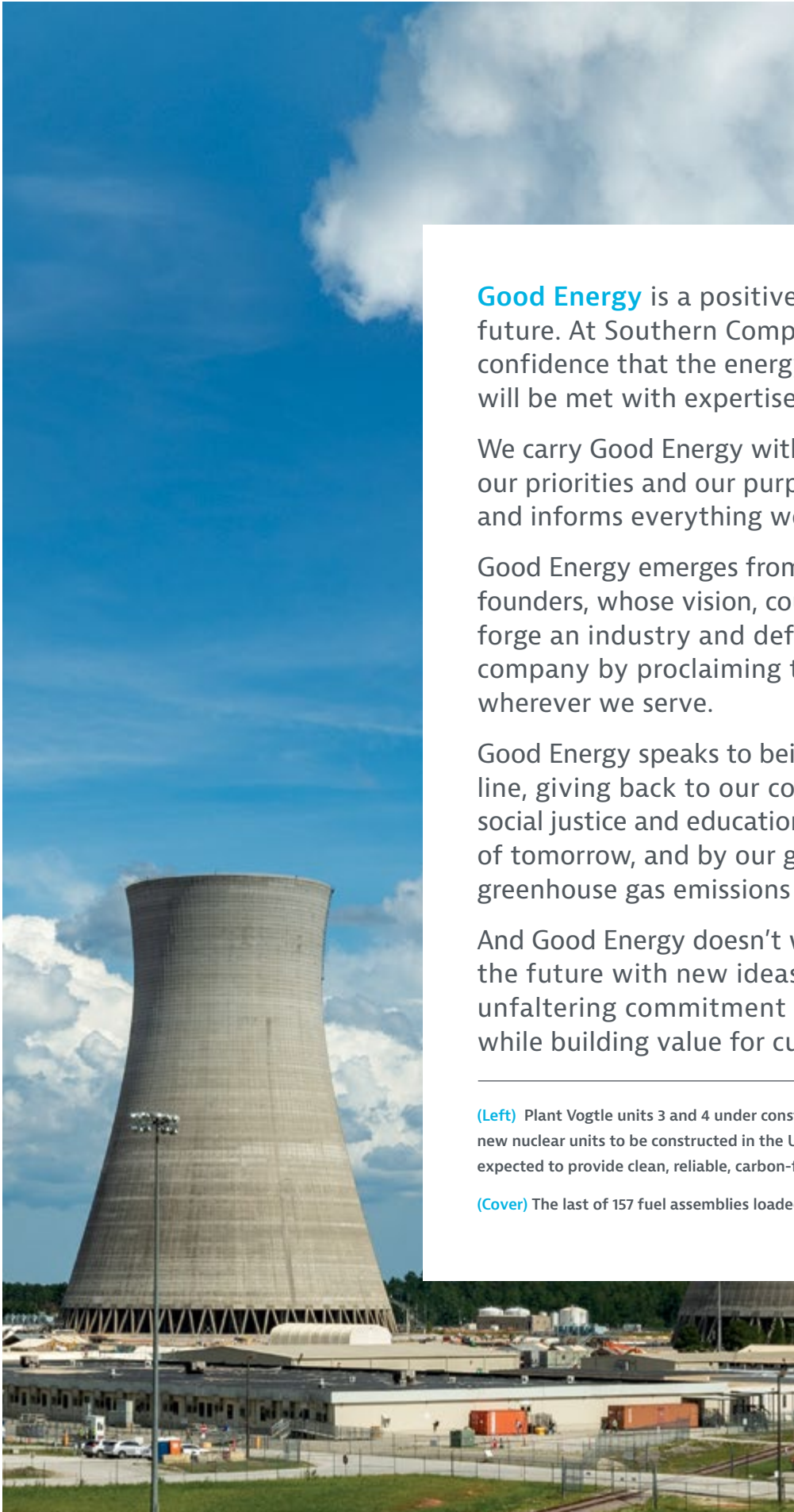
2022
Annual Report

Good Energy

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Good Energy is a positive outlook on life and the future. At Southern Company, it is manifested in a confidence that the energy needs of those we serve will be met with expertise and dedication.

We carry Good Energy with us every day in our people, our priorities and our purpose. It defines our culture and informs everything we do.

Good Energy emerges from the can-do attitude of our founders, whose vision, courage and fortitude helped forge an industry and defined the character of our company by proclaiming that we will be a citizen wherever we serve.

Good Energy speaks to being bigger than our bottom line, giving back to our communities by supporting social justice and educational resources for the leaders of tomorrow, and by our goal to achieve net zero greenhouse gas emissions by 2050.

And Good Energy doesn't wait for the future – it shapes the future with new ideas, new technologies and an unfaltering commitment to make things better – all while building value for customers and investors.

(Left) Plant Vogtle units 3 and 4 under construction near Waynesboro, Georgia. The first new nuclear units to be constructed in the United States in more than 30 years, they are expected to provide clean, reliable, carbon-free energy for the next 60-80 years.

(Cover) The last of 157 fuel assemblies loaded to the Unit 3 reactor core in October 2022.



THOMAS A. FANNING
Chairman, President & CEO,
Southern Company

CHRISTOPHER C. WOMACK
Chairman, President & CEO,
Georgia Power
Incoming President & CEO,
Southern Company

Chairman's Message

Good Energy doesn't wait for the future—it shapes the future with new ideas, new technologies and an unfaltering commitment to make things better for the communities we serve—all while building value for our customers and our investors.

Dear Fellow Shareholders,

At Southern Company, Our Values are essential to our sustained success. Safety First. Unquestionable Trust. Superior Performance. Total Commitment. These values guide our behavior and ensure that we put the needs of those we serve at the center of all we do. Good Energy is a tangible manifestation of those guiding values.

Our Values and Good Energy are serving us well, as this is an eventful time for Southern Company. As this annual report goes to press, progress on Vogtle Unit 3, the first of two new nuclear units currently under construction at Georgia Power's Plant Vogtle, is entering its final stages. This is a historic accomplishment that represents the culmination of years of hard work and planning.

In January of this year, my successor as president and CEO of Southern Company was announced. I am pleased to share that Chris Womack, my long-time colleague and good friend, will succeed me as president of Southern Company on March 31. Chris will then assume the role of CEO at the conclusion of our annual meeting of shareholders on May 24. I will continue to serve Southern Company as executive chairman of the board of directors.

The leadership, vision and integrity Chris has demonstrated throughout his career have uniquely prepared him to guide Southern Company into a new era. With the progress at Plant Vogtle and our continued work towards net zero emissions, the rest of the board of directors and I believe now is an ideal time to transition to new leadership. I look forward to working closely with Chris over the next few months as he assumes his new role, and to focusing on an effective transition to my new position as executive chairman of the board of directors.

Southern Company experienced another exceptional year in 2022. We reported strong adjusted* earnings for 2022 of \$3.60 per share, 19 cents higher than 2021. We are encouraged that the economies within our Southeast service territories remain strong, including robust residential customer growth and economic activity.

Notable 2022 accomplishments are perhaps best appreciated through a brief review of the progress we have made on each of our five strategic priorities:

Excel at the Fundamentals

We take great pride in the resilience of our systems, and our ability to reliably provide for the energy needs of customers, even under challenging circumstances. In 2022, our operations team, generation fleet and power delivery system performed exceedingly well. This included meeting an all-time peak load of over 41,000 megawatts in June and a winter peak of nearly 38,000 megawatts as frigid temperatures over the Christmas weekend resulted in a record December demand for electricity in our service footprint.

Our keen focus on operational excellence and business fundamentals has resulted in a variety of industry awards and recognition. J.D. Power ranked Georgia Power number one in business customer satisfaction for large utilities in the South. Nicor Gas was honored with the Midwest Energy Efficiency Alliance Award for outstanding service to customers in need. Cogent Reports named Alabama Power, Georgia Power and Mississippi Power among the most trusted business partners in the utility industry.

* Not a financial measure under generally accepted accounting principles. See Reconciliation of Non-GAAP Financial Metric on page 21 for additional information and specific adjustments made to this measure by year.

Chairman's Message *(continued)*

Achieve Success with Major Construction Projects

Last year saw significant progress at Plant Vogtle units 3 and 4. All 157 fuel assemblies were loaded to the Unit 3 reactor core in October, and the site team has turned to the testing and start-up process. Cold hydro testing for Unit 4 was completed in December and hot functional testing began this March. Component and system testing activities are steadily increasing in support of eventual fuel load at Unit 4.

Once completed, these units are expected to be reliable sources of carbon-free energy for the next 60-80 years. Moreover, once these two new units are in service and operating alongside the two existing units, Plant Vogtle will be the largest producer of carbon-free energy in the United States.

Support the Building of a National Energy Policy

We believe good public policy can be a driving force to create jobs and generate personal income that will help improve the lives of individuals and families throughout the nation. We continue to be proactively engaged in public policy dialogue and ongoing interaction with legislators and regulators to support a national energy policy that places a premium on innovation, advocating for policies that benefit both our evolving business as well as the customers we serve.

Promote Energy Innovation

Southern Company and TerraPower completed the installation of an Integrated Effects Test in Everett, WA. This was a landmark achievement in the development of the Molten Chloride Fast Reactor—a promising Generation-IV nuclear technology.

Georgia Power worked with Mitsubishi and EPRI to successfully blend hydrogen fuel with natural gas at Plant McDonough-Atkinson, paving the way for additional research on the potential long-term uses of hydrogen in conjunction with existing infrastructure for clean energy production. Southern Company joined with other Southeastern utilities to establish a coalition to pursue federal funding to develop a regional hydrogen hub in the Southeast.

Southern Company was a founding member of the Southeastern Energy Exchange Market (SEEM). SEEM facilitates sub-hourly,

bilateral trading of energy and allows for the sale and purchase of power closer to the time it is consumed, lowering costs for customers and optimizing renewable energy resources.

Value and Develop Our People

Our commitment to employees is reflected in numerous accolades. We were the top-rated utility in Military Times' Best for Vets Employers, and we were recently named the number one utility in Forbes' 2023 ranking of America's Best Large Employers, nearly 100 spots above our closest industry peer.

For the seventh consecutive year, we have been recognized as one of the Top 50 Companies for Diversity by DiversityInc. Some 81% of system employees participated in diversity, equity and inclusion development in 2022. Across the enterprise, employee resource groups, councils and networks bring employees together to cultivate inclusion and a healthy work environment.

I am proud of the remarkable growth and accomplishment Southern Company has experienced during my time as CEO. I take little personal credit, however, as I have been privileged to work alongside exceptional leaders and thousands of employees who make smart decisions every day.

As Chris Womack takes the reins as president and CEO later this year, I have never been more enthusiastic about the future. And even as a new generation of leaders emerges and we move boldly forward with new innovations, we remain committed to the ideals that have characterized our company for more than 100 years. The original vision and purpose of our founder, James Mitchell, is not forgotten. Customers remain at the center of all we do, and our mission continues to be bigger than our bottom line.

It has been my privilege to serve this great company and its shareholders. Thank you for your continued confidence in Southern Company.

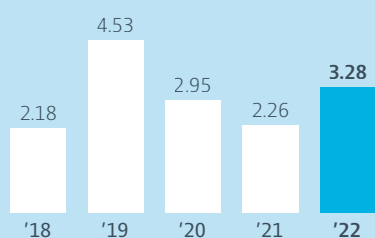
Sincerely,



Thomas A. Fanning

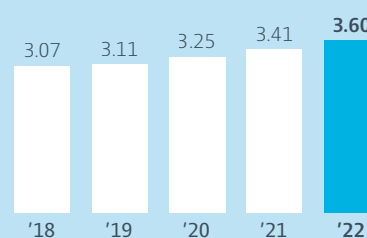
March 27, 2023

Financial Highlights



Basic Earnings Per Share

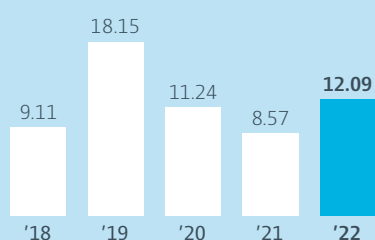
(in dollars)



Basic Earnings Per Share - Excluding Items*

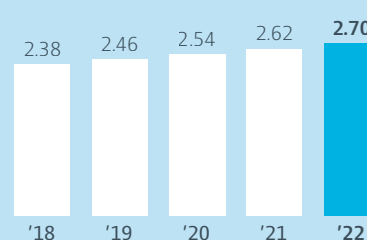
(in dollars)

* Not a financial measure under generally accepted accounting principles. See Reconciliation of Non-GAAP Financial Metric on page 21 for additional information and specific adjustments made to this measure by year.



Return On Average Common Equity

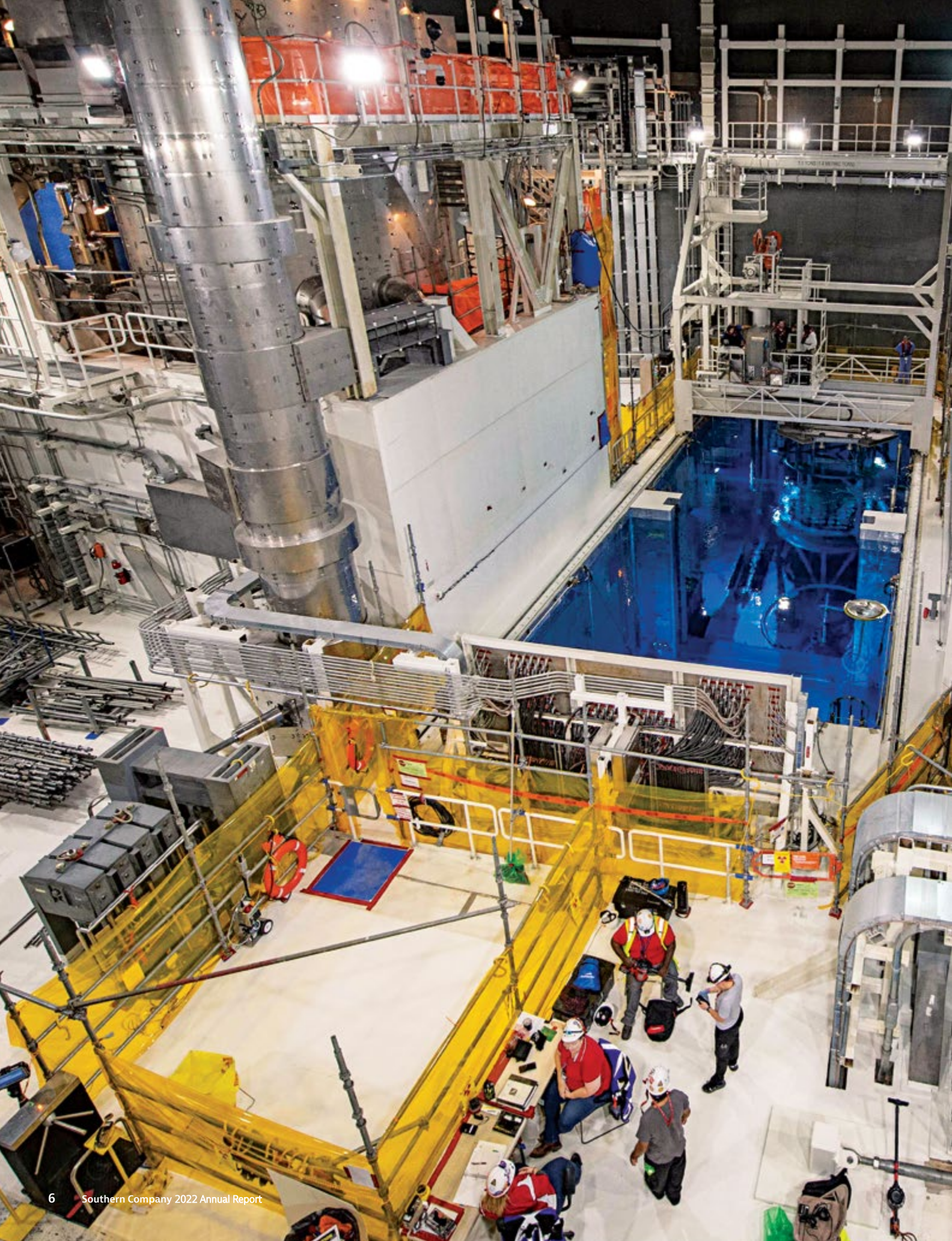
(percent)



Dividends Per Share

(in dollars)

	2022	2021	Change
Operating Revenues (in millions)	\$29,279	\$23,113	26.7%
Earnings (in millions)	\$3,524	\$2,393	47.3%
Basic Earnings Per Share	\$3.28	\$2.26	45.1%
Diluted Earnings Per Share	\$3.26	\$2.24	45.5%
Dividends Per Share (amount paid)	\$2.70	\$2.62	3.1%
Dividend Yield (year-end, percent)	3.8	3.8	-%
Average Shares Outstanding (in millions)	1,075	1,061	1.3%
Return On Average Common Equity (percent)	12.09	8.57	41.1%
Book Value Per Share	\$27.93	\$26.30	6.2%
Market Price Per Share (year-end, closing)	\$71.41	\$68.58	4.1%
Total Market Value Of Common Stock (year-end, in millions)	\$77,750	\$72,693	7.0%
Total Assets (in millions)	\$134,891	\$127,534	5.8%
Total Kilowatt-Hour Sales (in millions)	204,273	193,380	5.6%
Retail	147,981	143,370	3.2%
Wholesale	56,292	50,010	12.6%
Total Utility Customers (year-end, in thousands)	8,795	8,722	0.8%





Good Energy

Makes History

The two new nuclear units currently under construction at Georgia Power's Plant Vogtle are the first such units to be built in the United States in more than 30 years. Once online, they are expected to provide reliable, affordable and carbon-free energy for the next 60-80 years.

This past October marked a historic milestone for nuclear energy in the United States as fuel load was completed at Vogtle Unit 3, one of two new nuclear units under construction at Plant Vogtle near Waynesboro, Georgia. During fuel load, nuclear technicians and operators from Southern Nuclear and Westinghouse safely transferred 157 fuel assemblies from the Unit 3 spent fuel pool to the Unit 3 reactor core.

In early March 2023, Unit 3 reached initial criticality, a major step in the start-up testing sequence in which operators safely started a nuclear reaction inside the reactor. Achieving initial criticality is necessary to continue start-up of the unit and generate sufficient heat for the production of electricity. Now in the final phases of testing, Unit 3 is projected to be in service by May or June of 2023.

Unit 4 also saw substantial progress in 2022. Cold hydro testing was successfully completed in December and hot functional testing began this March. Fuel load is the next major milestone for Unit 4, which is projected to be in service by late 2023 or the first quarter of 2024.

The new Vogtle units are an essential part of Georgia Power's commitment to delivering clean, safe, reliable and affordable energy to its 2.7 million customers. Once operating, the two new units will be sources of clean, carbon-free energy, and they are expected to generate enough electricity to power more than 500,000 homes and businesses, and to play a vital role in the Southern Company system's transition to a net zero future.

"These new nuclear units represent a critical, long-term investment in our energy future," said Chairman, President and CEO of Georgia Power, Chris Womack. Womack, who is also the president- and CEO-elect of Southern Company, added, "We are making history here in Georgia and in the United States as we approach bringing online the first new nuclear units to be built in this country in over 30 years."

Importantly, as of year-end 2022, more than 70 million safe hours of work had been completed on the new Vogtle units, reflecting the company's commitment to one of its core values, Safety First.

Once online, Southern Company subsidiary Southern Nuclear will operate the new units on behalf of Georgia Power and its co-owners, Oglethorpe Power, MEAG Power and Dalton Utilities.

(Left) The interior of the containment vessel at Plant Vogtle Unit 3

Good Energy

Succeeds through Innovation

Southern Company enjoys a long-standing reputation as a leader in research and development. Even as work continues on the new nuclear units at Georgia Power's Plant Vogtle, the company and its subsidiaries are actively innovating on many other fronts.

Southern Company and TerraPower completed the installation of an Integrated Effects Test at TerraPower's laboratory in Everett, WA. The largest chloride salt system in the world to be built by the nuclear sector, this is a landmark achievement in the development of the Molten Chloride Fast Reactor – a promising Generation-IV nuclear technology. The goal is to deliver a commercial-scale, cost-effective, carbon-free molten salt reactor energy source by 2035.

Georgia Power and Mitsubishi Power, in collaboration with EPRI, were able to successfully blend hydrogen fuel and natural gas at Plant McDonough-Atkinson. The project was the first in North America to validate a blend of 20% hydrogen in an advanced-class natural gas turbine, resulting in an approximately 7% reduction in carbon emissions compared with units that burn only natural gas. This demonstration paves the way for additional research on potential long-term uses of existing infrastructure in clean energy production.

In November, Southern Company and other Southeastern utilities established a coalition to pursue federal funding under the Infrastructure Investment and Jobs Act to develop a regional hydrogen hub in the Southeast.

The Southeastern Energy Exchange Market (SEEM), of which Southern Company is a founding member, began operations in 2022. SEEM facilitates sub-hourly, bilateral trading of energy and allows participants to buy and sell power closer to the time the energy is consumed. SEEM lowers costs to customers and optimizes renewable energy resources.

Southern Company Gas is working to bring renewable natural gas production to market, potentially leading to significant emissions reductions, job creation and economic investment.

Mississippi Power supported the chartering of the first electric school bus in the state of Mississippi, replacing a diesel bus. The new bus can transport students within a 138-mile range on a single charge.

(Top Right) Integrated Effects Test at TerraPower's laboratory in Everett, WA; **(Bottom Images, Left to Right)** Dr. Kathryn Huff, assistant secretary, U.S. Department of Energy's Office of Nuclear Energy, at the Integrated Effects Test commissioning ceremony; Georgia Power's Plant McDonough-Atkinson; Plant McDonough-Atkinson control room during hydrogen blending.







Good Energy

Drives to Net Zero

Southern Company and its subsidiaries deliver the first-ever net zero energy TOUR Championship.

When the PGA TOUR returned to Atlanta's historic East Lake Golf Club to crown the 2022 FedExCup champion, players and patrons enjoyed the first-ever net zero energy TOUR Championship.

Southern Company has been the Official Energy Partner of the PGA TOUR since 1999, and a Proud Partner of the TOUR Championship since 2016. As one of golf's premier events, the TOUR Championship provides an outstanding opportunity to showcase the company's work to achieve net zero greenhouse gas emissions by 2050, and to highlight meaningful progress toward producing a more sustainable event.

"Providing the first Tour Championship with net zero energy emissions was an extension of our commitment to clean energy as we move toward a net zero future," explains Southern Company Brand Director Emily O'Brien. "This commitment is a fundamental component of our brand identity."

Some 90 percent of the tournament golf cart fleet was electric and, through subsidiary PowerSecure, Southern Company replaced 11,000 gallons of traditional diesel fuel with renewable fuels for all on-site generation during TOUR Championship week. A collaboration with Georgia Power offset some 300,000 kilowatt hours in on-course energy with 500,000 kilowatt hours of renewable energy credits. Renewable natural gas was used for clubhouse activities such as cooking, showering and laundry.

The PGA TOUR also presents a wonderful platform to give back to the communities where we live and work. Since its first playing in 1998, the TOUR Championship has donated more than \$42 million to East Lake and the greater Atlanta community for education, health and wellness and neighborhood revitalization programs.

We recognize the importance of strong values through our sponsorship of the Payne Stewart Award. We have contributed nearly \$9 million to the Stewart Family Foundation and to the charitable causes of some of golf's most values-driven players.

Southern Company also presented the inaugural Charlie Sifford Award to Renee Powell, the second African-American woman to compete on the LPGA TOUR. The award honors individuals who have helped advance diversity in golf.

If you would like to learn more about the company's association with golf, visit our online annual report at southerncompany.info/ar22.



(Top Left) Billy Horschel tees off at the 2022 TOUR Championship

(Inset Images, from the Left) Solar charger in the player's parking lot; 2022 Payne Stewart award winner Billy Andrade; East Lake Golf Club; volunteers at the company's Good Energy Pavilion.

Good Energy

Advances Equity and Justice

Southern Company has used its voice, influence and resources to advance a more inclusive, equitable and just society in the communities it is privileged to serve. Promoting education equity has been a key focus of that effort.

Southern Company and its foundations have committed \$225 million through 2025 to advance equity and justice in our communities. We have been vocal and clear about our equity beliefs and focused our volunteer efforts, giving and community investment strategies to four key pillars to maximize impact: education equity, criminal justice equity, economic empowerment and energy empowerment.

In alignment with our commitment to education equity, and in partnership with IN-ROADS, Inc., the United Negro College Fund and the Thurgood Marshall College Fund, the Southern Company Foundation in 2022 announced \$10 million in grants to support historically Black colleges and universities (HBCUs). These grants will foster student talent, provide job training in the communities that surround HBCU campuses and fund four sustainability professorships.

Together with Apple, Southern Company is also a founding partner in PROPEL, a first-of-its-kind technology and innovation hub for HBCUs. PROPEL will support the entire HBCU community, which includes more than 100 colleges and universities nationwide, through a robust virtual platform accessible to all HBCU students and faculty.

"We are proud to help open greater doors of opportunity for HBCU students," says Chris Womack, chairman, president and CEO of Georgia Power, and president- and CEO-elect of Southern Company. "We must equip students with the support and resources they need today so they can be the change agents of tomorrow."

Alana Burrell is a recent recipient of a PROPEL Student Impact Scholarship, with support from Southern Company and Apple. A native of Stone Mountain, Georgia, Ms. Burrell is currently a senior majoring in computer science at Spelman College. "I am grateful for the opportunity to attend Spelman on the PROPEL Student Impact Scholarship," says Ms. Burrell. "It has made it possible for me to complete my education without any additional financial burden or debt."

To learn more about the company's commitment to education equity and Ms. Burrell's personal story, visit our online annual report at southerncompany.info/ar22.

(Right) Alana Burrell, senior at Spelman College and PROPEL Student Impact Scholarship recipient; **(Top Right)** Ms. Burrell at historic Sisters Chapel on the Spelman campus; **(Middle Right)** Alumnae Arch on the campus Oval; **(Lower Right)** Spelman's office of admissions



Board of Directors



Thomas A. Fanning



Christopher C. Womack*



Janaki Akella



Henry A. Clark III



Anthony F. Earley, Jr.



David J. Grain



Colette D. Honorable



Donald M. James



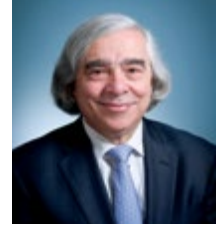
John D. Johns



Dale E. Klein



David E. Meador*



Ernest J. Moniz



William G. Smith, Jr.



Kristine L. Svinicki



Lizanne Thomas*



E. Jenner Wood III

Management Council



Thomas A. Fanning



Bryan D. Anderson



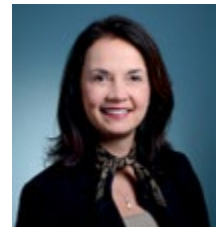
Stanley W. Connally, Jr.



Christopher Cummiskey



Martin B. Davis



Kimberly S. Greene



James Y. Kerr II



Stephen E. Kuczynski



J. Jeffrey Peoples



Daniel S. Tucker



Anthony L. Wilson



Christopher C. Womack

Board of Directors

Thomas A. Fanning

Chairman, President and CEO, Southern Company
Atlanta, GA | Age 66 | elected 2010

Christopher C. Womack*

Chairman, President and CEO, Georgia Power
Atlanta, GA | Age 65 | elected 2023

Janaki Akella

Digital Transformation Leader
Google LLC (technology)
Palo Alto, CA | Age 62 | elected 2019

Henry A. Clark III

Retired Senior Advisor, Evercore Inc.
(global independent investment advisory firm)
Hobe Sound, FL | Age 73 | elected 2009

Anthony F. Earley, Jr.

Retired Chairman, President and CEO
PG&E Corporation (utility)
Bloomfield Hills, MI | Age 73 | elected 2019

David J. Grain

CEO and Managing Director
Grain Management, LLC (private equity firm)
Sarasota, FL | Age 60 | elected 2012

Colette D. Honorable

Partner, Reed Smith LLP (legal)
Washington, DC | Age 53 | elected 2020

Donald M. James

Retired Chairman and CEO,
Vulcan Materials Company (construction materials)
Pensacola, FL | Age 74 | elected 1999

John D. Johns

Senior Advisor, Blackstone Inc.,
Retired Chairman of DLI North America Inc.,
the oversight company for Protective Life Insurance
Corporation (insurance)
Birmingham, AL | Age 71 | elected 2015

Dale E. Klein

Associate Vice Chancellor of Research, University
of Texas System; Retired Chairman, U.S. Nuclear
Regulatory Commission (energy)
Austin, TX | Age 75 | elected 2010

David E. Meador*

Retired Vice Chairman and Chief Administrative
Officer, DTE Energy (energy)
Bloomfield Hills, MI | Age 66 | elected 2023

Ernest J. Moniz

Cecil and Ida Green Professor of Physics and
Engineering Systems emeritus, Massachusetts
Institute of Technology; CEO and Co-Chair,
Nuclear Threat Initiative (energy); Former U.S.
Secretary of Energy
Brookline, MA | Age 78 | elected 2018

William G. Smith, Jr.

Chairman, President and CEO,
Capital City Bank Group, Inc. (banking)
Tallahassee, FL | Age 69 | elected 2006

Kristine L. Svinicki

Managing Director, The Svinicki Group LLC
Former Chairman, U.S. Nuclear Regulatory
Commission (energy)
Miami Beach, FL | Age 56 | elected 2021

Lizanne Thomas*

Of Counsel, Jones Day (legal)
Atlanta, GA | Age 65 | elected 2023

E. Jenner Wood III

Retired Corporate Executive Vice President–
Wholesale Banking, SunTrust Banks, Inc. (banking)
Atlanta, GA | Age 71 | elected 2012

* Christopher C. Womack has been elected to the board of directors effective March 31, 2023. David E. Meador and Lizanne Thomas have been elected to the board of directors effective April 1, 2023.

Management Council

Thomas A. Fanning

Chairman, President and CEO
Fanning, 66, joined the company in 1980

Bryan D. Anderson

Executive Vice President and President,
External Affairs
Anderson, 56, joined the company in 2010

Stanley W. Connally, Jr.

Executive Vice President, Operations,
Southern Company
Chairman, President and Chief Executive Officer,
Southern Company Services, Inc.
Connally, 53, joined the company in 1989

Christopher Cumiskey

Executive Vice President, Chief Commercial
and Customer Solutions Officer
Cumiskey, 48, joined the company in 2013

Martin B. Davis

Executive Vice President and
Chief Information Officer
Davis, 60, joined the company in 2015

Kimberly S. Greene

Chairman, President and CEO,
Southern Company Gas
Greene, 56, joined the company in 1991

James Y. Kerr II

Executive Vice President, Chief Legal Officer
and Chief Compliance Officer
Kerr, 59, joined the company in 2014

Stephen E. Kuczynski

Chairman, President and CEO, Southern Nuclear
Kuczynski, 60, joined the company in 2011

J. Jeffrey Peoples

Chairman, President and CEO, Alabama Power
Peoples, 64, joined the company in 1984

Daniel S. Tucker

Executive Vice President and Chief Financial Officer
Tucker, 52, joined the company in 1998

Anthony L. Wilson

Chairman, President and CEO, Mississippi Power
Wilson, 59, joined the company in 1984

Christopher C. Womack

Chairman, President and CEO, Georgia Power
Womack, 65, joined the company in 1988

On January 5, 2023, the Southern Company board of directors announced a succession plan for Chairman, President and CEO Thomas A. Fanning; also impacted were several other leaders shown in this annual report. Notably, Georgia Power Chairman, President and CEO Christopher C. Womack will become Southern Company president on March 31, 2023, and he will become CEO following Southern Company's 2023 Annual Meeting of Stockholders on May 24, 2023. For this report, all Management Council members are identified by their roles at the time of publication.

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Definitions

ARP

Georgia Power's Alternate Rate Plans approved by the Georgia PSC; 2019 ARP for the years 2020 through 2022 and 2022 ARP for the years 2023 through 2025

AFUDC

Allowance for funds used during construction

Alabama Power

Alabama Power Company

Amended and Restated Loan Guarantee Agreement

Loan guarantee agreement entered into by Georgia Power with the DOE in 2014, as amended and restated in March 2019, under which the proceeds of borrowings may be used to reimburse Georgia Power for Eligible Project Costs incurred in connection with its construction of Plant Vogtle Units 3 and 4

AOCI

Accumulated other comprehensive income

ARO

Asset retirement obligation

ASU

Accounting Standards Update

Atlanta Gas Light

Atlanta Gas Light Company, a wholly-owned subsidiary of Southern Company Gas

Atlantic Coast Pipeline

Atlantic Coast Pipeline, LLC, a joint venture to construct and operate a natural gas pipeline in which Southern Company Gas held a 5% interest through March 24, 2020

Bechtel

Bechtel Power Corporation, the primary contractor for the remaining construction activities for Plant Vogtle Units 3 and 4

Bechtel Agreement

The 2017 construction completion agreement between the Vogtle Owners and Bechtel

CCN

Certificate of convenience and necessity

CCR

Coal combustion residuals

CCR Rule

Disposal of Coal Combustion Residuals from Electric Utilities final rule published by the EPA in 2015

Chattanooga Gas

Chattanooga Gas Company, a wholly-owned subsidiary of Southern Company Gas

Clean Air Act

Clean Air Act Amendments of 1990

CO₂

Carbon dioxide

COD

Commercial operation date

Contractor Settlement Agreement

The December 31, 2015 agreement between Westinghouse and the Vogtle Owners resolving disputes between the Vogtle Owners and the EPC Contractor under the Vogtle 3 and 4 Agreement

Cooperative Energy

Electric generation and transmission cooperative in Mississippi

COVID-19

The novel coronavirus disease declared a pandemic by the World Health Organization and the Centers for Disease Control and Prevention in March 2020

CWIP

Construction work in progress

Dalton

City of Dalton, Georgia, an incorporated municipality in the State of Georgia, acting by and through its Board of Water, Light, and Sinking Fund Commissioners

Dalton Pipeline

A pipeline facility in Georgia in which Southern Company Gas has a 50% undivided ownership interest

DOE

U.S. Department of Energy

ECCR

Georgia Power's Environmental Compliance Cost Recovery tariff

ECO Plan

Mississippi Power's environmental compliance overview plan

ELG

Effluent limitations guidelines

Eligible Project Costs

Certain costs of construction relating to Plant Vogtle Units 3 and 4 that are eligible for financing under the loan guarantee program established under Title XVII of the Energy Policy Act of 2005

EPA

U.S. Environmental Protection Agency

EPC Contractor

Westinghouse and its affiliate, WECTEC Global Project Services Inc.; the former engineering, procurement, and construction contractor for Plant Vogtle Units 3 and 4

FASB

Financial Accounting Standards Board

FCC

Federal Communications Commission

FERC

Federal Energy Regulatory Commission

FFB

Federal Financing Bank

FFB Credit Facilities

Note purchase agreements among the DOE, Georgia Power, and the FFB and related promissory notes which provide for two multi-advance term loan facilities

Definitions

Fitch

Fitch Ratings, Inc.

FP&L

Florida Power and Light Company

GAAP

U.S. generally accepted accounting principles

Georgia Power

Georgia Power Company

GHG

Greenhouse gas

GRAM

Atlanta Gas Light's Georgia Rate Adjustment Mechanism

Guarantee Settlement Agreement

The June 9, 2017 settlement agreement between the Vogtle Owners and Toshiba related to certain payment obligations of the EPC Contractor guaranteed by Toshiba

Gulf Power

Gulf Power Company, until January 1, 2019 a wholly-owned subsidiary of Southern Company; effective January 1, 2021, Gulf Power Company merged with and into FP&L, with FP&L remaining as the surviving company

Heating Degree Days

A measure of weather, calculated when the average daily temperatures are less than 65 degrees Fahrenheit

Heating Season

The period from November through March when Southern Company Gas' natural gas usage and operating revenues are generally higher

HLBV

Hypothetical liquidation at book value

IGCC

Integrated coal gasification combined cycle, the technology originally approved for Mississippi Power's Kemper County energy facility

Illinois Commission

Illinois Commerce Commission

Internal Revenue Code

Internal Revenue Code of 1986, as amended

IPP

Independent power producer

IRP

Integrated resource plan

IRS

Internal Revenue Service

ITAAC

Inspections, Tests, Analyses, and Acceptance Criteria, standards established by the NRC

ITC

Investment tax credit

JEA

Jacksonville Electric Authority

Jefferson Island

Jefferson Island Storage and Hub, L.L.C, which owns a natural gas storage facility in Louisiana consisting of two salt dome caverns; a subsidiary of Southern Company Gas through December 1, 2020

KWH

Kilowatt-hour

LIBOR

London Interbank Offered Rate

LIFO

Last-in, first-out

LNG

Liquefied natural gas

LOCOM

Lower of weighted average cost or current market price

LTSA

Long-term service agreement

Marketers

Marketers selling retail natural gas in Georgia and certificated by the Georgia PSC

MEAG Power

Municipal Electric Authority of Georgia

MGP

Manufactured gas plant

Mississippi Power

Mississippi Power Company

mmBtu

Million British thermal units

Moody's

Moody's Investors Service, Inc.

MPUS

Mississippi Public Utilities Staff

MRA

Municipal and Rural Associations

MW

Megawatt

natural gas distribution utilities

Southern Company Gas' natural gas distribution utilities (Nicor Gas, Atlanta Gas Light, Virginia Natural Gas, and Chattanooga Gas)

NCCR

Georgia Power's Nuclear Construction Cost Recovery tariff

NDR

Alabama Power's Natural Disaster Reserve

NextEra Energy

NextEra Energy, Inc.

Definitions

Nicor Gas

Northern Illinois Gas Company, a wholly-owned subsidiary of Southern Company Gas

NO_x

Nitrogen oxide

NRC

U.S. Nuclear Regulatory Commission

NYMEX

New York Mercantile Exchange, Inc.

NYSE

New York Stock Exchange

OCI

Other comprehensive income

OPC

Oglethorpe Power Corporation (an electric membership corporation)

OTC

Over-the-counter

PennEast Pipeline

PennEast Pipeline Company, LLC, a joint venture in which Southern Company Gas has a 20% ownership interest

PEP

Mississippi Power's Performance Evaluation Plan

Pivotal LNG

Pivotal LNG, Inc., through March 24, 2020, a wholly-owned subsidiary of Southern Company Gas

PowerSecure

PowerSecure, Inc., a wholly-owned subsidiary of Southern Company

PowerSouth

PowerSouth Energy Cooperative

PPA

Power purchase agreements, as well as, for Southern Power, contracts for differences that provide the owner of a renewable facility a certain fixed price for the electricity sold to the grid

PSC

Public Service Commission

PTC

Production tax credit

Rate CNP

Alabama Power's Rate Certificated New Plant, consisting of Rate CNP New Plant, Rate CNP Compliance, Rate CNP PPA, and Rate CNP Depreciation

Rate ECR

Alabama Power's Rate Energy Cost Recovery

Rate NDR

Alabama Power's Rate Natural Disaster Reserve

Rate RSE

Alabama Power's Rate Stabilization and Equalization

Registrants

Southern Company, Alabama Power, Georgia Power, Mississippi Power, Southern Power Company, and Southern Company Gas

ROE

Return on equity

S&P

S&P Global Ratings, a division of S&P Global Inc.

SCS

Southern Company Services, Inc., the Southern Company system service company and a wholly-owned subsidiary of Southern Company

SEC

U.S. Securities and Exchange Commission

SEGCO

Southern Electric Generating Company, 50% owned by each of Alabama Power and Georgia Power

Sequent

Sequent Energy Management, L.P. and Sequent Energy Canada Corp., wholly-owned subsidiaries of Southern Company Gas through June 30, 2021

SNG

Southern Natural Gas Company, L.L.C., a pipeline system in which Southern Company Gas has a 50% ownership interest

SO₂

Sulfur dioxide

SOFR

Secured Overnight Financing Rate

Southern Company

The Southern Company

Southern Company Gas

Southern Company Gas and its subsidiaries

Southern Company Gas Capital

Southern Company Gas Capital Corporation, a 100%-owned subsidiary of Southern Company Gas

Southern Company power pool

The operating arrangement whereby the integrated generating resources of the traditional electric operating companies and Southern Power (excluding subsidiaries) are subject to joint commitment and dispatch in order to serve their combined load obligations

Southern Company system

Southern Company, the traditional electric operating companies, Southern Power, Southern Company Gas, SEGCO, Southern Nuclear, SCS, Southern Linc, PowerSecure, and other subsidiaries

Southern Holdings

Southern Company Holdings, Inc., a wholly-owned subsidiary of Southern Company

Southern Linc

Southern Communications Services, Inc., a wholly-owned subsidiary of Southern Company, doing business as Southern Linc

Definitions

Southern Nuclear

Southern Nuclear Operating Company, Inc., a wholly-owned subsidiary of Southern Company

Southern Power

Southern Power Company and its subsidiaries

SouthStar

SouthStar Energy Services, LLC (a Marketer), a wholly-owned subsidiary of Southern Company Gas

SP Solar

SP Solar Holdings I, LP, a limited partnership indirectly owning substantially all of Southern Power's solar and battery energy storage facilities, in which Southern Power has a 67% ownership interest

SP Wind

SP Wind Holdings II, LLC, a holding company owning a portfolio of eight operating wind facilities, in which Southern Power is the controlling partner in a tax equity arrangement

SRR

Mississippi Power's System Restoration Rider, a tariff for retail property damage cost recovery and reserve

Subsidiary Registrants

Alabama Power, Georgia Power, Mississippi Power, Southern Power, and Southern Company Gas

Tax Reform Legislation

The Tax Cuts and Jobs Act, which became effective on January 1, 2018

Toshiba

Toshiba Corporation, the parent company of Westinghouse

traditional electric operating companies

Alabama Power, Georgia Power, and Mississippi Power

VCM

Vogtle Construction Monitoring

VIE

Variable interest entity

Virginia Commission

Virginia State Corporation Commission

Virginia Natural Gas

Virginia Natural Gas, Inc., a wholly-owned subsidiary of Southern Company Gas

Vogtle 3 and 4 Agreement

Agreement entered into with the EPC Contractor in 2008 by Georgia Power, acting for itself and as agent for the Vogtle Owners, and rejected in bankruptcy in July 2017, pursuant to which the EPC Contractor agreed to design, engineer, procure, construct, and test Plant Vogtle Units 3 and 4

Vogtle Owners

Georgia Power, Oglethorpe Power Corporation, MEAG Power, and Dalton

Vogtle Services Agreement

The June 2017 services agreement between the Vogtle Owners and the EPC Contractor, as amended and restated in July 2017, for the EPC Contractor to transition construction management of Plant Vogtle Units 3 and 4 to Southern Nuclear and to provide ongoing design, engineering, and procurement services to Southern Nuclear

WACOG

Weighted average cost of gas

Westinghouse

Westinghouse Electric Company LLC

Williams Field Services Group

Williams Field Services Group, LLC

Reconciliation of Non-GAAP Financial Metric

<i>(In millions, except earnings per share)</i>	Year Ended December 31,				
	2022	2021	2020	2019	2018
Net Income – GAAP	\$ 3,524	\$ 2,393	\$ 3,119	\$ 4,739	\$ 2,226
Average Shares Outstanding	1,075	1,061	1,058	1,046	1,020
Basic Earnings Per Share	\$ 3.28	\$ 2.26	\$ 2.95	\$ 4.53	\$ 2.18
Net Income – GAAP	\$ 3,524	\$ 2,393	\$ 3,119	\$ 4,739	\$ 2,226
Less Non-GAAP Excluding Items:					
Acquisition, Disposition, and Integration Impacts ⁽¹⁾	(115)	209	60	2,516	35
Tax Impact	32	(90)	(22)	(1,081)	(294)
Estimated Loss on Plants Under Construction ⁽²⁾	(199)	(1,703)	(328)	(27)	(1,102)
Tax Impact	51	433	84	—	376
Wholesale Gas Services ⁽³⁾	—	18	17	215	42
Tax Impact	—	(3)	(3)	(52)	(4)
Impairments ⁽⁴⁾	(119)	(91)	(206)	(108)	—
Tax Impact	—	19	101	26	—
Litigation Settlement Proceeds ⁽⁵⁾	—	—	—	—	24
Tax Impact	—	—	—	—	(6)
Loss on Extinguishment of Debt ⁽⁶⁾	—	(23)	(29)	—	—
Tax Impact	—	6	7	—	—
Earnings Guidance Comparability Items⁽⁷⁾:					
Adoption of Tax Reform	—	—	—	—	27
Net Income – Excluding Items	\$ 3,874	\$ 3,618	\$ 3,438	\$ 3,250	\$ 3,128
Basic Earnings Per Share – Excluding Items	\$ 3.60	\$ 3.41	\$ 3.25	\$ 3.11	\$ 3.07

- Net income for the year ended December 31, 2022 includes impairment charges totaling \$131 million pre-tax (\$99 million after-tax) and other disposition impacts associated with the sales of two Southern Company Gas natural gas storage facilities. Net income for the year ended December 31, 2021 includes: (i) a \$93 million pre-tax (\$99 million after-tax) gain associated with the termination of a leasehold interest in assets associated with two leveraged lease projects; (ii) \$16 million of income tax benefits recognized as the result of another leveraged lease investment disposition; and (iii) a \$121 million pre-tax (\$92 million after-tax) gain on the sale of Sequent, as well as \$85 million of additional tax expense due to the resulting changes in state apportionment rates. Net income for the year ended December 31, 2020 includes: (i) \$39 million pre-tax (\$23 million after-tax) gain on the sale of Plant Mankato and (ii) a \$22 million pre-tax (\$16 million after-tax) gain on the sale of a natural gas storage facility. Net income for the year ended December 31, 2019 includes: (i) a \$2.6 billion pre-tax (\$1.4 billion after-tax) gain on the sale of Gulf Power; (ii) a \$23 million pre-tax (\$88 million after-tax) gain on the sale of Plant Nacagdoches; and (iii) \$18 million pre tax (\$11 million after tax) of other acquisition and disposition impacts, partially offset by: (i) a \$58 million pre-tax (\$52 million after-tax) net loss, including impairment charges, associated with the sales of PowerSecure's utility infrastructure services and lighting businesses and (ii) a \$24 million pre-tax (\$17 million after-tax) impairment charge in contemplation of the sale of Pivotal LNG and Atlantic Coast Pipeline. Net income for the year ended December 31, 2018 includes: (i) a net combined \$249 million pre-tax gain (\$93 million after-tax loss) on the sales of Elizabethtown Gas, Elkton Gas, Florida City Gas, and Pivotal Home Solutions, including a related impairment charge; (ii) a \$119 million pre-tax (\$89 million after tax) impairment charge associated with the sales of Plants Stanton and Oleander; and (iii) \$95 million pre tax (\$77 million after tax) of other acquisition, disposition, and integration costs.
- Net income for the years ended December 31, 2022, 2021, 2020, and 2018 includes aggregate net charges of \$183 million pre tax (\$137 million after tax), \$1.7 billion pre tax (\$1.3 billion after tax), \$325 million pre tax (\$242 million after tax), and \$1.1 billion pre tax (\$0.8 billion after tax), respectively, for estimated probable losses associated with Georgia Power's construction of Plant Vogtle Units 3 and 4. Further charges related to Plant Vogtle Units 3 and 4 may occur; however, the amounts and timing of any such charges are uncertain. Net income for all periods presented also includes charges (net of salvage proceeds), associated legal expenses (net of insurance recoveries), and tax impacts related to Mississippi Power's Kemper IGCC. Mississippi Power expects to incur additional pre-tax period costs to complete dismantlement of the abandoned gasifier-related assets and site restoration activities, including related costs for compliance and safety, asset retirement obligation accretion, and property taxes, net of salvage, totaling approximately \$15 million annually through 2025.
- Net income for the years ended December 31, 2021, 2020, 2019, and 2018 includes the Wholesale Gas Services business, which was sold on July 1, 2021. Presenting net income and earnings per share excluding Wholesale Gas Services provided an additional measure of operating performance that excluded the volatility resulting from mark-to-market and lower of weighted average cost or current market price accounting adjustments.
- Net income for the year ended December 31, 2022 include an impairment charge associated with goodwill at PowerSecure. Net income for the years ended December 31, 2021, 2020, and 2019 includes impairment charges associated with two leveraged leases. Net income for the year ended December 31, 2021 also includes pre-tax impairment charges totaling \$84 million (\$67 million after tax) related to Southern Company Gas' investment in the PennEast Pipeline project. Net income for the year ended December 31, 2019 also includes impairment charges associated with a natural gas storage facility. Impairment charges may occur in the future; however, the amounts and timing of any such charges are uncertain.
- Net income for the year ended December 31, 2018 includes the settlement proceeds of Mississippi Power's claim for lost revenue resulting from the 2010 Deepwater Horizon oil spill. No further proceeds are expected.
- Net income for the years ended December 31, 2021 and 2020 includes costs associated with the extinguishment of debt at Southern Company. Further debt extinguishment charges may occur at Southern Company or its non-regulated subsidiaries; however, the amounts and timing of any such costs are uncertain.
- Net income for the year ended December 31, 2018 includes net tax benefits as a result of implementing the Tax Reform Legislation. During 2018, Southern Company obtained and analyzed additional information that was not initially available or reported as provisional amounts at December 31, 2017. Southern Company believes presentation of earnings per share excluding this adjustment provided investors with information comparable to guidance and used such measure to evaluate performance.

Cautionary Statement Regarding Forward-Looking Statements

Southern Company's Annual Report contains forward-looking statements. Forward-looking statements include, among other things, statements concerning the potential and expected effects of the continued COVID-19 pandemic, regulated rates, the strategic goals for the business, customer and sales growth, economic conditions, cost recovery and other rate actions, projected equity ratios, current and proposed environmental regulations and related compliance plans and estimated expenditures, GHG emissions reduction goals, pending or potential litigation matters, access to sources of capital, projections for the qualified pension plans, postretirement benefit plans, and nuclear decommissioning trust fund contributions, financing activities, completion dates and costs of construction projects, matters related to the abandonment of the Kemper IGCC, completion of announced dispositions, filings with state and federal regulatory authorities, federal and state income tax benefits, estimated sales and purchases under power sale and purchase agreements, and estimated construction plans and expenditures. In some cases, forward-looking statements can be identified by terminology such as "may," "will," "could," "would," "should," "expects," "plans," "anticipates," "believes," "estimates," "projects," "predicts," "potential," or "continue" or the negative of these terms or other similar terminology. There are various factors that could cause actual results to differ materially from those suggested by the forward-looking statements; accordingly, there can be no assurance that such indicated results will be realized. These factors include:

- the impact of recent and future federal and state regulatory changes, including tax, environmental, and other laws and regulations to which Southern Company and its subsidiaries are subject, as well as changes in application of existing laws and regulations;
- the extent and timing of costs and legal requirements related to CCR;
- current and future litigation or regulatory investigations, proceedings, or inquiries, including litigation and other disputes related to the Kemper County energy facility and Plant Vogtle Units 3 and 4;
- the effects, extent, and timing of the entry of additional competition in the markets in which Southern Company's subsidiaries operate, including from the development and deployment of alternative energy sources;
- variations in demand for electricity and natural gas;
- available sources and costs of natural gas and other fuels and commodities;
- the ability to complete necessary or desirable pipeline expansion or infrastructure projects, limits on pipeline capacity, public and policymaker support for such projects, and operational interruptions to natural gas distribution and transmission activities;
- transmission constraints;
- the ability to control costs and avoid cost and schedule overruns during the development, construction, and operation of facilities or other projects, including Plant Vogtle Units 3 and 4 (which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale) and Plant Barry Unit 8, due to current and/or future challenges which include, but are not limited to, changes in labor costs, availability, and productivity; challenges with the management of contractors or vendors; subcontractor performance; adverse weather conditions; shortages, delays, increased costs, or inconsistent quality of equipment, materials, and labor; contractor or supplier delay; the impacts of inflation; delays due to judicial or regulatory action; nonperformance under construction, operating, or other agreements; operational readiness, including specialized operator training and required site safety programs; engineering or design problems or any remediation related thereto; design and other licensing-based compliance matters including, for Plant Vogtle Unit 4, inspections and the timely submittal by Southern Nuclear of the ITAAC documentation and the related investigations, reviews, and approvals by the NRC necessary to support NRC authorization to load fuel; challenges with start-up activities, including major equipment failure, or system integration; and/or operational performance; continued challenges related to the COVID-19 pandemic or future pandemic health events; continued public and policymaker support for projects; environmental and geological conditions; delays or increased costs to interconnect facilities to transmission grids; and increased financing costs as a result of changes in market interest rates or as a result of project delays;
- the ability to overcome or mitigate the current challenges at Plant Vogtle Units 3 and 4, as described in Note 2 to the financial statements under "Georgia Power – Nuclear Construction," that could further impact the cost and schedule for the project;
- legal proceedings and regulatory approvals and actions related to construction projects, such as Plant Vogtle Units 3 and 4 and Plant Barry Unit 8, including PSC approvals and FERC and NRC actions;
- under certain specified circumstances, a decision by holders of more than 10% of the ownership interests of Plant Vogtle Units 3 and 4 not to proceed with construction;
- the notices of tender by OPC and Dalton of a portion of their ownership interests in Plant Vogtle Units 3 and 4 to Georgia Power, including related litigation;
- in the event Georgia Power becomes obligated to provide funding to MEAG Power with respect to the portion of MEAG Power's ownership interest in Plant Vogtle Units 3 and 4 involving JEA, any inability of Georgia Power to receive repayment of such funding;
- the ability to construct facilities in accordance with the requirements of permits and licenses (including satisfaction of NRC requirements), to satisfy any environmental performance standards and the requirements of tax credits and other incentives, and to integrate facilities into the Southern Company system upon completion of construction;
- investment performance of the employee and retiree benefit plans and nuclear decommissioning trust funds;

Cautionary Statement Regarding Forward-Looking Statements

- advances in technology, including the pace and extent of development of low- to no-carbon energy and battery energy storage technologies and negative carbon concepts;
- performance of counterparties under ongoing renewable energy partnerships and development agreements;
- state and federal rate regulations and the impact of pending and future rate cases and negotiations, including rate actions relating to ROE, equity ratios, additional generating capacity, and fuel and other cost recovery mechanisms;
- the ability to successfully operate the traditional electric operating companies' and SEGCO's generation, transmission, and distribution facilities, Southern Power's generation facilities, and Southern Company Gas' natural gas distribution and storage facilities and the successful performance of necessary corporate functions;
- the inherent risks involved in operating and constructing nuclear generating facilities;
- the inherent risks involved in transporting and storing natural gas;
- the performance of projects undertaken by the non-utility businesses and the success of efforts to invest in and develop new opportunities;
- internal restructuring or other restructuring options that may be pursued;
- potential business strategies, including acquisitions or dispositions of assets or businesses, which cannot be assured to be completed or beneficial to Southern Company or its subsidiaries;
- the ability of counterparties of Southern Company and its subsidiaries to make payments as and when due and to perform as required;
- the ability to obtain new short- and long-term contracts with wholesale customers;
- the direct or indirect effect on the Southern Company system's business resulting from cyber intrusion or physical attack and the threat of cyber and physical attacks;
- global and U.S. economic conditions, including impacts from recession, inflation, interest rate fluctuations, and financial market conditions, and the results of financing efforts;
- access to capital markets and other financing sources;
- changes in Southern Company's and any of its subsidiaries' credit ratings;
- the replacement of LIBOR with an alternative reference rate;
- the ability of the traditional electric operating companies to obtain additional generating capacity (or sell excess generating capacity) at competitive prices;
- catastrophic events such as fires, earthquakes, explosions, floods, tornadoes, hurricanes and other storms, droughts, pandemic health events, political unrest, wars, or other similar occurrences;
- the potential effects of the continued COVID-19 pandemic;
- the direct or indirect effects on the Southern Company system's business resulting from incidents affecting the U.S. electric grid, natural gas pipeline infrastructure, or operation of generating or storage resources;
- impairments of goodwill or long-lived assets;
- the effect of accounting pronouncements issued periodically by standard-setting bodies; and
- other factors discussed elsewhere herein and in other reports filed by the Registrants from time to time with the SEC.

Southern Company expressly disclaims any obligation to update any forward-looking statements.

Available Information

Southern Company's Annual Report on Form 10-K for the year ended December 31, 2022 (Form 10-K), as well as other documents filed by Southern Company pursuant to the Securities Exchange Act of 1934, as amended, are available electronically at <http://www.sec.gov>.

A copy of the Form 10-K as filed with the SEC will be provided without charge upon written request to the office of the Corporate Secretary. Requests for copies should be directed to the Corporate Secretary, 30 Ivan Allen Jr. Blvd., N.W., Atlanta, GA 30308.

The "Management's Discussion and Analysis of Financial Condition and Results of Operations" herein generally discusses 2022 and 2021 items and year-to-year comparisons between 2022 and 2021. Discussions of 2020 items and year-to-year comparisons between 2021 and 2020 that are not included in this Annual Report can be found in Item 7 of Southern Company's Annual Report on Form 10-K for the year ended December 31, 2021, which was filed with the SEC on February 16, 2022.

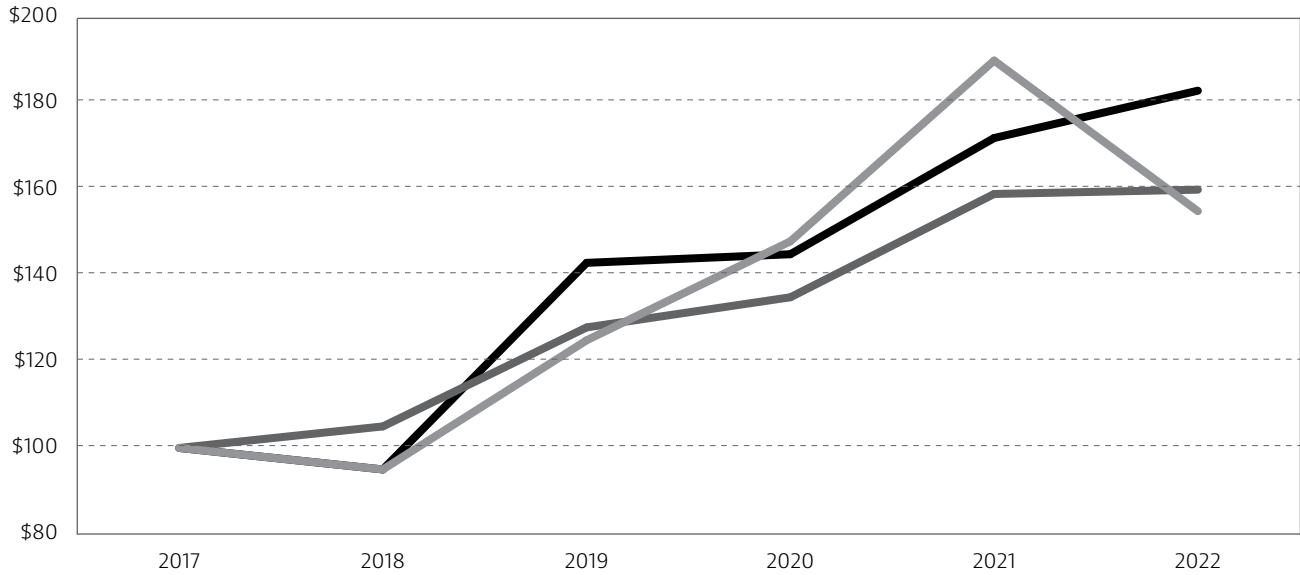
Southern Company Business

Southern Company is a holding company that owns all of the outstanding common stock of three traditional electric operating companies, Southern Power Company, and Southern Company Gas. The traditional electric operating companies – Alabama Power, Georgia Power, and Mississippi Power – are each operating public utility companies providing electric service to retail customers in three Southeastern states in addition to wholesale customers in the Southeast. Southern Power Company is also an operating public utility company. The term “Southern Power” when used herein refers to Southern Power Company and its subsidiaries, while the term “Southern Power Company” when used herein refers only to the Southern Power parent company. Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy projects, and sells electricity at market-based rates in the wholesale market. Southern Company Gas is an energy services holding company whose primary business is the distribution of natural gas in four states – Illinois, Georgia, Virginia, and Tennessee – through the natural gas distribution utilities. Southern Company Gas is also involved in several other businesses that are complementary to the distribution of natural gas.

Southern Company also owns SCS, Southern Linc, Southern Holdings, Southern Nuclear, PowerSecure, and other direct and indirect subsidiaries. SCS, the system service company, has contracted with Southern Company, each of the Subsidiary Registrants, Southern Nuclear, SEGCO, and other subsidiaries to furnish, at direct or allocated cost and upon request, the following services: general executive and advisory, general and design engineering, operations, purchasing, accounting, finance, treasury, legal, tax, information technology, marketing, auditing, insurance and pension administration, human resources, systems and procedures, digital wireless communications, cellular tower space, and other services with respect to business and operations, construction management, and Southern Company power pool transactions. Southern Linc provides digital wireless communications for use by Southern Company and its subsidiary companies and also markets these services to the public and provides fiber optics services through its subsidiary, Southern Telecom, Inc. Southern Linc’s system covers approximately 122,000 square miles in the Southeast. Southern Holdings is an intermediate holding company subsidiary, which invests in various projects. Southern Nuclear operates and provides services to the Southern Company system’s nuclear power plants and is currently managing construction of and developing Plant Vogtle Units 3 and 4, which are co-owned by Georgia Power. PowerSecure develops distributed energy and resilience solutions and deploys microgrids for commercial, industrial, governmental, and utility customers.

Five-Year Cumulative Performance Graph

This performance graph compares the cumulative total shareholder return on Southern Company's common stock with the Standard & Poor's 500 index and the Philadelphia Utility Index for the past five years. The graph assumes that \$100 was invested on December 29, 2017 in Southern Company's common stock and each of the indices and that all dividends were reinvested. The stockholder return shown for the five-year historical period may not be indicative of future performance.



	2017	2018	2019	2020	2021	2022
— Southern Company	100	96	146	147	171	185
— Philadelphia Utilities Index	100	104	131	135	159	160
— S&P 500	100	96	126	149	192	157

Management's Report on Internal Control Over Financial Reporting

The management of Southern Company is responsible for establishing and maintaining an adequate system of internal control over financial reporting as required by the Sarbanes-Oxley Act of 2002 and as defined in Exchange Act Rule 13a-15(f). A control system can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Under management's supervision, an evaluation of the design and effectiveness of Southern Company's internal control over financial reporting was conducted based on the framework in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that Southern Company's internal control over financial reporting was effective as of December 31, 2022.

Deloitte & Touche LLP, as auditors of Southern Company's financial statements, has issued an attestation report on the effectiveness of Southern Company's internal control over financial reporting as of December 31, 2022, which is included herein.



Thomas A. Fanning

Chairman, President, and Chief Executive Officer



Daniel S. Tucker

Executive Vice President and Chief Financial Officer

February 15, 2023

Report of Independent Registered Public Accounting Firm

To the stockholders and the Board of Directors of The Southern Company and Subsidiary Companies

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of The Southern Company and Subsidiary Companies (Southern Company) as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). We also have audited Southern Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Southern Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America. Also, in our opinion, Southern Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by COSO.

Basis for Opinions

Southern Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these financial statements and an opinion on Southern Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to Southern Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Report of Independent Registered Public Accounting Firm

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the Audit Committee of Southern Company's Board of Directors and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Impact of Rate Regulation on the Financial Statements – Refer to Note 1 (Summary of Significant Accounting Policies – Regulatory Assets and Liabilities) and Note 2 (Regulatory Matters) to the financial statements

Critical Audit Matter Description

Southern Company's traditional electric operating companies and natural gas distribution utilities (the "regulated utility subsidiaries"), which represent approximately 88% of Southern Company's consolidated operating revenues for the year ended December 31, 2022 and 87% of its consolidated total assets at December 31, 2022, are subject to rate regulation by their respective state Public Service Commissions or other applicable state regulatory agencies and wholesale regulation by the Federal Energy Regulatory Commission (collectively, the "Commissions"). Management has determined that the regulated utility subsidiaries meet the requirements under accounting principles generally accepted in the United States of America to utilize specialized rules to account for the effects of rate regulation in the preparation of its financial statements. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, including, but not limited to, property, plant, and equipment; other regulatory assets; other regulatory liabilities; other cost of removal obligations; deferred charges and credits related to income taxes; under and over recovered regulatory clause revenues; operating revenues; operations and maintenance expenses; and depreciation and amortization.

The Commissions set the rates the regulated utility subsidiaries are permitted to charge customers. Rates are determined and approved in regulatory proceedings based on an analysis of the applicable regulated utility subsidiary's costs to provide utility service and a return on, and recovery of, its investment in the utility business. Current and future regulatory decisions can have an impact on the recovery of costs, the rate of return earned on investments, and the timing and amount of assets to be recovered through rates. The Commissions' regulation of rates is premised on the full recovery of prudently incurred costs and a reasonable rate of return on invested capital. While Southern Company's regulated utility subsidiaries expect to recover costs from customers through regulated rates, there is a risk that the Commissions will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of all amounts invested in the utility business and a reasonable return on those investments.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures (e.g., asset retirement costs, property damage reserves, and remaining net book values of retired assets) and the high degree of subjectivity involved in assessing the potential impact of future regulatory orders on the financial statements. Management judgments include assessing the likelihood of (1) recovery in future rates of incurred costs, (2) a disallowance of part of the cost of recently completed plant or plant under construction, and/or (3) a refund to customers. Given that management's accounting judgments are based on assumptions about the outcome of future decisions by the Commissions, auditing these judgments required specialized knowledge of accounting for rate regulation and the rate setting process due to its inherent complexities and significant auditor judgment to evaluate management estimates and the subjectivity of audit evidence.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the Commissions included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and/or deferred as regulatory assets, and (2) refunds or future reductions in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We read relevant regulatory orders issued by the Commissions for the regulated utility subsidiaries, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the Commissions' treatment of similar costs under similar circumstances. We evaluated the external information and compared it to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected filings with the Commissions by Southern Company's regulated utility subsidiaries and other interested parties that may impact the regulated utility subsidiaries' future rates for any evidence that might contradict management's assertions.

Report of Independent Registered Public Accounting Firm

- We evaluated regulatory filings for any evidence that intervenors are challenging full recovery of the cost of any capital projects. We tested selected costs included in capitalized project costs for completeness and accuracy.
- We obtained representation from management regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities to assess management's assertion that amounts are probable of recovery, refund, or a future reduction in rates.
- We evaluated Southern Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.

Disclosure of Uncertainties – Plant Vogtle Units 3 and 4 Construction – Refer to Note 2 (Regulatory Matters – Georgia Power – Nuclear Construction) to the financial statements

Critical Audit Matter Description

As discussed in Note 2 to the financial statements, the ultimate recovery of Georgia Power Company's (Georgia Power) investment in the construction of Plant Vogtle Units 3 and 4 is subject to multiple uncertainties. Such uncertainties include the potential impact of future decisions by Georgia Power's regulators (particularly the Georgia Public Service Commission) and potential actions by the co-owners of the Vogtle project. In addition, Georgia Power's ability to meet its cost and schedule forecasts could impact its ability to fully recover its investment in the project. While the project is not subject to a cost cap, Georgia Power's cost and schedule forecasts are subject to numerous uncertainties which could impact cost recovery. The projected schedule for Unit 3 primarily depends on the progression of final component and pre-operational testing and start-up, which may be impacted by further equipment, component, and/or other operational challenges. The projected schedule for Unit 4 primarily depends on potential impacts arising from Unit 4 testing activities overlapping with Unit 3 start-up and commissioning; maintaining overall construction productivity and production levels, particularly in subcontractor scopes of work; and maintaining appropriate levels of craft laborers. As Unit 4 completes construction and transitions further into testing, ongoing and potential future challenges include the timeframe and duration of hot functional and other testing; the pace and quality of remaining commodities installation; completion of documentation to support Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) submittals; the pace of remaining work package closures and system turnovers; and the availability of craft, supervisory, and technical support resources. Ongoing or future challenges for both units also include management of contractors and vendors; subcontractor performance; and/or related cost escalation. New challenges also may continue to arise, as Unit 3 completes start-up and commissioning and Unit 4 moves further into testing and start-up, which may result in required engineering changes or remediation related to plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale). These challenges may result in further schedule delays and/or cost increases.

The ultimate recovery of Georgia Power's investment in Plant Vogtle Units 3 and 4 is subject to the outcome of future assessments by management as well as Georgia Public Service Commission decisions in future regulatory proceedings. After considering the significant level of uncertainty that exists regarding the future recoverability of these costs since the ultimate outcome of these matters is subject to the outcome of future assessments by management, as well as Georgia PSC decisions in future regulatory proceedings, Georgia Power recorded pre-tax charges to income of \$183 million in 2022.

In addition, management has disclosed the status, risks, and uncertainties associated with Plant Vogtle Units 3 and 4, including (1) the status of construction and testing; (2) the status of regulatory proceedings; (3) the status of legal actions or issues involving the co-owners of the project; and (4) other matters which could impact the ultimate recoverability of Georgia Power's investment in the project. We identified as a critical audit matter the evaluation of Georgia Power's identification and disclosure of events and uncertainties that could impact the ultimate cost recovery of its investment in the construction of Plant Vogtle Units 3 and 4. This critical audit matter involved significant audit effort requiring specialized industry and construction expertise, extensive knowledge of rate regulation, and difficult and subjective judgments.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to Georgia Power's identification and disclosure of events and uncertainties that could impact the ultimate cost recovery of its investment in the construction of Plant Vogtle Units 3 and 4 included the following, among others:

- We tested the effectiveness of internal controls over the on-going evaluation, monitoring, and disclosure of matters related to the construction and ultimate cost recovery of Plant Vogtle Units 3 and 4.
- We involved construction specialists to assist in our evaluation of the reasonableness of the methodology and assumptions used to determine the forecasted costs and the projected in-service dates for Plant Vogtle Units 3 and 4 and Georgia Power's processes for on-going evaluation and monitoring of the construction schedule.
- We attended meetings with Georgia Power and Southern Company officials, project managers (including contractors), independent regulatory monitors, and co-owners of the project to evaluate and monitor construction status and identify cost and schedule challenges.
- We read reports of external independent monitors employed by the Georgia Public Service Commission to monitor the status of construction at Plant Vogtle Units 3 and 4 to evaluate the completeness of Georgia Power's disclosure of the uncertainties impacting the ultimate cost recovery of its investment in the construction of Plant Vogtle Units 3 and 4.

Report of Independent Registered Public Accounting Firm

- We inquired of Georgia Power and Southern Company officials and project managers regarding the status of construction, the construction schedule, and cost forecasts to assess the financial statement disclosures with respect to project status and potential risks and uncertainties to the achievement of such forecasts.
- We inspected regulatory filings and transcripts of Georgia Public Service Commission hearings regarding the construction and cost recovery of Plant Vogtle Units 3 and 4 to identify potential challenges to the recovery of Georgia Power's construction costs and to evaluate the disclosures with respect to such uncertainties.
- We inquired of Georgia Power and Southern Company management and internal and external legal counsel regarding any potential legal actions or issues arising from project construction or issues involving the co-owners of the project.
- We monitored the status of reviews and inspections by the Nuclear Regulatory Commission to identify potential impediments to the licensing and commercial operation of the project that could impact the ultimate cost recovery of Plant Vogtle Units 3 and 4.
- We compared the financial statement disclosures relating to this matter to the information gathered through the conduct of all our procedures to evaluate whether there were omissions relating to significant facts or uncertainties regarding the status of construction or other factors which could impact the ultimate cost recovery of Plant Vogtle Units 3 and 4.
- We obtained representation from management regarding disclosure of all matters related to the cost and/or status of the construction of Plant Vogtle Units 3 and 4, including matters related to a co-owner or regulatory development, that could impact the recovery of the related costs.

Deloitte & Touche LLP

Atlanta, Georgia

February 15, 2023

We have served as Southern Company's auditor since 2002.

Management's Discussion and Analysis of Financial Condition and Results of Operations

OVERVIEW

Business Activities

Southern Company is a holding company that owns all of the common stock of three traditional electric operating companies, Southern Power, and Southern Company Gas and owns other direct and indirect subsidiaries. The primary businesses of the Southern Company system are electricity sales by the traditional electric operating companies and Southern Power and the distribution of natural gas by Southern Company Gas. Southern Company's reportable segments are the sale of electricity by the traditional electric operating companies, the sale of electricity in the competitive wholesale market by Southern Power, and the sale of natural gas and other complementary products and services by Southern Company Gas. See Note 16 to the financial statements for additional information.

- The traditional electric operating companies – Alabama Power, Georgia Power, and Mississippi Power – are vertically integrated utilities providing electric service to retail customers in three Southeastern states in addition to wholesale customers in the Southeast.
- Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy projects, and sells electricity at market-based rates in the wholesale market. Southern Power continually seeks opportunities to execute its strategy to create value through various transactions including acquisitions, dispositions, and sales of partnership interests, development and construction of new generating facilities, and entry into PPAs primarily with investor-owned utilities, IPPs, municipalities, electric cooperatives, and other load-serving entities, as well as commercial and industrial customers. In general, Southern Power commits to the construction or acquisition of new generating capacity only after entering into or assuming long-term PPAs for the new facilities.
- Southern Company Gas is an energy services holding company whose primary business is the distribution of natural gas. Southern Company Gas owns natural gas distribution utilities in four states – Illinois, Georgia, Virginia, and Tennessee – and is also involved in several other complementary businesses. Southern Company Gas manages its business through three reportable segments – gas distribution operations, gas pipeline investments, and gas marketing services, which includes SouthStar, a Marketer and provider of energy-related products and services to natural gas markets – and one non-reportable segment, all other. Prior to the sale of Sequent on July 1, 2021, Southern Company Gas' reportable segments also included wholesale gas services. See Notes 7, 15, and 16 to the financial statements for additional information.

Southern Company's other business activities include providing distributed energy and resilience solutions and deploying microgrids for commercial, industrial, governmental, and utility customers, as well as investments in telecommunications. Management continues to evaluate the contribution of each of these activities to total shareholder return and may pursue acquisitions, dispositions, and other strategic ventures or investments accordingly.

See FUTURE EARNINGS POTENTIAL herein for a discussion of the many factors that could impact the Registrants' future results of operations, financial condition, and liquidity.

Recent Developments

Alabama Power

On July 12, 2022, the Alabama PSC approved the following items:

- Alabama Power's petition for a certificate of convenience and necessity authorizing Alabama Power to complete the acquisition of the Calhoun Generating Station. The transaction closed on September 30, 2022 and the related costs are being recovered through Rate CNP New Plant, which reflected an increase in annual revenues of \$34 million, or 0.6%, effective with November 2022 billings.
- An increase to Rate ECR effective with August 2022 billings, which resulted in an increase of approximately \$310 million annually. The approved changes in the Rate ECR factor have no significant effect on Alabama Power's net income, but do impact the related operating cash flows.
- Modifications to Rate NDR.
- An accounting order authorizing Alabama Power to create a reliability reserve separate from the NDR and transition the previous Rate NDR authority related to reliability expenditures to the reliability reserve. Alabama Power may make accruals to the reliability reserve if the NDR balance exceeds \$35 million. At December 31, 2022, Alabama Power accrued \$166 million to the reserve.

On September 23, 2022, the FERC authorized Alabama Power to use updated depreciation rates from its 2021 depreciation study effective January 2023. The updated depreciation rates are expected to result in an approximately \$500 million increase in annual depreciation expense.

On November 1, 2022, the Alabama PSC approved an increase to Rate ECR of approximately \$500 million annually effective with December 2022 billings. The approved changes in the Rate ECR factor have no significant effect on Alabama Power's net income, but do impact operating cash flows related to fuel cost recovery.

Management's Discussion and Analysis of Financial Condition and Results of Operations

On December 1, 2022, Alabama Power submitted calculations for Rate CNP Compliance for 2023 which resulted in an annual revenue increase of approximately \$255 million, or 3.7%, effective with January 2023 billings, primarily due to updated depreciation rates.

On December 6, 2022, the Alabama PSC approved Rate CNP Depreciation, which allows Alabama Power to recover changes in depreciation resulting from updates to certain depreciation rates. Rate CNP Depreciation will result in an annual revenue increase of approximately \$318 million, or 4.6%, effective with January 2023 billings. In addition, the Alabama PSC directed Alabama Power to accelerate the amortization of a regulatory liability associated with excess federal accumulated deferred income taxes, which is being returned to customers through bill credits of up to approximately \$318 million in 2023 to offset the impact of the Rate CNP Depreciation increase. The Alabama PSC will determine the treatment of any remaining excess federal accumulated deferred income taxes at a future date. The ultimate outcome of this matter cannot be determined at this time.

During 2022, Alabama Power continued construction of Plant Barry Unit 8, which is expected to be placed in service in November 2023. At December 31, 2022, associated project expenditures totaled approximately \$518 million.

For the year ended December 31, 2022, Alabama Power's weighted common equity return exceeded 6.15%, resulting in Alabama Power establishing a current regulatory liability of \$62 million. On February 7, 2023, the Alabama PSC directed Alabama Power to issue the 2022 refund to customers through bill credits in August 2023.

See Note 2 to the financial statements under "Alabama Power" for additional information.

Georgia Power

Plant Vogtle Units 3 and 4 Construction and Start-Up Status

Construction continues on Plant Vogtle Units 3 and 4 (with electric generating capacity of approximately 1,100 MWs each), in which Georgia Power currently holds a 45.7% ownership interest. Georgia Power's share of the total project capital cost forecast to complete Plant Vogtle Units 3 and 4, including contingency, through the end of the second quarter 2023 and the first quarter 2024, respectively, is \$10.6 billion.

On July 29, 2022, Southern Nuclear announced that all Unit 3 ITAACs had been submitted to the NRC. On August 3, 2022, the NRC published its 103(g) finding that the acceptance criteria in the combined license for Unit 3 had been met, which allowed nuclear fuel to be loaded and start-up testing to begin. Fuel load for Unit 3 was completed on October 17, 2022. In early 2023, during the start-up and pre-operational testing for Unit 3, Southern Nuclear identified and is remediating certain equipment and component issues. As a result, Unit 3 is projected to be placed in service during May or June 2023. The projected schedule for Unit 3 primarily depends on the progression of final component and pre-operational testing and start-up, which may be impacted by further equipment, component, and/or other operational challenges. After considering the timeframe and duration of hot functional and other testing and recent experience with Unit 3 start-up and pre-operational testing, Unit 4 is now projected to be placed in service during late fourth quarter 2023 or the first quarter 2024. The projected schedule for Unit 4 primarily depends on potential impacts arising from Unit 4 testing activities overlapping with Unit 3 start-up and commissioning; maintaining overall construction productivity and production levels, particularly in subcontractor scopes of work; and maintaining appropriate levels of craft laborers. Any further delays could result in later in-service dates and cost increases.

During 2022, established construction contingency and additional costs totaling \$307 million were assigned to the base capital cost forecast for costs primarily associated with schedule extensions, construction productivity, the pace of system turnovers, additional craft and support resources, procurement for Units 3 and 4, and the equipment and component issues identified during Unit 3 start-up and pre-operational testing. During 2022, Georgia Power also increased its total project capital cost forecast by \$125 million to replenish construction contingency and \$9 million for construction monitoring costs, which were approved for recovery by the Georgia PSC in its nineteenth VCM order. After considering the significant level of uncertainty that exists regarding the future recoverability of these costs since the ultimate outcome of these matters is subject to the outcome of future assessments by management, as well as Georgia PSC decisions in future regulatory proceedings, Georgia Power recorded pre-tax charges to income in the second quarter 2022, the third quarter 2022, and the fourth quarter 2022 of \$36 million (\$27 million after tax), \$32 million (\$24 million after tax), and \$148 million (\$110 million after tax), respectively, for the increases in the total project capital cost forecast. Georgia Power may request the Georgia PSC to evaluate those expenditures for rate recovery during the prudence review following the Unit 4 fuel load pursuant to the twenty-fourth VCM stipulation described in Note 2 to the financial statements under "Georgia Power – Nuclear Construction – Regulatory Matters."

Georgia Power and the other Vogtle Owners do not agree on the starting dollar amount for the determination of cost increases subject to the cost-sharing and tender provisions of the Global Amendments (as defined in Note 2 to the financial statements under Georgia Power – Nuclear Construction – Joint Owner Contracts"). The other Vogtle Owners notified Georgia Power that they believe the project capital cost forecast approved by the Vogtle Owners on February 14, 2022 triggered the tender provisions.

Management's Discussion and Analysis of Financial Condition and Results of Operations

On June 17, 2022 and July 26, 2022, OPC and Dalton, respectively, notified Georgia Power of their purported exercises of their tender options. Georgia Power did not accept these purported tender exercises. On June 18, 2022, OPC and MEAG Power each filed a separate lawsuit against Georgia Power in the Superior Court of Fulton County, Georgia seeking a declaratory judgment that the starting dollar amount is \$17.1 billion and that the cost-sharing and tender provisions have been triggered. On July 25, 2022 and July 28, 2022, Georgia Power filed its answers in the lawsuits filed by MEAG Power and OPC, respectively, and included counterclaims seeking a declaratory judgment that the starting dollar amount is \$18.38 billion and that costs related to force majeure events are excluded prior to calculating the cost-sharing and tender provisions and when calculating Georgia Power's related financial obligations. On September 26, 2022, Dalton filed complaints in each of these lawsuits.

On September 29, 2022, Georgia Power and MEAG Power reached an agreement to resolve their dispute regarding the proper interpretation of the cost-sharing and tender provisions of the Global Amendments. Under the terms of the agreement, among other items, (i) MEAG Power will not exercise its tender option and will retain its full ownership interest in Plant Vogtle Units 3 and 4; (ii) Georgia Power will reimburse a portion of MEAG Power's costs of construction for Plant Vogtle Units 3 and 4 as such costs are incurred and with no further adjustment for force majeure costs, which payments will total approximately \$92 million based on the current project capital cost forecast; and (iii) Georgia Power will reimburse 20% of MEAG Power's costs of construction with respect to any amounts over the current project capital cost forecast, with no further adjustment for force majeure costs. On October 4, 2022, MEAG Power and Georgia Power filed a notice of settlement and voluntary dismissal of the pending litigation described above, including Georgia Power's counterclaim, and, on October 6, 2022, Dalton dismissed its related complaint. Georgia Power recorded pre-tax charges (credits) to income in the fourth quarter 2021, the second quarter 2022, the third quarter 2022, and the fourth quarter 2022 of approximately \$440 million (\$328 million after tax), \$16 million (\$12 million after tax), \$(102) million (\$(76) million after tax), and \$53 million (\$40 million after tax), respectively, associated with the cost-sharing and tender provisions of the Global Amendments, including the settlement with MEAG Power. A total of \$407 million associated with these provisions is included in the total project capital cost forecast and will not be recovered from retail customers. The settlement with MEAG Power does not resolve the separate pending litigation with OPC, including Dalton's associated complaint, described above. Georgia Power may be required to record further pre-tax charges to income of up to approximately \$345 million associated with the cost-sharing and tender provisions of the Global Amendments for OPC and Dalton based on the current project capital cost forecast.

Georgia Power's ownership interest in Plant Vogtle Units 3 and 4 continues to be 45.7%. Georgia Power believes the increases in the total project capital cost forecast through December 31, 2022 will trigger the tender provisions, but Georgia Power disagrees with OPC and Dalton on the tender provisions trigger date. Valid notices of tender from OPC and Dalton would require Georgia Power to pay 100% of their respective remaining shares of the costs necessary to complete Plant Vogtle Units 3 and 4. Georgia Power's incremental ownership interest will be calculated and conveyed to Georgia Power after Plant Vogtle Units 3 and 4 are placed in service.

The ultimate impact of these matters on the construction schedule and project capital cost forecast and related cost recovery for Plant Vogtle Units 3 and 4 cannot be determined at this time. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for additional information.

2022 ARP

On December 20, 2022, the Georgia PSC voted to approve the 2022 ARP, including estimated net rate increases totaling \$216 million, \$377 million, and \$403 million effective January 1, 2023, January 1, 2024, and January 1, 2025, respectively. See Note 2 to the financial statements under "Georgia Power – Rate Plans – 2022 ARP" for additional information.

Integrated Resource Plans

On July 21, 2022, the Georgia PSC approved Georgia Power's triennial IRP (2022 IRP), as modified by a stipulated agreement among Georgia Power, the staff of the Georgia PSC, and certain intervenors and as further modified by the Georgia PSC. In the 2022 IRP decision, the Georgia PSC approved several requests, including the following:

- Decertification and retirement of Plant Wansley Units 1 and 2 (926 MWs based on 53.5% ownership), which occurred on August 31, 2022, and Plant Scherer Unit 3 (614 MWs based on 75% ownership) by December 31, 2028, as well as the reclassification to regulatory asset accounts of the remaining net book values of these units and any remaining unusable materials and supplies inventories upon retirement.
- Decertification and retirement of Plant Gaston Units 1 through 4 (500 MWs based on 50% ownership through SEGCO) by December 31, 2028. See Note 7 to the financial statements under "SEGCO" for additional information.
- Georgia Power's environmental compliance strategy, including approval of Georgia Power's plans to address CCR at its ash ponds and landfills.

The Georgia PSC deferred a decision on the requested decertification and retirement of Plant Bowen Units 1 and 2 (1,400 MWs) to the 2025 IRP.

See Note 2 to the financial statements under "Georgia Power – Integrated Resource Plans" for additional information.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Mississippi Power

On June 7, 2022, the Mississippi PSC approved Mississippi Power's annual retail PEP filing for 2022, resulting in an annual increase in revenues of approximately \$18 million, or 1.9%, effective with the first billing cycle of April 2022.

On August 26, 2022, the FERC accepted an amended shared service agreement (SSA) between Mississippi Power and Cooperative Energy, effective July 1, 2022, under which Cooperative Energy will continue to decrease its use of Mississippi Power's generation services under the MRA tariff up to 2.5% annually through 2035. At December 31, 2022, Mississippi Power is serving approximately 400 MWs of Cooperative Energy's annual demand. Beginning in 2036, Cooperative Energy will provide 100% of its electricity requirements at the MRA delivery points under the tariff. Neither party has the option to cancel the amended SSA. Mississippi Power expects to remarket this capacity, including the potential development of future arrangements with Cooperative Energy.

On July 15, 2022, Mississippi Power filed a request with the FERC for a \$23 million increase in annual wholesale base revenues under the MRA tariff. Cooperative Energy filed a complaint with the FERC challenging the new rates. On September 13, 2022, the FERC issued an order that accepted Mississippi Power's request effective September 14, 2022, subject to refund, and established hearing and settlement judge procedures. The ultimate outcome of this matter cannot be determined at this time.

On November 15, 2022, Mississippi Power filed a request with the Mississippi PSC to increase retail fuel revenues by \$25 million annually effective with the first billing cycle of February 2023 and an additional \$25 million annually effective with the first billing cycle of June 2023. On January 10, 2023, the Mississippi PSC voted to defer approval of the filing. Mississippi Power is allowed to maintain current billing rates and continue accruing its weighted-average cost of capital on any under or over fuel recovery balance. The ultimate outcome of this matter cannot be determined at this time.

On December 6, 2022, the Mississippi PSC approved an accounting order authorizing Mississippi Power to create a reliability reserve for the purpose of deferring generation, transmission, and distribution reliability-related expenditures for use in a future year, under certain conditions. At December 31, 2022, Mississippi Power accrued \$25 million to the reliability reserve.

See Note 2 to the financial statements under "Mississippi Power" for additional information.

Southern Power

During 2022, Southern Power completed construction of and placed in service the remaining 40 MWs of the Tranquillity battery energy storage facility (72 MWs total) and the remaining 15 MWs of the Garland battery energy storage facility (88 MWs total).

Southern Power calculates an investment coverage ratio for its generating assets, including those owned with various partners, based on the ratio of investment under contract to total investment using the respective facilities' net book value (or expected in-service value for facilities under construction) as the investment amount. With the inclusion of investments associated with facilities under construction, as well as other capacity and energy contracts, Southern Power's average investment coverage ratio at December 31, 2022 was 96% through 2027 and 90% through 2032, with an average remaining contract duration of approximately 12 years.

See Note 15 to the financial statements under "Southern Power" for additional information.

Southern Company Gas

On August 1, 2022, Virginia Natural Gas filed a general base rate case with the Virginia Commission seeking an increase in annual base rate revenues of \$69 million, including \$15 million related to the recovery of investments under the SAVE program, primarily to recover investments and increased costs associated with infrastructure, technology, and workforce development. The requested increase is based on a projected 12-month period beginning January 1, 2023, a ROE of 10.35%, and an equity ratio of 53.2%. Rate adjustments became effective January 1, 2023, subject to refund. The Virginia Commission is expected to rule on the requested increase in the third quarter 2023. The ultimate outcome of this matter cannot be determined at this time.

On September 7, 2022, certain affiliates of Southern Company Gas entered into agreements to sell two natural gas storage facilities located in California and Texas for an aggregate purchase price of \$186 million, plus working capital and certain other adjustments. The sale of the Texas facility was completed on November 18, 2022 and completion of the sale of the California facility is expected later in 2023. The ultimate outcome of this matter cannot be determined at this time. Southern Company Gas recorded pre-tax impairment charges totaling approximately \$131 million (\$99 million after tax) in the fourth quarter 2022 related to the facilities. See Note 15 to the financial statements under "Southern Company Gas" for additional information.

On December 20, 2022, the Georgia PSC approved Atlanta Gas Light's annual GRAM filing, which resulted in an annual rate increase of \$53 million effective January 1, 2023.

Management's Discussion and Analysis of Financial Condition and Results of Operations

On January 3, 2023, Nicor Gas filed a general base rate case with the Illinois Commission requesting a \$321 million increase in annual base rate revenues, including \$59 million related to the recovery of investments under the Investing in Illinois program through December 31, 2023. The requested increase is based on a projected test year for the 12-month period ending December 31, 2024, a return on equity of 10.35%, and an equity ratio of 54.5%. Further, Nicor Gas is seeking to recover an additional \$32 million under three proposed riders related to recovery of vehicle fuel costs, company use gas, and customer payment fees. The Illinois Commission is expected to rule on the requested increase within the 11-month statutory time limit, after which rate adjustments will be effective. The ultimate outcome of this matter cannot be determined at this time.

Key Performance Indicators

In striving to achieve attractive risk-adjusted returns while providing cost-effective energy to approximately 8.8 million electric and gas utility customers collectively, the traditional electric operating companies and Southern Company Gas continue to focus on several key performance indicators. These indicators include, but are not limited to, customer satisfaction, plant availability, electric and natural gas system reliability, and execution of major construction projects. In addition, Southern Company and the Subsidiary Registrants focus on earnings per share (EPS) and net income, respectively, as a key performance indicator. See RESULTS OF OPERATIONS herein for information on the Registrants' financial performance. See RESULTS OF OPERATIONS – "Southern Company Gas – Operating Metrics" for additional information on Southern Company Gas' operating metrics, including Heating Degree Days, customer count, and volumes of natural gas sold.

The financial success of the traditional electric operating companies and Southern Company Gas is directly tied to customer satisfaction. Key elements of ensuring customer satisfaction include outstanding service, high reliability, and competitive prices. The traditional electric operating companies use customer satisfaction surveys to evaluate their results and generally target the top quartile of these surveys in measuring performance. Reliability indicators are also used to evaluate results. See Note 2 to the financial statements under "Alabama Power – Rate RSE" and "Mississippi Power – Performance Evaluation Plan" for additional information on Alabama Power's Rate RSE and Mississippi Power's PEP rate plan, respectively, both of which contain mechanisms that directly tie customer service indicators to the allowed equity return.

Southern Power continues to focus on several key performance indicators, including, but not limited to, the equivalent forced outage rate and contract availability to evaluate operating results and help ensure its ability to meet its contractual commitments to customers.

RESULTS OF OPERATIONS

Southern Company

Consolidated net income attributable to Southern Company was \$3.5 billion in 2022, an increase of \$1.1 billion, or 47.3%, from 2021. The increase was primarily due to a \$1.1 billion decrease in after-tax charges related to the construction of Plant Vogtle Units 3 and 4, increases in retail electric revenues associated with rates and pricing, warmer weather, primarily in the second quarter 2022, and sales growth, and increases in natural gas revenues from base rate increases and continued infrastructure replacement, partially offset by higher non-fuel operations and maintenance costs and higher interest expense. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for additional information.

Basic EPS was \$3.28 in 2022 and \$2.26 in 2021. Diluted EPS, which factors in additional shares related to stock-based compensation, was \$3.26 in 2022 and \$2.24 in 2021. EPS for 2022 and 2021 was negatively impacted by \$0.04 and \$0.01 per share, respectively, as a result of increases in the average shares outstanding. See Note 8 to the financial statements under "Outstanding Classes of Capital Stock – Southern Company" for additional information.

Dividends paid per share of common stock were \$2.70 in 2022 and \$2.62 in 2021. In January 2023, Southern Company declared a quarterly dividend of 68 cents per share. For 2022, the dividend payout ratio was 82% compared to 116% for 2021.

Discussion of Southern Company's results of operations is divided into three parts – the Southern Company system's primary business of electricity sales, its gas business, and its other business activities.

	2022	2021
	<i>(in millions)</i>	
Electricity business	\$3,672	\$2,247
Gas business	572	539
Other business activities	(720)	(393)
Net Income	\$3,524	\$2,393

Management's Discussion and Analysis of Financial Condition and Results of Operations

Electricity Business

Southern Company's electric utilities generate and sell electricity to retail and wholesale customers. A condensed statement of income for the electricity business follows:

	2022	Increase (Decrease) from 2021
	<i>(in millions)</i>	
Electric operating revenues	\$22,873	\$ 4,573
Fuel	6,835	2,825
Purchased power	1,593	615
Cost of other sales	114	5
Other operations and maintenance	5,268	459
Depreciation and amortization	3,029	76
Taxes other than income taxes	1,125	63
Estimated loss on Plant Vogtle Units 3 and 4	183	(1,509)
Impairment charges	—	(2)
Gain on dispositions, net	(39)	20
Total electric operating expenses	18,108	2,552
Operating income	4,765	2,021
Allowance for equity funds used during construction	210	31
Interest expense, net of amounts capitalized	1,067	99
Other income (expense), net	516	89
Income taxes	848	629
Net income	3,576	1,413
Less:		
Dividends on preferred stock of subsidiaries	11	(4)
Net loss attributable to noncontrolling interests	(107)	(8)
Net Income Attributable to Southern Company	\$ 3,672	\$ 1,425

Electric Operating Revenues

Electric operating revenues for 2022 were \$22.9 billion, reflecting a \$4.6 billion, or 25.0%, increase from 2021. Details of electric operating revenues were as follows:

	2022	2021
	<i>(in millions)</i>	
Retail electric — prior year	\$ 14,852	
Estimated change resulting from —		
Rates and pricing	451	
Sales growth	165	
Weather	244	
Fuel and other cost recovery	2,485	
Retail electric — current year	\$ 18,197	\$ 14,852
Wholesale electric revenues	3,641	2,455
Other electric revenues	747	718
Other revenues	288	275
Electric operating revenues	\$ 22,873	\$ 18,300

Retail electric revenues increased \$3.3 billion, or 22.5%, in 2022 as compared to 2021. The significant factors driving this change are shown in the preceding table. The increase in rates and pricing in 2022 was primarily due to increases at Georgia Power resulting from higher contributions by commercial and industrial customers with variable demand-driven pricing, base tariff increases in accordance with the 2019 ARP, and pricing effects associated with customer usage. In addition, Alabama Power made a larger Rate RSE customer refund in 2021. These increases were partially offset by revenue reductions resulting from Georgia Power's retail ROE exceeding the allowed retail ROE range in 2022.

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Electric rates for the traditional electric operating companies include provisions to adjust billings for fluctuations in fuel costs, including the energy component of purchased power costs. Under these provisions, fuel revenues generally equal fuel expenses, including the energy component of PPA costs, and do not affect net income. The traditional electric operating companies each have one or more regulatory mechanisms to recover other costs such as environmental and other compliance costs, storm damage, new plants, and PPA capacity costs.

See Note 2 to the financial statements under "Alabama Power" and "Georgia Power" for additional information. Also see "Energy Sales" herein for a discussion of changes in the volume of energy sold, including changes related to sales growth (decline) and weather.

Wholesale electric revenues from power sales were as follows:

	2022	2021
	<i>(in millions)</i>	
Capacity and other	\$ 625	\$ 550
Energy	3,016	1,905
Total	\$3,641	\$2,455

In 2022, wholesale electric revenues increased \$1.2 billion, or 48.3%, as compared to 2021 due to increases of \$1.1 billion in energy revenues and \$75 million in capacity revenues. Energy revenues increased \$744 million at Southern Power primarily due to fuel and purchased power increases compared to 2021 and an increase in the volume of KWHs sold primarily associated with natural gas PPAs. Energy revenues increased \$367 million at the traditional electric operating companies primarily due to higher natural gas and coal prices. The increase in capacity revenues was primarily due to a net increase in natural gas PPAs at Southern Power and increased opportunity sales at Alabama Power due to warmer weather.

Wholesale electric revenues consist of revenues from PPAs and short-term opportunity sales. Wholesale electric revenues from PPAs (other than solar and wind PPAs) have both capacity and energy components. Capacity revenues generally represent the greatest contribution to net income and are designed to provide recovery of fixed costs plus a return on investment. Energy revenues will vary depending on fuel prices, the market prices of wholesale energy compared to the Southern Company system's generation, demand for energy within the Southern Company system's electric service territory, and the availability of the Southern Company system's generation. Increases and decreases in energy revenues that are driven by fuel prices are accompanied by an increase or decrease in fuel costs and do not have a significant impact on net income. Energy sales from solar and wind PPAs do not have a capacity charge and customers either purchase the energy output of a dedicated renewable facility through an energy charge or through a fixed price related to the energy. As a result, the ability to recover fixed and variable operations and maintenance expenses is dependent upon the level of energy generated from these facilities, which can be impacted by weather conditions, equipment performance, transmission constraints, and other factors. Wholesale electric revenues at Mississippi Power include FERC-regulated MRA sales under cost-based tariffs as well as market-based sales. Short-term opportunity sales are made at market-based rates that generally provide a margin above the Southern Company system's variable cost to produce the energy.

Other Electric Revenues

Other electric revenues increased \$29 million, or 4.0%, in 2022 as compared to 2021. The increase was primarily due to increases of \$54 million in transmission revenues primarily associated with open access transmission tariff sales, \$18 million in outdoor lighting sales at Georgia Power, \$13 million in cogeneration steam revenues associated with higher natural gas prices at Alabama Power, and \$11 million in rent revenues at the traditional electric operating companies, partially offset by a decrease of \$32 million resulting from the termination of a transmission service contract, an increase of \$18 million in realized losses associated with price stability products for retail customers on variable demand-driven pricing tariffs, and a decrease of \$17 million from retail solar programs as a result of higher avoided cost credits to customers, all at Georgia Power.

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Energy Sales

Changes in revenues are influenced heavily by the change in the volume of energy sold from year to year. KWH sales for 2022 and the percent change from 2021 were as follows:

	2022		
	Total KWHs	Total KWH Percent Change	Weather- Adjusted Percent Change ^(*)
	<i>(in billions)</i>		
Residential	49.6	4.8%	0.2%
Commercial	48.3	3.5	2.0
Industrial	49.5	1.5	1.5
Other	0.6	(4.8)	(4.8)
Total retail	148.0	3.2	1.2%
Wholesale	56.3	12.6	
Total energy sales	204.3	5.6%	

(*) Weather-adjusted KWH sales are estimated using statistical models of the historical relationship between temperatures and energy sales, and then removing the estimated effect of deviations from normal temperature conditions. Normal temperature conditions are defined as those experienced in the applicable service territory over a specified historical period. This metric is useful because it allows trends in historical operations to be evaluated apart from the influence of weather conditions. Management also considers this metric in developing long-term capital and financial plans.

Changes in retail energy sales are generally the result of changes in electricity usage by customers, weather, and the number of customers. Weather-adjusted retail energy sales increased 1.8 billion KWHs in 2022 as compared to 2021. Weather-adjusted residential KWH sales and weather-adjusted commercial KWH sales increased 0.2% and 2.0%, respectively, in 2022 when compared to 2021 largely due to customer growth. In addition, commercial customer usage increased and residential customer usage decreased in 2022 when compared to 2021 as customers returned to pre-pandemic levels of activity outside the home. Industrial KWH sales increased 1.5% in 2022 when compared to 2021 primarily due to increases in the pipeline and paper sectors, partially offset by a decrease in the chemicals sector.

See "Electric Operating Revenues" above for a discussion of significant changes in wholesale revenues related to changes in price and KWH sales.

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Other Revenues

Other revenues increased \$13 million, or 4.7%, in 2022 as compared to 2021. The increase was primarily due to increases of \$10 million in unregulated lighting sales at Alabama Power and \$7 million associated with energy conservation projects at Georgia Power.

Fuel and Purchased Power Expenses

The mix of fuel sources for the generation of electricity is determined primarily by demand, the unit cost of fuel consumed, and the availability of generating units. Additionally, the electric utilities purchase a portion of their electricity needs from the wholesale market.

Details of the Southern Company system's generation and purchased power were as follows:

	2022	2021
Total generation (in billions of KWHs) ^(a)	186	179
Total purchased power (in billions of KWHs)	25	18
Sources of generation (percent) —		
Gas	51	48
Coal	22	22
Nuclear	16	18
Hydro	3	4
Wind, Solar, and Other	8	8
Cost of fuel, generated (in cents per net KWH) —		
Gas ^(a)	5.29	3.07
Coal	3.67	2.85
Nuclear	0.72	0.75
Average cost of fuel, generated (in cents per net KWH) ^(a)	4.05	2.55
Average cost of purchased power (in cents per net KWH) ^(b)	7.66	5.85

(a) Excludes Central Alabama Generating Station KWHs and associated cost of fuel through July 12, 2022 as its fuel was previously provided by the purchaser under a power sales agreement. See Note 15 to the financial statements under "Alabama Power" for additional information.

(b) Average cost of purchased power includes fuel purchased by the Southern Company system for tolling agreements where power is generated by the provider.

In 2022, total fuel and purchased power expenses were \$8.4 billion, an increase of \$3.4 billion, or 69.0%, as compared to 2021.

The increase was primarily the result of a \$2.8 billion increase in the average cost of fuel generated and purchased and a \$653 million increase in the volume of KWHs generated and purchased.

Fuel and purchased power energy transactions at the traditional electric operating companies are generally offset by fuel revenues and do not have a significant impact on net income. See Note 2 to the financial statements for additional information. Fuel expenses incurred under Southern Power's PPAs are generally the responsibility of the counterparties and do not significantly impact net income.

Fuel

In 2022, fuel expense was \$6.8 billion, an increase of \$2.8 billion, or 70.4%, as compared to 2021. The increase was primarily due to a 72.3% increase in the average cost of natural gas per KWH generated, a 28.8% increase in the average cost of coal per KWH generated, an 11.1% decrease in the volume of KWHs generated by hydro, and a 9.0% increase in the volume of KWHs generated by natural gas.

Purchased Power

In 2022, purchased power expense was \$1.6 billion, an increase of \$615 million, or 62.9%, as compared to 2021. The increase was primarily due to a 38.2% increase in the volume of KWHs purchased and a 30.9% increase in the average cost per KWH purchased primarily due to higher natural gas and coal prices.

Energy purchases will vary depending on demand for energy within the Southern Company system's electric service territory, the market prices of wholesale energy as compared to the cost of the Southern Company system's generation, and the availability of the Southern Company system's generation.

Other Operations and Maintenance Expenses

Other operations and maintenance expenses increased \$459 million, or 9.5%, in 2022 as compared to 2021. The increase was primarily associated with increases of \$247 million in transmission and distribution expenses, \$95 million in generation expenses primarily related to scheduled outage and maintenance costs, \$25 million for a reliability reserve accrual in 2022 at Mississippi Power, and \$22 million in

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amortization of cloud software. The transmission and distribution increase was primarily due to increased line maintenance, as well as the net impact of Alabama Power accruals of \$166 million to the reliability reserve in 2022 and an incremental \$65 million to the NDR in 2021. See Note 1 to the financial statements under "Storm Damage and Reliability Reserves" for additional information.

Depreciation and Amortization

Depreciation and amortization increased \$76 million, or 2.6%, in 2022 as compared to 2021. The increase was primarily due to additional plant in service.

Taxes Other Than Income Taxes

Taxes other than income taxes increased \$63 million, or 5.9%, in 2022 as compared to 2021. The increase primarily reflects an increase in municipal franchise fees associated with higher retail revenues at Georgia Power.

Estimated Loss on Plant Vogtle Units 3 and 4

Georgia Power recorded pre-tax charges to income for the estimated probable loss on Plant Vogtle Units 3 and 4 totaling \$183 million and \$1.7 billion in 2022 and 2021, respectively. The charges to income in each year were recorded to reflect Georgia Power's revised total project capital cost forecast to complete construction and start-up of Plant Vogtle Units 3 and 4. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for additional information.

Gain on Dispositions, Net

Gain on dispositions, net decreased \$20 million, or 33.9%, in 2022 as compared to 2021 primarily due to a net decrease of \$39 million in gains at Southern Power related to contributions of wind turbine equipment to various equity method investments in 2021, partially offset by \$17 million in gains from sales of integrated transmission system assets at Georgia Power in 2022. See Notes 7 and 15 to the financial statements under "Southern Power" for additional information.

Allowance for Equity Funds Used During Construction

Allowance for equity funds used during construction increased \$31 million, or 17.3%, in 2022 as compared to 2021. The increase was primarily associated with an increase in capital expenditures related to Plant Barry Unit 8 construction at Alabama Power and an increase in capital expenditures subject to AFUDC at Georgia Power. See Note 2 to the financial statements under "Alabama Power – Certificates of Convenience and Necessity" for additional information.

Interest Expense, Net of Amounts Capitalized

Interest expense, net of amounts capitalized increased \$99 million, or 10.2%, in 2022 as compared to 2021. The increase reflects approximately \$54 million related to higher average outstanding borrowings and \$43 million related to higher interest rates. See Note 8 to the financial statements for additional information.

Other Income (Expense), Net

Other income (expense), net increased \$89 million, or 20.8%, in 2022 as compared to 2021 primarily due to a \$68 million increase in non-service cost-related retirement benefits income and a \$23 million increase in interest income, partially offset by a \$33 million increase in charitable donations at the traditional electric operating companies. See Note 11 to the financial statements for additional information.

Income Taxes

Income taxes increased \$629 million in 2022 as compared to 2021. The increase was primarily due to higher pre-tax earnings largely resulting from a decrease in charges associated with the construction of Plant Vogtle Units 3 and 4 and an increase in a valuation allowance and other adjustments related to certain state tax credit carryforwards at Georgia Power. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" and Note 10 to the financial statements for additional information.

Net Loss Attributable to Noncontrolling Interests

Substantially all noncontrolling interests relate to renewable projects at Southern Power. Net loss attributable to noncontrolling interests increased \$8 million, or 8.1%, in 2022 as compared to 2021. The increased loss was primarily due to \$28 million in higher HLBV loss allocations to Southern Power's tax equity partners in 2022, largely offset by \$23 million in loss allocations associated with the Garland and Tranquillity battery energy storage facilities being placed in service in 2021. See Notes 9 and 15 to the financial statements under "Lessor" and "Southern Power," respectively, for additional information.

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Gas Business

Southern Company Gas distributes natural gas through utilities in four states and is involved in several other complementary businesses including gas pipeline investments, wholesale gas services (until the sale of Sequent on July 1, 2021), and gas marketing services.

A condensed statement of income for the gas business follows:

	2022	Increase (Decrease) from 2021
	<i>(in millions)</i>	
Operating revenues	\$5,962	\$1,582
Cost of natural gas	3,004	1,385
Other operations and maintenance	1,176	104
Depreciation and amortization	559	23
Taxes other than income taxes	282	57
Impairment charges	131	131
Gain on dispositions, net	(4)	123
Total operating expenses	5,148	1,823
Operating income	814	(241)
Earnings from equity method investments	148	98
Interest expense, net of amounts capitalized	263	25
Other income (expense), net	53	106
Income taxes	180	(95)
Net income	\$ 572	\$ 33

Seasonality of Results

During the period from November through March when natural gas usage and operating revenues are generally higher (Heating Season), more customers are connected to Southern Company Gas' distribution systems and natural gas usage is higher in periods of colder weather. Prior to the sale of Sequent, wholesale gas services' operating revenues were occasionally impacted due to peak usage by power generators in response to summer energy demands. Southern Company Gas' base operating expenses, excluding cost of natural gas, bad debt expense, and certain incentive compensation costs, are incurred relatively equally over any given year. Thus, operating results can vary significantly from quarter to quarter as a result of seasonality. For 2022, the percentage of operating revenues and net income generated during the Heating Season (January through March and November through December) were 67% and 66%, respectively. For 2021, the percentage of operating revenues and net income generated during the Heating Season were 70% and 102%, respectively.

Operating Revenues

Operating revenues in 2022 were \$6.0 billion, reflecting a \$1.6 billion, or 36.1%, increase compared to 2021. Details of operating revenues were as follows:

	2022
	<i>(in millions)</i>
Operating revenues – prior year	\$4,380
Estimated change resulting from –	
Infrastructure replacement programs and base rate changes	252
Gas costs and other cost recovery	1,468
Gas marketing services	15
Wholesale gas services	(187)
Other	34
Operating revenues – current year	\$5,962

Revenues at the natural gas distribution utilities increased in 2022 compared to 2021 due to rate increases at Nicor Gas, Atlanta Gas Light, and Chattanooga Gas and continued investment in infrastructure replacement. See Note 2 to the financial statements under "Southern Company Gas" for additional information.

Revenues associated with gas costs and other cost recovery increased in 2022 compared to 2021 primarily due to higher natural gas cost recovery as a result of higher volumes of natural gas sold and an increase in natural gas prices. The natural gas distribution utilities

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have weather or revenue normalization mechanisms that mitigate revenue fluctuations from customer consumption changes. Natural gas distribution rates include provisions to adjust billings for fluctuations in natural gas costs. Therefore, gas costs recovered through natural gas revenues generally equal the amount expensed in cost of natural gas and do not affect net income from the natural gas distribution utilities. See "Cost of Natural Gas" herein for additional information.

The change in 2022 revenues related to wholesale gas services was due to the sale of Sequent on July 1, 2021. See Note 15 to the financial statements under "Southern Company Gas" for additional information.

Southern Company Gas hedged its exposure to warmer-than-normal weather in Illinois for gas distribution operations and in Illinois and Georgia for gas marketing services. The remaining impacts of weather on earnings were immaterial.

Cost of Natural Gas

Excluding Atlanta Gas Light, which does not sell natural gas to end-use customers, the natural gas distribution utilities rates include provisions to adjust billings for fluctuations in natural gas costs. Therefore, gas costs recovered through natural gas revenues generally equal the amount expensed in cost of natural gas and do not affect net income from the natural gas distribution utilities. See Note 2 to the financial statements under "Southern Company Gas – Natural Gas Cost Recovery" for additional information. Cost of natural gas at the natural gas distribution utilities represented 87.5% of the total cost of natural gas for 2022.

Gas marketing services customers are charged for actual and estimated natural gas consumed. Cost of natural gas includes the cost of fuel and associated transportation costs, lost and unaccounted for gas, adjustments to reduce the value of inventories to market value, if applicable, and gains and losses associated with certain derivatives.

Cost of natural gas was \$3.0 billion, an increase of \$1.4 billion, or 85.5%, in 2022 compared to 2021, which reflects higher gas cost recovery in 2022 as a result of higher volumes sold and a 73.0% increase in natural gas prices compared to 2021.

Other Operations and Maintenance Expenses

Other operations and maintenance expenses increased \$104 million, or 9.7%, in 2022 compared to 2021. Excluding \$66 million of expenses related to Sequent in 2021, other operations and maintenance expenses increased approximately \$174 million. The increase was primarily due to increases of \$64 million in compensation and benefit expenses, \$43 million in expenses passed through directly to customers primarily related to bad debt at the natural gas distribution utilities, \$31 million primarily related to bad debt, customer service, and sales expenses, and \$18 million primarily related to pipeline compliance.

Depreciation and Amortization

Depreciation and amortization increased \$23 million, or 4.3%, in 2022 compared to 2021. The increase was primarily due to continued infrastructure investments at the natural gas distribution utilities. See Note 2 to the financial statements under "Southern Company Gas – Infrastructure Replacement Programs and Capital Projects" for additional information.

Taxes Other Than Income Taxes

Taxes other than income taxes increased \$57 million, or 25.3%, in 2022 compared to 2021. The increase was primarily due to a \$39 million increase in revenue tax expenses as a result of higher natural gas revenues and an \$11 million increase in invested capital tax expense at Nicor Gas. Revenue tax expenses are passed through directly to customers and have no impact on net income.

Impairment Charges

In 2022, Southern Company Gas recorded pre-tax impairment charges totaling approximately \$131 million (\$99 million after tax) as a result of an agreement to sell two natural gas storage facilities. See Note 15 to the financial statements under "Southern Company Gas" for additional information.

Gain on Dispositions, Net

In 2021, Southern Company Gas recorded a \$121 million gain on the sale of Sequent. See Note 15 to the financial statements under "Southern Company Gas" for additional information.

Earnings from Equity Method Investments

Earnings from equity method investments increased \$98 million in 2022 compared to 2021. The increase was primarily due to pre-tax impairment charges totaling \$84 million in 2021 related to the PennEast Pipeline project and higher earnings at SNG resulting from higher revenues primarily due to increased demand. See Note 7 to the financial statements under "Southern Company Gas" for additional information.

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Interest Expense, Net of Amounts Capitalized

Interest expense, net of amounts capitalized increased \$25 million, or 10.5%, in 2022 compared to 2021. The increase reflects approximately \$16 million related to higher average outstanding borrowings and \$8 million related to higher interest rates. See Note 8 to the financial statements for additional information.

Other Income (Expense), Net

Other income (expense), net increased \$106 million in 2022 compared to 2021. The increase was largely due to charitable contributions by Sequent prior to its sale totaling \$101 million in 2021 and an increase of \$10 million primarily related to non-service cost-related retirement benefits income. See Note 11 to the financial statements under "Southern Company Gas" for additional information.

Income Taxes

Income taxes decreased \$95 million, or 34.5%, in 2022 compared to 2021. The decrease was primarily due to additional tax benefit of \$110 million resulting from the sale of Sequent in 2021 and \$32 million as a result of the impairment related to the agreement to sell two natural gas storage facilities in 2022. The decrease was partially offset by \$17 million of tax benefits in 2021 resulting from the impairment charge related to the PennEast Pipeline project and higher pre-tax earnings in 2022. See Notes 7 and 15 to the financial statements under "Southern Company Gas" and Note 10 to the financial statements for additional information.

Other Business Activities

Southern Company's other business activities primarily include the parent company (which does not allocate operating expenses to business units); PowerSecure, which provides distributed energy and resilience solutions and deploys microgrids for commercial, industrial, governmental, and utility customers; Southern Holdings, which invests in various projects; and Southern Linc, which provides digital wireless communications for use by the Southern Company system and also markets these services to the public and provides fiber optics services within the Southeast.

A condensed statement of operations for Southern Company's other business activities follows:

	2022	Increase (Decrease) from 2021
	<i>(in millions)</i>	
Operating revenues	\$ 444	\$ 11
Cost of other sales	268	19
Other operations and maintenance	201	(6)
Depreciation and amortization	75	—
Taxes other than income taxes	4	—
Impairment charges	119	119
Gain on dispositions, net	(14)	(14)
Total operating expenses	653	118
Operating income (loss)	(209)	(107)
Earnings from equity method investments	3	(23)
Interest expense	692	61
Impairment of leveraged leases	—	(7)
Other income (expense), net	(55)	(149)
Income taxes (benefit)	(233)	(6)
Net loss	\$(720)	\$(327)

Cost of Other Sales

Cost of other sales for these other business activities increased \$19 million, or 7.6%, in 2022 as compared to 2021 primarily due to distributed infrastructure projects at PowerSecure.

Impairment Charges

In 2022, a goodwill impairment charge of \$119 million was recorded at PowerSecure. See Note 1 to the financial statements under "Goodwill and Other Intangible Assets and Liabilities" for additional information.

Gain on Dispositions, Net

In 2022, a \$14 million gain was recorded at the parent company as a result of the early termination of the transition services agreement related to the 2019 sale of Gulf Power.

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Earnings from Equity Method Investments

Earnings from equity method investments for these other business activities decreased \$23 million, or 88.5%, in 2022 as compared to 2021 primarily due to a decrease in investment income at Southern Holdings.

Interest Expense

Interest expense for these other business activities increased \$61 million, or 9.7%, in 2022 as compared to 2021. The increase primarily results from parent company financing activities and includes approximately \$52 million related to higher average outstanding borrowings, \$15 million related to fair value hedge amortization, \$11 million related to higher interest rates, and \$7 million in fees associated with remarketing the 2019 Series A Equity Units (Equity Units), partially offset by a \$23 million loss in 2021 associated with the extinguishment of debt. See Note 8 to the financial statements for additional information.

Other Income (Expense), Net

Other income (expense), net for these other business activities decreased \$149 million in 2022 as compared to 2021 primarily due to a \$93 million pre-tax gain (\$99 million gain after tax) recorded at Southern Holdings in 2021 related to the termination of two leveraged leases and a \$24 million decrease in leveraged lease income as a result of the terminations. See Note 15 to the financial statements under "Southern Company" for additional information.

FUTURE EARNINGS POTENTIAL

General

Prices for electric service provided by the traditional electric operating companies and natural gas distribution service provided by the natural gas distribution utilities to retail customers are set by state PSCs or other applicable state regulatory agencies under cost-based regulatory principles. Retail rates and earnings are reviewed through various regulatory mechanisms and/or processes and may be adjusted periodically within certain limitations. Effectively operating pursuant to these regulatory mechanisms and/or processes and appropriately balancing required costs and capital expenditures with customer prices will continue to challenge the traditional electric operating companies and natural gas distribution utilities for the foreseeable future. Prices for wholesale electricity sales, interconnecting transmission lines, and the exchange of electric power are regulated by the FERC. Southern Power continues to focus on long-term PPAs. See ACCOUNTING POLICIES – "Application of Critical Accounting Policies and Estimates – Utility Regulation" herein and Note 2 to the financial statements for additional information about regulatory matters.

Each Registrant's results of operations are not necessarily indicative of its future earnings potential. The disposition activities described in Note 15 to the financial statements have reduced earnings for the applicable Registrants. The level of the Registrants' future earnings depends on numerous factors that affect the opportunities, challenges, and risks of the Registrants' primary businesses of selling electricity and/or distributing natural gas, as described further herein.

For the traditional electric operating companies, these factors include the ability to maintain constructive regulatory environments that allow for the timely recovery of prudently-incurred costs during a time of increasing costs, including those related to projected long-term demand growth, stringent environmental standards, including CCR rules, safety, system reliability and resiliency, fuel, restoration following major storms, and capital expenditures, including constructing new electric generating plants and expanding and improving the transmission and distribution systems; continued customer growth; and the trends of higher inflation and reduced electricity usage per customer, especially in residential and commercial markets. For Georgia Power, completing construction of Plant Vogtle Units 3 and 4 and the related cost recovery proceedings is another major factor.

Earnings in the electricity business will also depend upon maintaining and growing sales, considering, among other things, the adoption and/or penetration rates of increasingly energy-efficient technologies and increasing volumes of electronic commerce transactions, which could contribute to a net reduction in customer usage.

Global and U.S. economic conditions continue to be significantly affected by a series of demand and supply shocks that caused a global and national economic recession in 2020 and have been further impacted by the invasion of Ukraine and significant declines in labor force participation rates. The confluence of these disruptions has resulted in the highest levels of inflation globally in 40 years and driven a significant policy response by central banks across the global economy. The U.S. Federal Reserve has increased policy interest rates faster than any rate increase cycle in the last 40 years and to levels high enough to slow economic activity. These actions and impacts, including increased costs for goods and services and borrowing costs, have led to a significantly increased risk of recession. Additionally, inflation remains elevated in part due to continued supply chain constraints and labor markets remaining tight. Electricity sales across all classes

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have recovered to pre-COVID-19 pandemic levels and customer growth at both the traditional electric operating companies and natural gas distribution utilities has remained strong. However, weakening economic activity increases the risk of slowing to declining energy sales. Additionally, the current economic environment has increased the uncertainty of future energy demand and operating costs. See RESULTS OF OPERATIONS herein for information on energy sales in the Southern Company system's service territory during 2022.

The level of future earnings for Southern Power's competitive wholesale electric business depends on numerous factors including the parameters of the wholesale market and the efficient operation of its wholesale generating assets; Southern Power's ability to execute its growth strategy through the development or acquisition of renewable facilities and other energy projects while containing costs; regulatory matters; customer creditworthiness; total electric generating capacity available in Southern Power's market areas; Southern Power's ability to successfully remarket capacity as current contracts expire; renewable portfolio standards; continued availability of federal and state ITCs and PTCs, which could be impacted by future tax legislation; transmission constraints; cost of generation from units within the Southern Company power pool; and operational limitations. See "Income Tax Matters" herein for information regarding recent tax legislation expanding the availability of federal ITCs and PTCs. Also see Notes 10 and 15 to the financial statements for additional information.

The level of future earnings for Southern Company Gas' primary business of distributing natural gas and its complementary businesses in the gas pipeline investments and gas marketing services sectors depends on numerous factors. These factors include the natural gas distribution utilities' ability to maintain constructive regulatory environments that allow for the timely recovery of prudently-incurred costs, including those related to projected long-term demand growth, safety, system reliability and resiliency, natural gas, and capital expenditures, including expanding and improving the natural gas distribution systems; the completion and subsequent operation of ongoing infrastructure and other construction projects; customer creditworthiness; and certain policies to limit the use of natural gas, such as the potential across certain parts of the U.S. for state or municipal bans on the use of natural gas or policies designed to promote electrification. The volatility of natural gas prices has an impact on Southern Company Gas' customer rates, its long-term competitive position against other energy sources, and the ability of Southern Company Gas' gas marketing services business to capture value from locational and seasonal spreads. Additionally, changes in commodity prices, primarily driven by tight gas supplies, geopolitical events, and diminished gas production, subject a portion of Southern Company Gas' operations to earnings variability and have resulted in higher natural gas prices. Additional economic factors may contribute to this environment. The demand for natural gas may increase, which may cause natural gas prices to rise and drive higher volatility in the natural gas markets on a longer-term basis. Alternatively, a significant drop in oil and natural gas prices could lead to a consolidation of natural gas producers or reduced levels of natural gas production.

Earnings for both the electricity and natural gas businesses are subject to a variety of other factors. These factors include weather; competition; developing new and maintaining existing energy contracts and associated load requirements with wholesale customers; customer energy conservation practices; the use of alternative energy sources by customers; government incentives to reduce overall energy usage; fuel, labor, and material prices in an environment of heightened inflation and material and labor supply chain disruptions; and the price elasticity of demand. Demand for electricity and natural gas in the Registrants' service territories is primarily driven by the pace of economic growth or decline that may be affected by changes in regional and global economic conditions, which may impact future earnings.

Mississippi Power provides service under long-term contracts with rural electric cooperative associations and a municipality located in southeastern Mississippi under requirements cost-based electric tariffs which are subject to regulation by the FERC. The contracts with these wholesale customers represented 12.4% of Mississippi Power's total operating revenues in 2022. Historically, these wholesale customers have acted as a group and any changes in contractual relationships for one customer are likely to be followed by the other wholesale customers.

As part of its ongoing effort to adapt to changing market conditions, Southern Company continues to evaluate and consider a wide array of potential business strategies. These strategies may include business combinations, partnerships, and acquisitions involving other utility or non-utility businesses or properties, disposition of, or the sale of interests in, certain assets or businesses, internal restructuring, or some combination thereof. Furthermore, Southern Company may engage in new business ventures that arise from competitive and regulatory changes in the utility industry. Pursuit of any of the above strategies, or any combination thereof, may significantly affect the business operations, risks, and financial condition of Southern Company. In addition, Southern Power and Southern Company Gas regularly consider and evaluate joint development arrangements as well as acquisitions and dispositions of businesses and assets as part of their business strategies. See Note 15 to the financial statements for additional information.

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Environmental Matters

The Southern Company system's operations are regulated by state and federal environmental agencies through a variety of laws and regulations governing air, water, land, avian and other wildlife and habitat protection, and other natural resources. The Southern Company system maintains comprehensive environmental compliance and GHG strategies to assess both current and upcoming requirements and compliance costs associated with these environmental laws and regulations. New or revised environmental laws and regulations could further affect many areas of operations for the Subsidiary Registrants. The costs required to comply with environmental laws and regulations and to achieve stated goals, including capital expenditures, operations and maintenance costs, and costs reflected in ARO liabilities, may impact future electric generating unit retirement and replacement decisions (which are subject to approval from the traditional electric operating companies' respective state PSCs), results of operations, cash flows, and/or financial condition. Related costs may result from the installation of additional environmental controls, closure and monitoring of CCR facilities, unit retirements, or changing fuel sources for certain existing units, as well as related upgrades to the Southern Company system's transmission and distribution (electric and natural gas) systems. A major portion of these costs is expected to be recovered through retail and wholesale rates, including existing ratemaking and billing provisions. The ultimate impact of environmental laws and regulations and the GHG goals discussed herein cannot be determined at this time and will depend on various factors, such as state adoption and implementation of requirements, the availability and cost of any deployed technology, fuel prices, the outcome of pending and/or future legal challenges, and the ability to continue recovering the related costs, through rates for the traditional electric operating companies and the natural gas distribution utilities and/or through long-term wholesale agreements for the traditional electric operating companies and Southern Power.

Alabama Power and Mississippi Power recover environmental compliance costs through separate mechanisms, Rate CNP Compliance and the ECO Plan, respectively. Georgia Power's base rates include an ECCR tariff that allows for the recovery of environmental compliance costs. The natural gas distribution utilities of Southern Company Gas generally recover environmental remediation expenditures through rate mechanisms approved by their applicable state regulatory agencies. See Notes 2 and 3 to the financial statements for additional information.

Southern Power's PPAs generally contain provisions that permit charging the counterparty for some of the new costs incurred as a result of changes in environmental laws and regulations. Since Southern Power's units are generally newer natural gas and renewable generating facilities, costs associated with environmental compliance for these facilities have been less significant than for similarly situated coal or older natural gas generating facilities. Environmental, natural resource, and land use concerns, including the applicability of air quality limitations, the potential presence of wetlands or threatened and endangered species, the availability of water withdrawal rights, uncertainties regarding impacts such as increased light or noise, and concerns about potential adverse health impacts can, however, increase the cost of siting and operating any type of future facility. The impact of such laws, regulations, and other considerations on Southern Power and subsequent recovery through PPA provisions cannot be determined at this time.

Further, increased costs that are recovered through regulated rates could contribute to reduced demand for electricity and natural gas, which could negatively affect results of operations, cash flows, and/or financial condition. Additionally, many commercial and industrial customers may also be affected by existing and future environmental requirements, which may have the potential to affect their demand for electricity and natural gas.

Although the timing, requirements, and estimated costs could change as environmental laws and regulations are adopted or modified, as compliance plans are revised or updated, and as legal challenges to rules are initiated or completed, estimated capital expenditures through 2027 based on the current environmental compliance strategy for the Southern Company system and the traditional electric operating companies are as follows:

	2023	2024	2025	2026	2027	Total
	<i>(in millions)</i>					
Southern Company	\$139	\$125	\$108	\$91	\$50	\$513
Alabama Power	53	35	46	28	18	180
Georgia Power	82	86	56	53	24	301
Mississippi Power	5	3	7	11	7	33

These estimates do not include any costs associated with potential regulation of GHG emissions. See "Global Climate Issues" herein for additional information. The Southern Company system also anticipates substantial expenditures associated with ash pond closure and groundwater monitoring under the CCR Rule and related state rules, which are reflected in the applicable Registrants' ARO liabilities. See FINANCIAL CONDITION AND LIQUIDITY – "Cash Requirements" herein and Note 6 to the financial statements for additional information.

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Environmental Laws and Regulations

Air Quality

Since 1990, the Southern Company system reduced SO₂ and NO_x air emissions by 99% and 92%, respectively, through 2021. Since 2005, the Southern Company system reduced mercury air emissions by 97% through 2021.

On March 11, 2022, the EPA released a proposed Federal Implementation Plan to require reductions in NO_x emissions from sources in 26 states, including Alabama and Mississippi, to assure those states satisfy their interstate transport (good neighbor) obligations under the 2015 Ozone National Ambient Air Quality Standards (NAAQS) in downwind states. Georgia and North Carolina have approved interstate transport state implementation plans related to the 2015 Ozone NAAQS and are not subject to this rule. The EPA is anticipated to issue a final rule by March 2023 with initial applicability for 2023. The ultimate impact of a final rule cannot be determined at this time; however, it may result in increased compliance costs.

Water Quality

In 2020, the EPA published the final steam electric ELG reconsideration rule (ELG Reconsideration Rule), a reconsideration of the 2015 ELG rule's limits on bottom ash transport water and flue gas desulfurization wastewater that extended the latest applicability date for both discharges to December 31, 2025. The ELG Reconsideration Rule also updated the voluntary incentive program and provided new subcategories for low utilization electric generating units and electric generating units that will permanently cease coal combustion by 2028. As required by the ELG Reconsideration Rule, in October 2021, Alabama Power and Georgia Power each submitted initial notices of planned participation (NOPP) for applicable units seeking to qualify for these subcategories.

Alabama Power submitted its NOPP to the Alabama Department of Environmental Management (ADEM) indicating plans to retire Plant Barry Unit 5 (700 MWs) and to cease using coal and begin operating solely on natural gas at Plant Barry Unit 4 (350 MWs) and Plant Gaston Unit 5 (880 MWs). Alabama Power, as agent for SEGCO, indicated plans to retire Plant Gaston Units 1 through 4 (1,000 MWs). These plans are expected to be completed on or before the compliance date of December 31, 2028. The NOPP submittals are subject to the review of the ADEM. With the completion of the Calhoun Generating Station acquisition on September 30, 2022, Alabama Power expects to retire Plant Barry Unit 5 in late 2023 or early 2024 subject to certain operating conditions. Plant Barry Unit 4 ceased using coal and began to operate solely on natural gas in December 2022. See Notes 2 and 7 to the financial statements under "Alabama Power – Certificates of Convenience and Necessity" and "SEGCO," respectively, for additional information.

The remaining assets for which Alabama Power has indicated retirement, due to early closure or repowering of the unit to natural gas, have net book values totaling approximately \$1.4 billion (excluding capitalized asset retirement costs which are recovered through Rate CNP Compliance) at December 31, 2022. The net book value of \$42 million for retired coal equipment at Plant Barry Unit 4 was reclassified to a regulatory asset at December 31, 2022. Based on an Alabama PSC order, Alabama Power is authorized to establish a regulatory asset to record the unrecovered investment costs, including the plant asset balance and the site removal and closure costs, associated with unit retirements caused by environmental regulations (Environmental Accounting Order). Under the Environmental Accounting Order, the regulatory asset would be amortized and recovered over an affected unit's remaining useful life, as established prior to the decision regarding early retirement, through Rate CNP Compliance. See Note 2 to the financial statements under "Alabama Power – Rate CNP Compliance" and " – Environmental Accounting Order" for additional information.

Georgia Power submitted its NOPP to the Georgia Environmental Protection Division (EPD) indicating plans to retire Plant Wansley Units 1 and 2 (926 MWs based on 53.5% ownership), Plant Bowen Units 1 and 2 (1,400 MWs), and Plant Scherer Unit 3 (614 MWs based on 75% ownership) on or before the compliance date of December 31, 2028. Georgia Power also submitted a NOPP indicating plans to pursue compliance with the ELG Reconsideration Rule for Plant Scherer Units 1 and 2 (137 MWs based on 8.4% ownership) through the voluntary incentive program by no later than December 31, 2028. Georgia Power intends to comply with the ELG Rules for Plant Bowen Units 3 and 4 through the generally applicable requirements by December 31, 2025; therefore, no NOPP submission was required for these units. The NOPP submittals and generally applicable requirements are subject to the review of the Georgia EPD.

The Georgia PSC approved the retirements of Plant Wansley Units 1 and 2 (which occurred on August 31, 2022) and Plant Scherer Unit 3 in its 2022 IRP order, but deferred a decision on the requested decertification and retirement of Plant Bowen Units 1 and 2 to the 2025 IRP. See Note 2 to the financial statements under "Georgia Power – Integrated Resource Plans" for additional information.

The ELG Reconsideration Rule has been challenged by several environmental organizations and the cases have been consolidated in the U.S. Court of Appeals for the Fourth Circuit. The case is being held in abeyance while the EPA undertakes a new rulemaking to revise the ELG Reconsideration Rule. A proposed rule, referred to as the ELG Supplemental Rule, is expected to be released by mid-2023. Any revisions could require changes in the traditional electric operating companies' compliance strategies.

The ultimate outcome of these matters cannot be determined at this time.

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Coal Combustion Residuals

In 2015, the EPA finalized non-hazardous solid waste regulations for the management and disposal of CCR, including coal ash and gypsum, in landfills and surface impoundments (ash ponds) at active electric generating power plants. The CCR Rule requires landfills and ash ponds to be evaluated against a set of performance criteria and potentially closed if certain criteria are not met. Closure of existing landfills and ash ponds requires installation of equipment and infrastructure to manage CCR in accordance with the CCR Rule. In addition to the federal CCR Rule, the States of Alabama and Georgia finalized state regulations regarding the management and disposal of CCR within their respective states. In 2019, the State of Georgia received partial approval from the EPA for its state CCR permitting program, which has broader applicability than the federal rule. The State of Mississippi has not developed a state CCR permit program.

The Holistic Approach to Closure: Part A rule, finalized in 2020, revised the deadline to stop sending CCR and non-CCR wastes to unlined surface impoundments to April 11, 2021 and established a process for the EPA to approve extensions to the deadline. The traditional electric operating companies stopped sending CCR and non-CCR wastes to their unlined impoundments prior to April 11, 2021 and, therefore, did not submit requests for extensions. Beginning on January 11, 2022, the EPA has issued numerous Part A determinations that state its current positions on a variety of CCR Rule compliance requirements, such as criteria for groundwater corrective action and CCR unit closure. The traditional electric operating companies are working with state regulatory agencies to determine whether the EPA's current positions may impact closure and groundwater monitoring plans.

On April 8, 2022, the Utilities Solid Waste Activities Group and a group of generating facility operators filed petitions for review in the U.S. Court of Appeals for the D.C. Circuit challenging whether the EPA's January 11, 2022 actions establish new legislative rules that should have gone through notice-and-comment rulemaking. A decision by the court is expected in late 2023. The ultimate impacts of the EPA's current positions are subject to the outcome of the pending litigation and any potential future rulemaking and cannot be determined at this time.

Based on requirements for closure and monitoring of landfills and ash ponds pursuant to the CCR Rule and applicable state rules, the traditional electric operating companies have periodically updated, and expect to continue periodically updating, their related cost estimates and ARO liabilities for each CCR unit as additional information related to closure methodologies, schedules, and/or costs becomes available. Some of these updates have been, and future updates may be, material. Additionally, the closure designs and plans in the States of Alabama and Georgia are subject to approval by environmental regulatory agencies. Absent continued recovery of ARO costs through regulated rates, results of operations, cash flows, and financial condition for Southern Company and the traditional electric operating companies could be materially impacted. See FINANCIAL CONDITION AND LIQUIDITY – "Cash Requirements," Notes 2 and 3 to the financial statements under "Georgia Power – Rate Plans" and "General Litigation Matters – Alabama Power," respectively, and Note 6 to the financial statements for additional information.

Environmental Remediation

The Southern Company system must comply with environmental laws and regulations governing the handling and disposal of waste and releases of hazardous substances. Under these various laws and regulations, the Southern Company system could incur substantial costs to clean up affected sites. The traditional electric operating companies and Southern Company Gas conduct studies to determine the extent of any required cleanup and have recognized the estimated costs to clean up known impacted sites in their financial statements. Amounts for cleanup and ongoing monitoring costs were not material for any year presented. The traditional electric operating companies and the natural gas distribution utilities in Illinois and Georgia (which represent substantially all of Southern Company Gas' accrued remediation costs) have all received authority from their respective state PSCs or other applicable state regulatory agencies to recover approved environmental remediation costs through regulatory mechanisms. These regulatory mechanisms are adjusted annually or as necessary within limits approved by the state PSCs or other applicable state regulatory agencies. The traditional electric operating companies and Southern Company Gas may be liable for some or all required cleanup costs for additional sites that may require environmental remediation. See Note 3 to the financial statements under "Environmental Remediation" for additional information.

Global Climate Issues

In 2019, the EPA published the final Affordable Clean Energy rule (ACE Rule), which repealed and replaced the Clean Power Plan (CPP) and would have required states to develop unit-specific CO₂ emission rate standards for existing coal-fired units based on heat-rate efficiency improvements. On June 30, 2022, the U.S. Supreme Court issued an opinion limiting the EPA's authority to regulate GHG emissions under the Clean Air Act with a focus on whether such authority allows the EPA to regulate the electric industry in a manner as broad as the CPP. The EPA has announced its intent to propose a new rule for existing fossil fuel-fired electric generating units and to propose revised performance standards for new fossil fuel-fired electric generating units pursuant to the Clean Air Act by April 2023. The ultimate impact of these actions cannot be determined at this time.

In February 2021, the United States officially rejoined the Paris Agreement. The Paris Agreement establishes a non-binding universal framework for addressing GHG emissions based on nationally determined emissions reduction contributions and sets in place a process

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for tracking progress towards the goals every five years. In April 2021, President Biden announced a new target for the United States to achieve a 50% to 52% reduction in economy-wide GHG emissions from 2005 levels by 2030. The target was accepted by the United Nations as the United States' nationally determined emissions reduction contribution under the Paris Agreement.

Additional GHG policies, including legislation, may emerge in the future requiring the United States to accelerate its transition to a lower GHG emitting economy; however, associated impacts are currently unknown. The Southern Company system has transitioned from an electric generating mix of 70% coal and 15% natural gas in 2007 to a mix of 22% coal and 51% natural gas in 2022. This transition has been supported in part by the Southern Company system retiring over 6,700 MWs of coal-fired generating capacity since 2010 and converting 3,700 MWs of generating capacity from coal to natural gas since 2015. In addition, the Southern Company system's capacity mix consists of over 11,500 MWs of renewable and storage facilities through ownership and long-term PPAs. See "Environmental Laws and Regulations – Water Quality" herein for information on plans to retire or convert to natural gas additional coal-fired generating capacity. In addition, Southern Company Gas has replaced over 6,000 miles of pipe material that was more prone to fugitive emissions (unprotected steel and cast-iron pipe), resulting in mitigation of more than 3.3 million metric tons of CO₂ equivalents from its natural gas distribution system since 1998.

The following table provides the Registrants' 2021 and preliminary 2022 Scope 1 GHG emissions based on equity share of facilities:

	2021	Preliminary 2022
	<i>(in million metric tons of CO₂ equivalent)</i>	
Southern Company ^(*)	82	85
Alabama Power ^(*)	34	35
Georgia Power	23	23
Mississippi Power	8	9
Southern Power	11	13
Southern Company Gas ^(*)	2	2

(*) Includes GHG emissions attributable to disposed assets through the date of the applicable disposition and to acquired assets beginning with the date of the applicable acquisition. See Note 15 to the financial statements for additional information.

Southern Company system management has established an intermediate goal of a 50% reduction in GHG emissions from 2007 levels by 2030 and a long-term goal of net zero GHG emissions by 2050. Based on the preliminary 2022 emissions, the Southern Company system has achieved an estimated GHG emission reduction of 46% since 2007. GHG emissions increased in 2022 due to an increase in generation when compared to 2021 resulting from increased electricity sales, as discussed further under RESULTS OF OPERATIONS – "Southern Company – Electricity Business" herein. Southern Company system management expects to achieve sustained GHG emissions reductions of at least 50% as early as 2025. While none of Southern Company's subsidiaries are currently subject to renewable portfolio standards or similar requirements, management of the traditional electric operating companies is working with applicable regulators through their IRP processes to continue the generating fleet transition in a manner responsible to customers, communities, employees, and other stakeholders. Achievement of these goals is dependent on many factors, including natural gas prices and the pace and extent of development and deployment of low- to no-GHG energy technologies and negative carbon concepts. Southern Company system management plans to continue to pursue a diverse portfolio including low-carbon and carbon-free resources and energy efficiency resources; continue to transition the Southern Company system's generating fleet and make the necessary related investments in transmission and distribution systems; implement initiatives to reduce natural gas distribution operational emissions; continue its research and development with a particular focus on technologies that lower GHG emissions, including methods of removing carbon from the atmosphere; and constructively engage with policymakers, regulators, investors, customers, and other stakeholders to support outcomes leading to a net zero future.

Regulatory Matters

See OVERVIEW – "Recent Developments" herein and Note 2 to the financial statements for a discussion of regulatory matters related to Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas, including items that could impact the applicable Registrants' future earnings, cash flows, and/or financial condition.

Construction Programs

The Subsidiary Registrants are engaged in continuous construction programs to accommodate existing and estimated future loads on their respective systems. The Southern Company system strategy continues to include developing and constructing new electric generating

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facilities, expanding and improving the electric transmission and electric and natural gas distribution systems, and undertaking projects to comply with environmental laws and regulations.

For the traditional electric operating companies, major generation construction projects are subject to state PSC approval in order to be included in retail rates. The largest construction project currently underway in the Southern Company system is Plant Vogtle Units 3 and 4. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for additional information. Also see Note 2 to the financial statements under "Alabama Power – Certificates of Convenience and Necessity" for information regarding Alabama Power's construction of Plant Barry Unit 8.

See Note 15 to the financial statements under "Southern Power" for information about costs relating to Southern Power's construction of renewable energy facilities.

Southern Company Gas is engaged in various infrastructure improvement programs designed to update or expand the natural gas distribution systems of the natural gas distribution utilities to improve reliability, reduce emissions, and meet operational flexibility and growth. The natural gas distribution utilities recover their investment and a return associated with these infrastructure programs through their regulated rates. See Note 2 to the financial statements under "Southern Company Gas – Infrastructure Replacement Programs and Capital Projects" for additional information on Southern Company Gas' construction program.

See FINANCIAL CONDITION AND LIQUIDITY – "Cash Requirements" herein for additional information regarding the Registrants' capital requirements for their construction programs, including estimated totals for each of the next five years.

Southern Power's Power Sales Agreements

General

Southern Power has PPAs with some of the traditional electric operating companies, other investor-owned utilities, IPPs, municipalities, and other load-serving entities, as well as commercial and industrial customers. The PPAs are expected to provide Southern Power with a stable source of revenue during their respective terms.

Many of Southern Power's PPAs have provisions that require Southern Power or the counterparty to post collateral or an acceptable substitute guarantee if (i) S&P or Moody's downgrades the credit ratings of the respective company to an unacceptable credit rating, (ii) the counterparty is not rated, or (iii) the counterparty fails to maintain a minimum coverage ratio.

Southern Power works to maintain and expand its share of the wholesale market. During 2022, Southern Power continued to be successful in remarketing up to 1,175 MWs of annual natural gas generation capacity to load-serving entities through several PPAs extending over the next eight years. Market demand is being driven by load-serving entities replacing expired purchase contracts and/or retired generation, as well as planning for future growth.

Natural Gas

Southern Power's electricity sales from natural gas facilities are primarily through long-term PPAs that consist of two types of agreements. The first type, referred to as a unit or block sale, is a customer purchase from a dedicated generating unit where all or a portion of the generation from that unit is reserved for that customer. Southern Power typically has the ability to serve the unit or block sale customer from an alternate resource. The second type, referred to as requirements service, provides that Southern Power serve the customer's capacity and energy requirements from a combination of the customer's own generating units and from Southern Power resources not dedicated to serve unit or block sales. Southern Power has rights to purchase power provided by the requirements customers' resources when economically viable.

As a general matter, substantially all of the PPAs provide that the purchasers are responsible for either procuring the fuel (tolling agreements) or reimbursing Southern Power for substantially all of the cost of fuel or purchased power relating to the energy delivered under such PPAs. To the extent a particular generating facility does not meet the operational requirements contemplated in the PPAs, Southern Power may be responsible for excess fuel costs. With respect to fuel transportation risk, most of Southern Power's PPAs provide that the counterparties are responsible for the availability of fuel transportation to the particular generating facility.

Capacity charges that form part of the PPA payments are designed to recover fixed and variable operation and maintenance costs based on dollars-per-kilowatt year. In general, to reduce Southern Power's exposure to certain operation and maintenance costs, Southern Power has LTSAs. See Note 1 to the financial statements under "Long-Term Service Agreements" for additional information.

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Solar and Wind

Southern Power's electricity sales from solar and wind generating facilities are also primarily through long-term PPAs; however, these PPAs do not have a capacity charge and customers either purchase the energy output of a dedicated renewable facility through an energy charge or provide Southern Power a certain fixed price for the electricity sold to the grid. As a result, Southern Power's ability to recover fixed and variable operations and maintenance expenses is dependent upon the level of energy generated from these facilities, which can be impacted by weather conditions, equipment performance, transmission constraints, and other factors. Generally, under the renewable generation PPAs, the purchasing party retains the right to keep or resell the associated renewable energy credits.

Income Tax Matters

Consolidated Income Taxes

The impact of certain tax events at Southern Company and/or its other subsidiaries can, and does, affect each Registrant's ability to utilize certain tax credits. See "Tax Credits" and ACCOUNTING POLICIES – "Application of Critical Accounting Policies and Estimates – Accounting for Income Taxes" herein and Note 10 to the financial statements for additional information.

Tax Credits

Southern Company has received ITCs and PTCs in connection with investments in solar, wind, fuel cell facilities, and battery energy storage facilities (co-located with existing solar facilities) primarily at Southern Power and Georgia Power.

Southern Power's ITCs relate to its investment in new solar facilities and battery energy storage facilities (co-located with existing solar facilities) that are acquired or constructed and its PTCs relate to the first 10 years of energy production from its wind facilities, which have had, and may continue to have, a material impact on Southern Power's cash flows and net income. At December 31, 2022, Southern Company and Southern Power had approximately \$1.1 billion and \$0.8 billion, respectively, of unutilized federal ITCs and PTCs, which are currently expected to be fully utilized by 2026, but could be further delayed. Since 2018, Southern Power has been utilizing tax equity partnerships for wind, solar, and battery energy storage projects, where the tax partner takes significantly all of the respective federal tax benefits. These tax equity partnerships are consolidated in Southern Company's and Southern Power's financial statements using the HLBV methodology to allocate partnership gains and losses. See Note 1 to the financial statements under "General" for additional information on the HLBV methodology and Note 1 to the financial statements under "Income Taxes" and Note 10 to the financial statements under "Deferred Tax Assets and Liabilities – Tax Credit Carryforwards" and "Effective Tax Rate" for additional information regarding utilization and amortization of credits and the tax benefit related to associated basis differences.

Inflation Reduction Act

On August 16, 2022, the Inflation Reduction Act (IRA) was signed into law. The IRA extends, expands, and increases ITCs and PTCs for clean energy projects, allows PTCs for solar projects, adds ITCs for stand-alone energy storage projects with an option to elect out of the tax normalization requirement, and allows for the transferability of the tax credits. The IRA extends and increases the tax credits for carbon capture and sequestration projects and adds tax credits for clean hydrogen and nuclear projects. Additional ITC and PTC amounts are available if the projects meet domestic content requirements or are located in low-income or energy communities. The IRA also enacted a 15% corporate minimum tax on book income, with material adjustments for pension costs and tax depreciation. The 15% corporate minimum tax on book income can be reduced by energy tax credits.

For solar projects placed in service in 2022 through 2032, the IRA provides for a 30% ITC and an option to claim a PTC instead of an ITC. Starting in 2023 and through 2032, the IRA provides for a 30% ITC for stand-alone energy storage projects. For wind projects placed in service in 2022 through 2032, the IRA provides for a 100% PTC, adjusted for inflation annually. For projects placed in service before 2022, the 2022 PTC rate is 2.6 cents per KWH. For projects placed in service in 2022, the 2022 PTC rate is 2.75 cents per KWH. The same PTC rate applies for solar projects for which the PTC option has been elected. To realize the full value of ITCs and PTCs, the IRA requires satisfaction of prevailing wage and apprenticeship requirements.

Implementation of the IRA provisions is subject to the issuance of additional guidance by the U.S. Treasury Department and the IRS, and the ultimate impacts cannot be determined at this time; however, the IRA is not expected to have a material impact on the Registrants' financial statements for the year ending December 31, 2023.

General Litigation and Other Matters

The Registrants are involved in various matters being litigated and/or regulatory and other matters that could affect future earnings, cash flows, and/or financial condition. The ultimate outcome of such pending or potential litigation against each Registrant and any subsidiaries or regulatory and other matters cannot be determined at this time; however, for current proceedings and/or matters not specifically reported herein or in Notes 2 and 3 to the financial statements, management does not anticipate that the ultimate liabilities, if any, arising

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from such current proceedings and/or matters would have a material effect on such Registrant's financial statements. See Notes 2 and 3 to the financial statements for a discussion of various contingencies, including matters being litigated, regulatory matters, and other matters which may affect future earnings potential.

ACCOUNTING POLICIES

Application of Critical Accounting Policies and Estimates

The Registrants prepare their financial statements in accordance with GAAP. Significant accounting policies are described in the notes to the financial statements. In the application of these policies, certain estimates are made that may have a material impact on the results of operations and related disclosures of the applicable Registrants (as indicated in the section descriptions herein). Different assumptions and measurements could produce estimates that are significantly different from those recorded in the financial statements. Senior management has reviewed and discussed the following critical accounting policies and estimates with the Audit Committee of Southern Company's Board of Directors. The following critical accounting policies and estimates include only those that are applicable to Southern Company.

Utility Regulation (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

The traditional electric operating companies and the natural gas distribution utilities are subject to retail regulation by their respective state PSCs or other applicable state regulatory agencies and wholesale regulation by the FERC. These regulatory agencies set the rates the traditional electric operating companies and the natural gas distribution utilities are permitted to charge customers based on allowable costs, including a reasonable ROE. As a result, the traditional electric operating companies and the natural gas distribution utilities apply accounting standards which require the financial statements to reflect the effects of rate regulation. Through the ratemaking process, the regulators may require the inclusion of costs or revenues in periods different than when they would be recognized by a non-regulated company. This treatment may result in the deferral of expenses and the recording of related regulatory assets based on anticipated future recovery through rates or the deferral of gains or creation of liabilities and the recording of related regulatory liabilities. The application of the accounting standards for rate regulated entities also impacts their financial statements as a result of the estimates of allowable costs used in the ratemaking process. These estimates may differ from those actually incurred by the traditional electric operating companies and the natural gas distribution utilities; therefore, the accounting estimates inherent in specific costs such as depreciation, AROs, and pension and other postretirement benefits have less of a direct impact on the results of operations and financial condition of the applicable Registrants than they would on a non-regulated company.

Revenues related to regulated utility operations as a percentage of total operating revenues in 2022 for the applicable Registrants were as follows: 88% for Southern Company, 98% for Alabama Power, 97% for Georgia Power, 99% for Mississippi Power, and 88% for Southern Company Gas.

As reflected in Note 2 to the financial statements, significant regulatory assets and liabilities have been recorded. Management reviews the ultimate recoverability of these regulatory assets and any requirement to refund these regulatory liabilities based on applicable regulatory guidelines and GAAP. However, adverse legislative, judicial, or regulatory actions could materially impact the amounts of such regulatory assets and liabilities and could adversely impact the financial statements of the applicable Registrants.

Estimated Cost, Schedule, and Rate Recovery for the Construction of Plant Vogtle Units 3 and 4 (Southern Company and Georgia Power)

In 2016, the Georgia PSC approved the Vogtle Cost Settlement Agreement, which resolved certain prudence matters in connection with Georgia Power's fifteenth VCM report. In 2017, the Georgia PSC approved Georgia Power's seventeenth VCM report, which included a recommendation to continue construction of Plant Vogtle Units 3 and 4, with Southern Nuclear serving as project manager and Bechtel serving as the primary construction contractor, as well as a modification of the Vogtle Cost Settlement Agreement. The Georgia PSC's related order stated that under the modified Vogtle Cost Settlement Agreement, (i) none of the \$3.3 billion of costs incurred through December 31, 2015 should be disallowed as imprudent; (ii) the Contractor Settlement Agreement was reasonable and prudent and none of the \$0.3 billion paid pursuant to the Contractor Settlement Agreement should be disallowed from rate base on the basis of imprudence; (iii) capital costs incurred up to \$5.68 billion would be presumed to be reasonable and prudent with the burden of proof on any party challenging such costs; (iv) Georgia Power would have the burden of proof to show that any capital costs above \$5.68 billion were prudent; (v) Georgia Power's total project capital cost forecast of \$7.3 billion (net of \$1.7 billion received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds) was found reasonable and did not represent a cost cap; and (vi) a prudence proceeding on cost recovery will occur subsequent to achieving fuel load for Unit 4. In its order, the Georgia PSC also stated if other conditions change and assumptions upon which Georgia Power's seventeenth VCM report are based do not materialize, the Georgia PSC reserved the right to reconsider the decision to continue construction.

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As of December 31, 2022, Georgia Power revised its total project capital cost forecast to \$10.6 billion (net of \$1.7 billion received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds). This forecast includes construction contingency of \$60 million and is based on projected in-service dates at the end of the second quarter 2023 and the first quarter 2024 for Units 3 and 4, respectively. Since 2018, established construction contingency and additional costs totaling \$2.5 billion have been assigned to the base capital cost forecast. Although Georgia Power believes these incremental costs are reasonable and necessary to complete the project and the Georgia PSC's order in the seventeenth VCM proceeding specifically states that the construction of Plant Vogtle Units 3 and 4 is not subject to a cost cap, Georgia Power will not seek rate recovery for the \$0.7 billion increase to the base capital cost forecast included in the nineteenth VCM report and charged to income by Georgia Power in the second quarter 2018 and has not sought rate recovery for any subsequent construction and additional contingency costs assigned to the base capital cost forecast. After considering the significant level of uncertainty that exists regarding the future recoverability of these costs since the ultimate outcome of these matters is subject to the outcome of future assessments by management, as well as Georgia PSC decisions in these future regulatory proceedings, Georgia Power recorded total pre-tax charges to income of \$1.1 billion (\$0.8 billion after tax) in 2018; \$149 million (\$111 million after tax) and \$176 million (\$131 million after tax) in the second quarter and the fourth quarter 2020, respectively; \$48 million (\$36 million after tax), \$460 million (\$343 million after tax), \$264 million (\$197 million after tax), and \$480 million (\$358 million after tax) in the first quarter 2021, the second quarter 2021, the third quarter 2021, and the fourth quarter 2021, respectively; and \$36 million (\$27 million after tax), \$32 million (\$24 million after tax), and \$148 million (\$110 million after tax) in the second quarter 2022, the third quarter 2022, and the fourth quarter 2022, respectively.

Georgia Power and the other Vogtle Owners do not agree on either the starting dollar amount for the determination of cost increases subject to the cost-sharing and tender provisions of the Global Amendments (as defined in Note 2 to the financial statements under "Georgia Power – Nuclear Construction – Joint Owner Contracts") or the extent to which COVID-19-related costs impact those provisions. The other Vogtle Owners notified Georgia Power that they believe the project capital cost forecast approved by the Vogtle Owners on February 14, 2022 triggered the tender provisions. On June 17, 2022 and July 26, 2022, OPC and Dalton, respectively, notified Georgia Power of their purported exercises of their tender options. Georgia Power did not accept these purported tender exercises. On September 29, 2022, Georgia Power and MEAG Power reached an agreement to resolve their dispute regarding the proper interpretation of the cost-sharing and tender provisions of the Global Amendments. Under the terms of the agreement, among other items, (i) MEAG Power will not exercise its tender option and will retain its full ownership interest in Plant Vogtle Units 3 and 4; (ii) Georgia Power will reimburse a portion of MEAG Power's costs of construction for Plant Vogtle Units 3 and 4 as such costs are incurred and with no further adjustment for force majeure costs, which payments will total approximately \$92 million based on the current project capital cost forecast; and (iii) Georgia Power will reimburse 20% of MEAG Power's costs of construction with respect to any amounts over the current project capital cost forecast, with no further adjustment for force majeure costs.

Georgia Power recorded additional pre-tax charges (credits) to income of approximately \$440 million (\$328 million after tax) in the fourth quarter 2021 and approximately \$16 million (\$12 million after tax), \$(102) million (\$76 million after tax), and \$53 million (\$40 million after tax) in the second quarter 2022, the third quarter 2022, and the fourth quarter 2022, respectively, associated with the cost-sharing and tender provisions of the Global Amendments, including the settlement with MEAG Power. A total of \$407 million associated with these provisions is included in the total project capital cost forecast and will not be recovered from retail customers. The settlement with MEAG Power does not resolve the separate pending litigation with OPC, including Dalton's associated complaint, regarding the cost-sharing and tender provisions of the Global Amendments described in Note 2 to the financial statements under "Georgia Power – Nuclear Construction – Joint Owner Contracts." Georgia Power may be required to record further pre-tax charges to income of up to approximately \$345 million associated with these provisions for OPC and Dalton based on the current project capital cost forecast.

Georgia Power's ownership interest in Plant Vogtle Units 3 and 4 continues to be 45.7%. Georgia Power believes the increases in the total project capital cost forecast through December 31, 2022 will trigger the tender provisions, but Georgia Power disagrees with OPC and Dalton on the tender provisions trigger date. Valid notices of tender from OPC and Dalton would require Georgia Power to pay 100% of their respective remaining shares of the costs necessary to complete Plant Vogtle Units 3 and 4. Georgia Power's incremental ownership interest will be calculated and conveyed to Georgia Power after Plant Vogtle Units 3 and 4 are placed in service.

As part of its ongoing processes, Southern Nuclear continues to evaluate cost and schedule forecasts on a regular basis to incorporate current information available, particularly in the areas of start-up testing and related test results, engineering support, commodity installation, system turnovers, and workforce statistics.

The projected schedule for Unit 3 primarily depends on the progression of final component and pre-operational testing and start-up, which may be impacted by further equipment, component, and/or other operational challenges. The projected schedule for Unit 4 primarily depends on potential impacts arising from Unit 4 testing activities overlapping with Unit 3 start-up and commissioning; maintaining overall construction productivity and production levels, particularly in subcontractor scopes of work; and maintaining appropriate levels of craft laborers. Any further delays could result in later in-service dates and cost increases.

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Various design and other licensing-based compliance matters, including the timely submittal by Southern Nuclear of the ITAAC documentation and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel for Unit 4, may arise, which may result in additional license amendment requests or require other resolution. If any license amendment requests or other licensing-based compliance issues, including inspections and ITAACs for Unit 4, are not resolved in a timely manner, there may be delays in the project schedule that could result in increased costs.

The ultimate outcome of these matters cannot be determined at this time. However, any extension of the in-service date beyond the second quarter 2023 for Unit 3 or the first quarter 2024 for Unit 4, including the joint owner cost sharing and tender impacts described in Note 2, is estimated to result in additional base capital costs for Georgia Power of up to \$15 million per month for Unit 3 and \$35 million per month for Unit 4, as well as the related AFUDC and any additional related construction, support resources, or testing costs. While Georgia Power is not precluded from seeking retail recovery of any future capital cost forecast increase other than the amounts related to the cost-sharing and tender provisions of the joint ownership agreements described above, management will ultimately determine whether or not to seek recovery. Any further changes to the capital cost forecast that are not expected to be recoverable through regulated rates will be required to be charged to income and such charges could be material.

Given the significant complexity involved in estimating the future costs to complete construction and start-up of Plant Vogtle Units 3 and 4 and the significant management judgment necessary to assess the related uncertainties surrounding future rate recovery of any projected cost increases, as well as the potential impact on results of operations and cash flows, Southern Company and Georgia Power consider these items to be critical accounting estimates. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for additional information.

Accounting for Income Taxes (Southern Company, Georgia Power, Mississippi Power, Southern Power, and Southern Company Gas)

The consolidated income tax provision and deferred income tax assets and liabilities, as well as any unrecognized tax benefits and valuation allowances, require significant judgment and estimates. These estimates are supported by historical tax return data, reasonable projections of taxable income, the ability and intent to implement tax planning strategies if necessary, and interpretations of applicable tax laws and regulations across multiple taxing jurisdictions. The effective tax rate reflects the statutory tax rates and calculated apportionments for the various states in which the Southern Company system operates.

Southern Company files a consolidated federal income tax return and the Registrants file various state income tax returns, some of which are combined or unitary. Under a joint consolidated income tax allocation agreement, each Southern Company subsidiary's current and deferred tax expense is computed on a stand-alone basis and each subsidiary is allocated an amount of tax similar to that which would be paid if it filed a separate income tax return. In accordance with IRS regulations, each company is jointly and severally liable for the federal tax liability. Certain deductions and credits can be limited or utilized at the consolidated or combined level resulting in tax credit and/or state NOL carryforwards that would not otherwise result on a stand-alone basis. Utilization of these carryforwards and the assessment of valuation allowances are based on significant judgment and extensive analysis of Southern Company's and its subsidiaries' current financial position and results of operations, including currently available information about future years, to estimate when future taxable income will be realized. See Note 10 to the financial statements under "Deferred Tax Assets and Liabilities – Tax Credit Carryforwards" and "– Net Operating Loss Carryforwards" for additional information.

Current and deferred state income tax liabilities and assets are estimated based on laws of multiple states that determine the income to be apportioned to their jurisdictions. States have various filing methodologies and utilize specific formulas to calculate the apportionment of taxable income. The calculation of deferred state taxes considers apportionment factors and filing methodologies that are expected to apply in future years. Any apportionments and/or filing methodologies ultimately finalized in a manner inconsistent with expectations could have a material effect on the financial statements of the applicable Registrants.

Given the significant judgment involved in estimating tax credit and/or state NOL carryforwards and multi-state apportionments for all subsidiaries, the applicable Registrants consider deferred income tax liabilities and assets to be critical accounting estimates.

Asset Retirement Obligations (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

AROs are computed as the present value of the estimated costs for an asset's future retirement and are recorded in the period in which the liability is incurred. The estimated costs are capitalized as part of the related long-lived asset and depreciated over the asset's useful life. In the absence of quoted market prices, AROs are estimated using present value techniques in which estimates of future cash outlays associated with the asset retirements are discounted using a credit-adjusted risk-free rate. Estimates of the timing and amounts of future cash outlays are based on projections of when and how the assets will be retired and the cost of future removal activities.

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The ARO liabilities for the traditional electric operating companies primarily relate to facilities that are subject to the CCR Rule and the related state rules, principally ash ponds. In addition, Alabama Power and Georgia Power have retirement obligations related to the decommissioning of nuclear facilities (Alabama Power's Plant Farley and Georgia Power's ownership interests in Plant Hatch and Plant Vogtle Units 1 and 2). Other significant AROs include various landfill sites and asbestos removal for Alabama Power, Georgia Power, and Mississippi Power and gypsum cells and mine reclamation for Mississippi Power.

The traditional electric operating companies and Southern Company Gas also have identified other retirement obligations, such as obligations related to certain electric transmission and distribution facilities, certain asbestos-containing material within long-term assets not subject to ongoing repair and maintenance activities, certain wireless communication towers, the disposal of polychlorinated biphenyls in certain transformers, leasehold improvements, equipment on customer property, and property associated with the Southern Company system's rail lines and natural gas pipelines. However, liabilities for the removal of these assets have not been recorded because the settlement timing for certain retirement obligations related to these assets is indeterminable and, therefore, the fair value of the retirement obligations cannot be reasonably estimated. A liability for these retirement obligations will be recognized when sufficient information becomes available to support a reasonable estimation of the ARO.

The cost estimates for AROs related to the disposal of CCR are based on information using various assumptions related to closure and post-closure costs, timing of future cash outlays, inflation and discount rates, and the potential methods for complying with the CCR Rule and the related state rules. The traditional electric operating companies have periodically updated, and expect to continue periodically updating, their related cost estimates and ARO liabilities for each CCR unit as additional information related to these assumptions becomes available. Some of these updates have been, and future updates may be, material. See Note 6 to the financial statements for additional information, including updates to AROs related to ash ponds recorded during 2022 by certain Registrants.

Given the significant judgment involved in estimating AROs, the applicable Registrants consider the liabilities for AROs to be critical accounting estimates.

Pension and Other Postretirement Benefits (Southern Company, Alabama Power, Georgia Power, Mississippi Power, and Southern Company Gas)

The applicable Registrants' calculations of pension and other postretirement benefits expense are dependent on a number of assumptions. These assumptions include discount rates, healthcare cost trend rates, expected long-term rate of return (LRR) on plan assets, mortality rates, expected salary and wage increases, and other factors. Components of pension and other postretirement benefits expense include interest and service cost on the pension and other postretirement benefit plans, expected return on plan assets, and amortization of certain unrecognized costs and obligations. Actual results that differ from the assumptions utilized are accumulated and amortized over future periods and, therefore, generally affect recognized expense and the recorded obligation in future periods. While the applicable Registrants believe the assumptions used are appropriate, differences in actual experience or significant changes in assumptions would affect their pension and other postretirement benefit costs and obligations.

Key elements in determining the applicable Registrants' pension and other postretirement benefit expense are the LRR and the discount rate used to measure the benefit plan obligations and the periodic benefit plan expense for future periods. For purposes of determining the applicable Registrants' liabilities related to the pension and other postretirement benefit plans, Southern Company discounts the future related cash flows using a single-point discount rate for each plan developed from the weighted average of market-observed yields for high quality fixed income securities with maturities that correspond to expected benefit payments. The discount rate assumption impacts both the service cost and non-service costs components of net periodic benefit costs as well as the projected benefit obligations.

The LRR on pension and other postretirement benefit plan assets is based on Southern Company's investment strategy, as described in Note 11 to the financial statements, historical experience, and expectations that consider external actuarial advice, and represents the average rate of earnings expected over the long term on the assets invested to provide for anticipated future benefit payments. Southern Company determines the amount of the expected return on plan assets component of non-service costs by applying the LRR of various asset classes to Southern Company's target asset allocation. The LRR only impacts the non-service costs component of net periodic benefit costs for the following year and is set annually at the beginning of the year.

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The following table illustrates the sensitivity to changes in the applicable Registrants' long-term assumptions with respect to the discount rate, salary increases, and the long-term rate of return on plan assets:

25 Basis Point Change in:	Increase/(Decrease) in		
	Total Benefit Expense for 2023	Projected Obligation for Pension Plan at December 31, 2022	Projected Obligation for Other Postretirement Benefit Plans at December 31, 2022
	<i>(in millions)</i>		
Discount rate:			
Southern Company	\$33/\$(25)	\$395/\$(375)	\$35/\$(33)
Alabama Power	\$9/\$(9)	\$95/\$(90)	\$9/\$(8)
Georgia Power	\$9/\$(9)	\$116/\$(111)	\$12/\$(12)
Mississippi Power	\$2/\$(1)	\$18/\$(17)	\$1/\$(1)
Southern Company Gas	\$2/\$(2)	\$25/\$(24)	\$4/\$(4)
Salaries:			
Southern Company	\$16/\$(15)	\$81/\$(79)	\$-/\$-
Alabama Power	\$5/\$(4)	\$23/\$(22)	\$-/\$-
Georgia Power	\$5/\$(4)	\$22/\$(22)	\$-/\$-
Mississippi Power	\$1/\$(1)	\$3/\$(3)	\$-/\$-
Southern Company Gas	\$1/\$(0)	\$2/\$(2)	\$-/\$-
Long-term return on plan assets:			
Southern Company	\$39/\$(39)	N/A	N/A
Alabama Power	\$10/\$(10)	N/A	N/A
Georgia Power	\$12/\$(12)	N/A	N/A
Mississippi Power	\$2/\$(2)	N/A	N/A
Southern Company Gas	\$3/\$(3)	N/A	N/A

See Note 11 to the financial statements for additional information regarding pension and other postretirement benefits.

Asset Impairment (Southern Company, Southern Power, and Southern Company Gas)

Goodwill (Southern Company and Southern Company Gas)

The acquisition method of accounting for business combinations requires the assets acquired and liabilities assumed to be recorded at the date of acquisition at their respective estimated fair values. The applicable Registrants have recognized goodwill as of the date of their acquisitions, as a residual over the fair values of the identifiable net assets acquired. Goodwill is tested for impairment at the reporting unit level on an annual basis in the fourth quarter of the year and on an interim basis if events and circumstances occur that indicate goodwill may be impaired. A reporting unit is the operating segment, or a business one level below the operating segment (a component), if discrete financial information is prepared and regularly reviewed by management. Components are aggregated if they have similar economic characteristics.

As part of the goodwill impairment tests, the applicable Registrant may perform an initial qualitative assessment to determine whether it is more likely than not that the fair value of each reporting unit is less than its carrying amount before applying the quantitative goodwill impairment test. If the applicable Registrant elects to perform the qualitative assessment, it evaluates relevant events and circumstances, including but not limited to, macroeconomic conditions, industry and market conditions, cost factors, financial performance, entity specific events, and events specific to each reporting unit. If the applicable Registrant determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, or it elects not to perform a qualitative assessment, it compares the fair value of the reporting unit to its carrying amount to determine if the fair value is greater than its carrying amount.

Goodwill for Southern Company and Southern Company Gas was \$5.2 billion and \$5.0 billion, respectively, at December 31, 2022. During the fourth quarter 2022, Southern Company recorded a \$119 million impairment loss as a result of its annual goodwill impairment test for PowerSecure.

The judgments made in determining the estimated fair value assigned to each class of assets acquired and liabilities assumed, as well as asset lives, can significantly impact the applicable Registrant's results of operations. Fair values and useful lives are determined based on, among other factors, the expected future period of benefit of the asset, the various characteristics of the asset, and projected cash flows. As the determination of an asset's fair value and useful life involves management making certain estimates and because these estimates

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form the basis for the determination of whether or not an impairment charge should be recorded, the applicable Registrants consider these estimates to be critical accounting estimates.

See Note 1 to the financial statements under "Goodwill and Other Intangible Assets and Liabilities" for additional information regarding the applicable Registrants' goodwill.

Long-Lived Assets (Southern Company, Southern Power, and Southern Company Gas)

The applicable Registrants assess their other long-lived assets for impairment whenever events or changes in circumstances indicate that an asset's carrying amount may not be recoverable. If an indicator exists, the asset is tested for recoverability by comparing the asset carrying amount to the sum of the undiscounted expected future cash flows directly attributable to the asset's use and eventual disposition. If the estimate of undiscounted future cash flows is less than the carrying amount of the asset, the fair value of the asset is determined and a loss is recorded equal to the difference between the carrying amount and the fair value of the asset. In addition, when assets are identified as held for sale, an impairment loss is recognized to the extent the carrying amount of the assets or asset group exceeds their fair value less cost to sell. A high degree of judgment is required in developing estimates related to these evaluations, which are based on projections of various factors, some of which have been quite volatile in recent years. Impairments of long-lived assets of the traditional electric utilities and natural gas distribution utilities are generally related to specific regulatory disallowances.

Southern Power's investments in long-lived assets are primarily generation assets. Excluding the natural gas distribution utilities, Southern Company Gas' investments in long-lived assets are primarily natural gas transportation and storage facility assets.

For Southern Power, examples of impairment indicators could include significant changes in construction schedules, current period losses combined with a history of losses or a projection of continuing losses, a significant decrease in market prices, changes in tax legislation, the inability to remarket generating capacity for an extended period, the unplanned termination of a customer contract, or the inability of a customer to perform under the terms of the contract. For Southern Company Gas, examples of impairment indicators could include, but are not limited to, significant changes in the U.S. natural gas storage market, construction schedules, current period losses combined with a history of losses or a projection of continuing losses, a significant decrease in market prices, the inability to renew or extend customer contracts or the inability of a customer to perform under the terms of the contract, attrition rates, or the inability to deploy a development project.

As the determination of the expected future cash flows generated from an asset, an asset's fair value, and useful life involves management making certain estimates and because these estimates form the basis for the determination of whether or not an impairment charge should be recorded, the applicable Registrants consider these estimates to be critical accounting estimates.

During 2021 and 2020, Southern Company recorded impairment charges totaling \$7 million (\$6 million after tax) and \$206 million (\$105 million after tax), respectively, related to its leveraged lease investments. During 2022, Southern Company Gas recorded pre-tax impairment charges totaling \$131 million (\$99 million after tax) related to natural gas storage facilities. During 2021, Southern Company Gas recorded total pre-tax impairment charges of \$84 million (\$67 million after tax) related to its equity method investment in the PennEast Pipeline project. See Notes 7 and 9 to the financial statements under "Southern Company Gas" and "Southern Company Leveraged Lease," respectively, and Note 15 to the financial statements for additional information on recent asset impairments.

Contingent Obligations (All Registrants)

The Registrants are subject to a number of federal and state laws and regulations, as well as other factors and conditions that subject them to environmental, litigation, and other risks. See FUTURE EARNINGS POTENTIAL herein and Notes 2 and 3 to the financial statements for more information regarding certain of these contingencies. The Registrants periodically evaluate their exposure to such risks and record reserves for those matters where a non-tax-related loss is considered probable and reasonably estimable. The adequacy of reserves can be significantly affected by external events or conditions that can be unpredictable; thus, the ultimate outcome of such matters could materially affect the results of operations, cash flows, or financial condition of the Registrants.

Recently Issued Accounting Standards

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (ASU 2020-04) providing temporary guidance to ease the potential burden in accounting for reference rate reform primarily resulting from the discontinuation of LIBOR, which began phasing out on December 31, 2021. The discontinuation date of the overnight 1-, 3-, 6-, and 12-month tenors of LIBOR is June 30, 2023, which is beyond the original effective date of ASU 2020-04; therefore, on December 21, 2022, the FASB issued ASU 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848* (ASU 2022-06) to defer the sunset date of ASU 2020-04 from December 31, 2022 to December 31, 2024.

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The amendments are elective and apply to all entities that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued. The guidance (i) simplifies accounting analyses under current GAAP for contract modifications; (ii) simplifies the assessment of hedge effectiveness and allows hedging relationships affected by reference rate reform to continue; and (iii) allows a one-time election to sell or transfer debt securities classified as held to maturity that reference a rate affected by reference rate reform. An entity may elect to apply the amendments prospectively from March 12, 2020 through December 31, 2024 by accounting topic. The Registrants have elected to apply the amendments to modifications of debt and derivative arrangements that meet the scope of ASU 2020-04 and ASU 2022-06.

The Registrants currently reference LIBOR for certain debt and hedging arrangements. In addition, certain provisions in PPAs at Southern Power include references to LIBOR. Contract language has been, or is expected to be, incorporated into each of these agreements to address the transition to an alternative rate for agreements that will be in place at the transition date. No material impacts are expected from modifications to the arrangements and effective hedging relationships are expected to continue. See FINANCIAL CONDITION AND LIQUIDITY – “Overview” and “Financing Activities” herein and Note 14 to the financial statements under “Interest Rate Derivatives” for additional information.

FINANCIAL CONDITION AND LIQUIDITY

Overview

The financial condition of each Registrant remained stable at December 31, 2022. The Registrants' cash requirements primarily consist of funding ongoing operations, including unconsolidated subsidiaries, as well as common stock dividends, capital expenditures, and debt maturities. Southern Power's cash requirements also include distributions to noncontrolling interests. Capital expenditures and other investing activities for the traditional electric operating companies include investments to build new generation facilities to meet projected long-term demand requirements and to replace units being retired as part of the generation fleet transition, to maintain existing generation facilities, to comply with environmental regulations including adding environmental modifications to certain existing generating units and closures of ash ponds, to expand and improve transmission and distribution facilities, and for restoration following major storms. Southern Power's capital expenditures and other investing activities may include acquisitions or new construction associated with its overall growth strategy and to maintain its existing generation fleet's performance. Southern Company Gas' capital expenditures and other investing activities include investments to meet projected long-term demand requirements, to maintain existing natural gas distribution systems as well as to update and expand these systems, and to comply with environmental regulations. See “Cash Requirements” herein for additional information.

Operating cash flows provide a substantial portion of the Registrants' cash needs. During 2022, Southern Power utilized tax credits, which provided \$49 million in operating cash flows. For the three-year period from 2023 through 2025, projected stock dividends, capital expenditures, and debt maturities are expected to exceed operating cash flows for each of Southern Company, the traditional electric operating companies, and Southern Company Gas. Southern Company plans to finance future cash needs in excess of its operating cash flows through one or more of the following: accessing borrowings from financial institutions, issuing debt and hybrid securities in the capital markets, and/or through its stock plans. Each Subsidiary Registrant plans to finance its future cash needs in excess of its operating cash flows primarily through external securities issuances, borrowings from financial institutions, and equity contributions from Southern Company. In addition, Southern Power plans to utilize tax equity partnership contributions. The Registrants plan to use commercial paper to manage seasonal variations in operating cash flows and for other working capital needs and continue to monitor their access to short-term and long-term capital markets as well as their bank credit arrangements to meet future capital and liquidity needs. See “Sources of Capital” and “Financing Activities” herein for additional information.

To facilitate an orderly transition from LIBOR to alternative benchmark rate(s), the Registrants have established an initiative to assess and mitigate risks associated with the discontinuation of LIBOR. As part of this initiative, several alternative benchmark rates have been, and continue to be, evaluated and implemented. Substantially all of the Registrants' credit facilities allow for LIBOR to be phased out and replaced with SOFR and interest rate derivatives address the LIBOR transition through the adoption of the ISDA 2020 IBOR Fallbacks Protocol and subsequent amendments. None of the Registrants expects the transition from LIBOR to have a material impact.

The Registrants' investments in their qualified pension plans and Alabama Power's and Georgia Power's investments in their nuclear decommissioning trust funds decreased in value at December 31, 2022 as compared to December 31, 2021. No contributions to the qualified pension plan were made during 2022 and no mandatory contributions to the qualified pension plans are anticipated during 2023. See Notes 6 and 11 to the financial statements under “Nuclear Decommissioning” and “Pension Plans,” respectively, for additional information.

At the end of 2022, the market price of Southern Company's common stock was \$71.41 per share (based on the closing price as reported on the NYSE) and the book value was \$27.93 per share, representing a market-to-book value ratio of 256%, compared to \$68.58, \$26.30, and 261%, respectively, at the end of 2021.

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Cash Requirements

Capital Expenditures

Total estimated capital expenditures, including LTSA and nuclear fuel commitments, for the Registrants through 2027 based on their current construction programs are as follows:

	2023	2024	2025	2026	2027
	<i>(in billions)</i>				
Southern Company ^{(a)(b)(c)}	\$9.1	\$8.1	\$7.7	\$7.9	\$7.7
Alabama Power ^(a)	2.0	1.9	1.9	1.8	1.9
Georgia Power ^(b)	4.6	3.9	3.6	3.9	3.6
Mississippi Power	0.3	0.3	0.3	0.2	0.2
Southern Power ^(c)	0.1	0.1	0.1	0.1	0.1
Southern Company Gas	1.8	1.8	1.8	1.8	1.8

(a) Includes expenditures of approximately \$0.1 billion in 2023 for the construction of Plant Barry Unit 8. See Note 2 to the financial statements under "Alabama Power" for additional information.

(b) Includes expenditures of approximately \$1.0 billion and \$0.2 billion in 2023 and 2024, respectively, for the construction of Plant Vogtle Units 3 and 4.

(c) Excludes approximately \$0.5 billion in 2023 and \$0.8 billion per year for 2024 through 2027 for Southern Power's planned acquisitions and placeholder growth, which may vary materially due to market opportunities and Southern Power's ability to execute its growth strategy.

These capital expenditures include estimates to comply with environmental laws and regulations, but do not include any potential compliance costs associated with any future regulation of CO₂ emissions from fossil fuel-fired electric generating units. See FUTURE EARNINGS POTENTIAL – "Environmental Matters" herein for additional information. At December 31, 2022, significant purchase commitments were outstanding in connection with the Registrants' construction programs.

The traditional electric operating companies also anticipate continued expenditures associated with closure and monitoring of ash ponds and landfills in accordance with the CCR Rule and the related state rules, which are reflected in the applicable Registrants' ARO liabilities. The cost estimates for Alabama Power and Mississippi Power are based on closure-in-place for all ash ponds. The cost estimates for Georgia Power are based on a combination of closure-in-place for some ash ponds and closure by removal for others. These estimated costs are likely to change, and could change materially, as assumptions and details pertaining to closure are refined and compliance activities continue. Current estimates of these costs through 2027 are provided in the table below. Material expenditures in future years for ARO settlements will also be required for ash ponds, nuclear decommissioning (for Alabama Power and Georgia Power), and other liabilities reflected in the applicable Registrants' AROs, as discussed further in Note 6 to the financial statements. Also see FUTURE EARNINGS POTENTIAL – "Environmental Matters – Environmental Laws and Regulations – Coal Combustion Residuals" herein.

	2023	2024	2025	2026	2027
	<i>(in millions)</i>				
Southern Company	\$672	\$730	\$765	\$816	\$712
Alabama Power	330	346	364	299	237
Georgia Power	295	330	345	482	469
Mississippi Power	21	25	31	17	2

The construction programs are subject to periodic review and revision, and actual construction costs may vary from these estimates because of numerous factors. These factors include: changes in business conditions; changes in load projections; changes in environmental laws and regulations; the outcome of any legal challenges to environmental rules; changes in electric generating plants, including unit retirements and replacements and adding or changing fuel sources at existing electric generating units, to meet regulatory requirements; changes in FERC rules and regulations; state regulatory agency approvals; changes in the expected environmental compliance program; changes in legislation and/or regulation; the cost, availability, and efficiency of construction labor, equipment, and materials; project scope and design changes; abnormal weather; delays in construction due to judicial or regulatory action; storm impacts; and the cost of capital. The continued impacts of the COVID-19 pandemic could also impair the ability to develop, construct, and operate facilities. In addition, there can be no assurance that costs related to capital expenditures and AROs will be fully recovered. Additionally, expenditures associated with Southern Power's planned acquisitions may vary due to market opportunities and the execution of its growth strategy. See Note 15 to the financial statements under "Southern Power" for additional information regarding Southern Power's plant acquisitions and construction projects.

The construction program of Georgia Power includes Plant Vogtle Units 3 and 4, which includes components based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale and which may be subject to additional revised cost estimates during construction. See Note 2 to the financial statements under "Georgia Power – Nuclear Construction" for information regarding Plant Vogtle Units 3 and 4 and additional factors that may impact construction expenditures.

See FUTURE EARNINGS POTENTIAL – "Construction Programs" herein for additional information.

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Other Significant Cash Requirements

Long-term debt maturities and the interest payable on long-term debt each represent a significant cash requirement for the Registrants. See Note 8 to the financial statements for information regarding the Registrants' long-term debt at December 31, 2022, the weighted average interest rate applicable to each long-term debt category, and a schedule of long-term debt maturities over the next five years. The Registrants plan to continue, when economically feasible, to retire higher-cost securities and replace these obligations with lower-cost capital if market conditions permit.

Fuel and purchased power costs represent a significant component of funding ongoing operations for the traditional electric operating companies and Southern Power. See Note 3 to the financial statements under "Commitments" for information on Southern Company Gas' commitments for pipeline charges, storage capacity, and gas supply. Total estimated costs for fuel and purchased power commitments at December 31, 2022 for the applicable Registrants are provided in the table below. Fuel costs include purchases of coal (for the traditional electric operating companies) and natural gas (for the traditional electric operating companies and Southern Power), as well as the related transportation and storage. In most cases, these contracts contain provisions for price escalation, minimum purchase levels, and other financial commitments. Natural gas purchase commitments are based on various indices at the time of delivery; the amounts reflected below have been estimated based on the NYMEX future prices at December 31, 2022. As discussed under "Capital Expenditures" herein, estimated expenditures for nuclear fuel are included in the applicable Registrants' construction programs for the years 2023 through 2027. Nuclear fuel commitments at December 31, 2022 that extend beyond 2027 are included in the table below. Purchased power costs represent estimated minimum obligations for various PPAs for the purchase of capacity and energy, except for those accounted for as leases, which are discussed in Note 9 to the financial statements.

	2023	2024	2025	2026	2027	Thereafter
	<i>(in millions)</i>					
Southern Company ^(*)	\$5,985	\$3,605	\$2,485	\$1,260	\$1,136	\$6,052
Alabama Power	1,623	1,067	820	343	313	1,363
Georgia Power ^(*)	2,413	1,347	946	487	452	4,255
Mississippi Power	789	496	280	160	143	418
Southern Power	1,159	695	438	269	228	16

(*) Excludes capacity payments related to Plant Vogtle Units 1 and 2, which are discussed in Note 3 to the financial statements under "Commitments."

In connection with Georgia Power's 2022 IRP, the Georgia PSC approved five affiliate PPAs with Southern Power, which are expected to be accounted for as leases, and are contingent upon approval by the FERC. The expected capacity payments associated with the PPAs total \$5 million in 2024, \$68 million in 2025, \$75 million in 2026, \$76 million in 2027, and \$670 million thereafter. See Note 2 to the financial statements under "Georgia Power – Integrated Resource Plans" for additional information.

The traditional electric operating companies and Southern Power have entered into LTSAs for the purpose of securing maintenance support for certain of their generating facilities. See Note 1 to the financial statements under "Long-term Service Agreements" for additional information. As discussed under "Capital Expenditures" herein, estimated expenditures related to LTSAs are included in the applicable Registrants' construction programs for the years 2023 through 2027. Total estimated payments for LTSA commitments at December 31, 2022 that extend beyond 2027 are provided in the following table and include price escalation based on inflation indices:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power
	<i>(in millions)</i>				
LTSA commitments (after 2027)	\$1,779	\$303	\$305	\$163	\$1,008

In addition, Southern Power has certain other operations and maintenance agreements. Total estimated costs for these commitments at December 31, 2022 are provided in the table below.

	2023	2024	2025	2026	2027	Thereafter
	<i>(in millions)</i>					
Southern Power's operations and maintenance agreements	\$69	\$58	\$41	\$30	\$29	\$251

See Note 9 to the financial statements for information on the Registrants' operating lease obligations, including a maturity analysis of the lease liabilities over the next five years and thereafter.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Sources of Capital

Southern Company intends to meet its future capital needs through operating cash flows, borrowings from financial institutions, and debt, hybrid, and/or equity issuances. Equity capital can be provided from any combination of Southern Company's stock plans, private placements, or public offerings.

The Subsidiary Registrants plan to obtain the funds to meet their future capital needs from sources similar to those they used in the past, which were primarily from operating cash flows, external securities issuances, borrowings from financial institutions, and equity contributions from Southern Company. In addition, Southern Power plans to utilize tax equity partnership contributions (as discussed further herein). Georgia Power intends to continue utilizing short-term floating rate bank loans and commercial paper issuances to fund operating cash flows related to fuel cost under recovery.

The amount, type, and timing of any financings in 2023, as well as in subsequent years, will be contingent on investment opportunities and the Registrants' capital requirements and will depend upon prevailing market conditions, regulatory approvals (for certain of the Subsidiary Registrants), and other factors. See "Cash Requirements" herein for additional information.

Southern Power utilizes tax equity partnerships as one of its financing sources, where the tax partner takes significantly all of the federal tax benefits. These tax equity partnerships are consolidated in Southern Power's financial statements and are accounted for using HLBV methodology to allocate partnership gains and losses. During 2022, Southern Power obtained tax equity funding for existing tax equity partnerships totaling \$51 million. See Notes 1 and 15 to the financial statements under "General" and "Southern Power," respectively, for additional information.

The issuance of securities by the traditional electric operating companies and Nicor Gas is generally subject to the approval of the applicable state PSC or other applicable state regulatory agency. The issuance of all securities by Mississippi Power and short-term securities by Georgia Power is generally subject to regulatory approval by the FERC. Additionally, with respect to the public offering of securities, Southern Company, the traditional electric operating companies, and Southern Power (excluding its subsidiaries), Southern Company Gas Capital, and Southern Company Gas (excluding its other subsidiaries) file registration statements with the SEC under the Securities Act of 1933, as amended (1933 Act). The amounts of securities authorized by the appropriate regulatory authorities, as well as the securities registered under the 1933 Act, are closely monitored and appropriate filings are made to ensure flexibility in the capital markets.

The Registrants generally obtain financing separately without credit support from any affiliate. See Note 8 to the financial statements under "Bank Credit Arrangements" for additional information. The Southern Company system does not maintain a centralized cash or money pool. Therefore, funds of each company are not commingled with funds of any other company in the Southern Company system, except in the case of Southern Company Gas, as described below.

The traditional electric operating companies and SEGCO may utilize a Southern Company subsidiary organized to issue and sell commercial paper at their request and for their benefit. Proceeds from such issuances for the benefit of an individual company are loaned directly to that company. The obligations of each traditional electric operating company and SEGCO under these arrangements are several and there is no cross-affiliate credit support. Alabama Power also maintains its own separate commercial paper program.

Southern Company Gas Capital obtains external financing for Southern Company Gas and its subsidiaries, other than Nicor Gas, which obtains financing separately without credit support from any affiliates. Southern Company Gas maintains commercial paper programs at Southern Company Gas Capital and Nicor Gas. Nicor Gas' commercial paper program supports its working capital needs as Nicor Gas is not permitted to make money pool loans to affiliates. All of the other Southern Company Gas subsidiaries benefit from Southern Company Gas Capital's commercial paper program.

By regulation, Nicor Gas is restricted, to the extent of its retained earnings balance, in the amount it can dividend or loan to affiliates and is not permitted to make money pool loans to affiliates. At December 31, 2022, the amount of subsidiary retained earnings restricted to dividend totaled \$1.5 billion. This restriction did not impact Southern Company Gas' ability to meet its cash obligations, nor does management expect such restriction to materially impact Southern Company Gas' ability to meet its currently anticipated cash obligations.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Certain Registrants' current liabilities frequently exceed their current assets because of long-term debt maturities and the periodic use of short-term debt as a funding source, as well as significant seasonal fluctuations in cash needs. The Registrants generally plan to refinance long-term debt as it matures. See Note 8 to the financial statements for additional information. Also see "Financing Activities" herein for information on financing activities that occurred subsequent to December 31, 2022. The following table shows the amount by which current liabilities exceeded current assets at December 31, 2022 for the applicable Registrants:

At December 31, 2022	Southern Company	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
			<i>(in millions)</i>		
Current liabilities in excess of current assets	\$5,308	\$3,179	\$50	\$263	\$532

The Registrants believe the need for working capital can be adequately met by utilizing operating cash flows, as well as commercial paper, lines of credit, and short-term bank notes, as market conditions permit. In addition, under certain circumstances, the Subsidiary Registrants may utilize equity contributions and/or loans from Southern Company.

Bank Credit Arrangements

At December 31, 2022, the Registrants' unused committed credit arrangements with banks were as follows:

At December 31, 2022	Southern Company parent	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(a)	Southern Company Gas ^(b)	SEGCO	Southern Company
				<i>(in millions)</i>				
Unused committed credit	\$1,998	\$1,250	\$1,726	\$275	\$569	\$1,748	\$30	\$7,596

(a) At December 31, 2022, Southern Power also had two continuing letters of credit facilities for standby letters of credit, of which \$14 million was unused.

Southern Power's subsidiaries are not parties to its bank credit arrangements or letter of credit facilities.

(b) Includes \$798 million and \$950 million at Southern Company Gas Capital and Nicor Gas, respectively.

Subject to applicable market conditions, the Registrants, Nicor Gas, and SEGCO expect to renew or replace their bank credit arrangements as needed, prior to expiration. In connection therewith, the Registrants, Nicor Gas, and SEGCO may extend the maturity dates and/or increase or decrease the lending commitments thereunder. A portion of the unused credit with banks is allocated to provide liquidity support to the revenue bonds of the traditional electric operating companies and the commercial paper programs of the Registrants, Nicor Gas, and SEGCO. The amount of variable rate revenue bonds of the traditional electric operating companies outstanding requiring liquidity support at December 31, 2022 was approximately \$1.7 billion (comprised of approximately \$789 million at Alabama Power, \$819 million at Georgia Power, and \$69 million at Mississippi Power). In addition, at December 31, 2022, Alabama Power and Georgia Power had approximately \$120 million and \$288 million, respectively, of fixed rate revenue bonds outstanding that are required to be remarketed within the next 12 months. See Note 8 to the financial statements under "Bank Credit Arrangements" for additional information.

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Short-term Borrowings

The Registrants, Nicor Gas, and SEGCO make short-term borrowings primarily through commercial paper programs that have the liquidity support of the committed bank credit arrangements described above. Southern Power's subsidiaries are not issuers or obligors under its commercial paper program. Commercial paper and short-term bank term loans are included in notes payable in the balance sheets. Details of the Registrants' short-term borrowings were as follows:

	Short-term Debt at the End of the Period					
	Amount Outstanding			Weighted Average Interest Rate		
	December 31,			December 31,		
	2022	2021	2020	2022	2021	2020
	<i>(in millions)</i>					
Southern Company	\$2,609	\$1,440	\$609	4.9%	0.4%	0.3%
Georgia Power	1,600	—	60	5.0	—	0.3
Mississippi Power	—	—	25	—	—	0.4
Southern Power	225	211	175	4.7	0.3	0.3
Southern Company Gas:						
Southern Company Gas Capital	\$ 285	\$ 379	\$220	4.8%	0.3%	0.3%
Nicor Gas	483	830	104	4.7	0.4	0.2
Southern Company Gas Total	\$ 768	\$1,209	\$324	4.7%	0.4%	0.2%

	Short-term Debt During the Period ^(*)								
	Average Amount Outstanding			Weighted Average Interest Rate			Maximum Amount Outstanding		
	2022	2021	2020	2022	2021	2020	2022	2021	2020
	<i>(in millions)</i>						<i>(in millions)</i>		
Southern Company	\$1,995	\$1,141	\$1,017	2.2%	0.3%	1.6%	\$2,894	\$1,809	\$2,113
Alabama Power	6	27	20	2.1	0.1	1.1	200	200	155
Georgia Power	673	95	264	3.1	0.2	1.7	1,710	407	478
Mississippi Power	8	15	9	1.6	0.2	1.6	71	81	40
Southern Power	166	133	64	2.3	0.2	1.5	350	520	550
Southern Company Gas:									
Southern Company Gas Capital	\$ 279	\$ 206	\$ 316	1.8%	0.2%	1.4%	\$ 547	\$ 485	\$ 641
Nicor Gas	349	420	49	2.1	0.4	1.4	830	897	278
Southern Company Gas Total	\$ 628	\$ 626	\$ 365	2.0%	0.4%	1.4%			

(*) Average and maximum amounts are based upon daily balances during the 12-month periods ended December 31, 2022, 2021, and 2020.

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Analysis of Cash Flows

Net cash flows provided from (used for) operating, investing, and financing activities in 2022 and 2021 are presented in the following table:

Net cash provided from (used for):	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2022						
Operating activities	\$ 6,302	\$ 1,639	\$ 2,038	\$ 383	\$ 815	\$ 1,519
Investing activities	(8,430)	(2,263)	(3,954)	(317)	(194)	(1,580)
Financing activities	2,336	251	2,363	(68)	(623)	96
2021						
Operating activities	\$ 6,169	\$ 2,053	\$ 2,747	\$ 246	\$ 951	\$ 663
Investing activities	(7,353)	(1,961)	(3,590)	(257)	(803)	(1,379)
Financing activities	1,945	438	867	33	(195)	745

Fluctuations in cash flows from financing activities vary from year to year based on capital needs and the maturity or redemption of securities.

Southern Company

Net cash provided from operating activities increased \$133 million in 2022 as compared to 2021 primarily due to the timing of vendor payments and increased natural gas cost recovery at the natural gas distribution utilities, largely offset by decreased fuel cost recovery at the traditional electric operating companies.

The net cash used for investing activities in 2022 and 2021 was primarily related to the Subsidiary Registrants' construction programs.

The net cash provided from financing activities in 2022 was primarily related to net issuances of long-term debt, the issuance of common stock to settle the purchase contracts entered into as part of the Equity Units (as discussed in Note 8 to the financial statements under "Equity Units"), and an increase in short-term borrowings, partially offset by common stock dividend payments. The net cash provided from financing activities in 2021 was primarily related to net issuances of long-term and short-term debt, partially offset by common stock dividend payments.

Significant Balance Sheet Changes

Southern Company

Significant balance sheet changes in 2022 for Southern Company included:

- an increase of \$3.5 billion in total property, plant, and equipment primarily related to the Subsidiary Registrants' construction programs, net of the reclassification of \$0.6 billion to other regulatory assets and \$0.4 billion to regulatory assets associated with AROs upon Georgia Power's retirement of Plant Wansley Units 1 and 2;
- an increase of \$2.7 billion in long-term debt (including securities due within one year) related to new issuances;
- an increase of \$2.5 billion in total common stockholders' equity primarily related to net income and the issuance of common stock to settle the purchase contracts entered into as part of the Equity Units (as discussed in Note 8 to the financial statements under "Equity Units"), partially offset by common stock dividend payments;
- an increase of \$1.6 billion in deferred under recovered fuel clause revenues due to higher fuel and purchased power costs at Georgia Power;
- an increase of \$1.4 billion in accounts payable primarily related to the timing of vendor payments;
- an increase of \$1.2 billion in accumulated deferred income taxes primarily related to the increase in under recovered fuel clause revenues, an increase in property-related timing differences, and continued flowback of excess deferred income taxes;
- an increase of \$1.2 billion in notes payable due to an increase in short-term bank debt;
- a decrease of \$0.8 billion in AROs primarily related to cost estimate updates for ash pond closures at Georgia Power; and
- an increase of \$0.6 billion in prepaid pension costs primarily related to actuarial gains resulting from increases in the assumed discount rates, partially offset by actual losses on plan assets.

See "Financing Activities" herein and Notes 2, 5, 6, 8, 10, and 11 to the financial statements for additional information.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Financing Activities

The following table outlines the Registrants' long-term debt financing activities for the year ended December 31, 2022:

Company	Issuances/Reofferings			Maturities, Redemptions, and Repurchases		
	Senior Notes	Revenue Bonds	Other Long- Term Debt	Senior Notes	Revenue Bonds	Other Long- Term Debt ^(a)
	<i>(in millions)</i>					
Southern Company parent	\$1,000	\$ —	\$ —	\$ —	\$ —	\$ —
Alabama Power	1,700	—	—	750	—	1
Georgia Power	1,500	200	—	400	53	228
Mississippi Power	—	35	—	—	—	—
Southern Power	—	—	—	677	—	—
Southern Company Gas	500	—	197	—	—	46
Other	—	—	—	—	—	11
Elimination ^(b)	—	—	—	—	—	(8)
Southern Company	\$4,700	\$235	\$197	\$1,827	\$53	\$278

(a) Includes reductions in finance lease obligations resulting from cash payments under finance leases and, for Georgia Power, principal amortization payments totaling \$88 million for FFB borrowings. See Note 8 to the financial statements under "Long-term Debt – DOE Loan Guarantee Borrowings" for additional information.

(b) Represents reductions in affiliate finance lease obligations at Georgia Power, which are eliminated in Southern Company's consolidated financial statements.

Except as otherwise described herein, the Registrants used the proceeds of debt issuances for their redemptions and maturities shown in the table above, to repay short-term indebtedness, and for general corporate purposes, including working capital. The Subsidiary Registrants also used the proceeds for their construction programs.

In addition to any financings that may be necessary to meet capital requirements and contractual obligations, the Registrants plan to continue, when economically feasible, a program to retire higher-cost securities and replace these obligations with lower-cost capital if market conditions permit.

Southern Company

During 2022, Southern Company issued approximately 3.6 million shares of common stock primarily through equity compensation plans and received proceeds of approximately \$83 million.

In May 2022, Southern Company remarketed its Series 2019A and Series 2019B Remarketable Junior Subordinated Notes pursuant to the terms of its 2019 Series A Equity Units (Equity Units). Southern Company did not receive any proceeds from the remarketing, which were used to purchase a portfolio of treasury securities maturing on July 28, 2022. On August 1, 2022, the proceeds from this portfolio were used to settle the purchase contracts entered into as part of the Equity Units and Southern Company issued approximately 25.2 million shares of common stock and received proceeds of \$1.725 billion. See Note 8 to the financial statements under "Equity Units" for additional information.

In March 2022, Southern Company entered into a \$400 million short-term floating rate bank loan, which it repaid in August 2022.

In May 2022, Southern Company borrowed \$100 million pursuant to a short-term uncommitted bank credit arrangement, which it repaid in August 2022.

In October 2022, Southern Company issued \$500 million aggregate principal amount of Series 2022A 5.15% Senior Notes due October 6, 2025 and \$500 million aggregate principal amount of Series 2022B 5.70% Senior Notes due October 15, 2032.

Subsequent to December 31, 2022, Southern Company redeemed all \$550 million aggregate principal amount of its Series 2016B Junior Subordinated Notes due March 15, 2057.

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Alabama Power

In February 2022, Alabama Power redeemed all \$550 million aggregate principal amount of its Series 2017A 2.45% Senior Notes due March 30, 2022.

In March 2022, Alabama Power issued \$700 million aggregate principal amount of Series 2022A 3.05% Senior Notes due March 15, 2032.

In June 2022, Alabama Power redeemed the following series of preferred stock: 4.20% Preferred Stock, Par Value \$100 Per Share, 4.60% Preferred Stock, Par Value \$100 Per Share, 4.92% Preferred Stock, Par Value \$100 Per Share, 4.52% Preferred Stock, Par Value \$100 Per Share, 4.64% Preferred Stock, Par Value \$100 Per Share, and 4.72% Preferred Stock, Par Value \$100 Per Share. The redemption price per share for each series of preferred stock equaled the redemption price per share provided in Note 8 to the financial statements under "Outstanding Classes of Capital Stock – Alabama Power", plus accrued and unpaid dividends to the redemption date.

In August 2022, Alabama Power issued \$550 million aggregate principal amount of Series 2022B 3.75% Senior Notes due September 1, 2027 and \$450 million aggregate principal amount of Series 2022C 3.94% Senior Notes due September 1, 2032. An amount equal to the net proceeds of the Series 2022C Senior Notes is being allocated to finance or refinance, in whole or in part, one or more renewable energy projects and/or expenditures and programs related to enabling opportunities for diverse and small businesses/suppliers.

In October 2022, Alabama Power redeemed all of its 5.00% Class A Preferred Stock, Par Value \$1 Per Share (Stated Capital \$25 Per Share) at a redemption price of \$25.00 per share plus accrued and unpaid dividends to the redemption date.

In December 2022, Alabama Power repaid at maturity \$200 million aggregate principal amount of its Series S 5.875% Senior Notes.

Georgia Power

In January 2022, Georgia Power redeemed all \$400 million aggregate principal amount of its Series 2012B 2.85% Senior Notes due May 15, 2022.

In February 2022, Georgia Power borrowed \$250 million pursuant to a short-term uncommitted bank credit arrangement, which it repaid in May 2022.

In each of March and April 2022, Georgia Power entered into a \$200 million short-term floating rate bank loan bearing interest based on term SOFR.

In May 2022, Georgia Power issued \$700 million aggregate principal amount of Series 2022A 4.70% Senior Notes due May 15, 2032 and \$800 million aggregate principal amount of Series 2022B 5.125% Senior Notes due May 15, 2052. An amount equal to the net proceeds of the Series 2022B Senior Notes is being allocated to finance or refinance, in whole or in part, one or more renewable energy projects and/or expenditures and programs related to enabling opportunities for diverse and small businesses/suppliers.

In May 2022, Georgia Power repaid its \$125 million long-term bank loan that was scheduled to mature in June 2022.

In July 2022, Georgia Power repaid at maturity \$53 million aggregate principal amount of Development Authority of Floyd County (Georgia) Pollution Control Revenue Bonds (Georgia Power Company Plant Hammond Project), First Series 2010.

In October 2022, Georgia Power borrowed \$250 million pursuant to a short-term uncommitted bank credit arrangement, which it repaid in November 2022.

In November 2022, the Development Authority of Bartow County (Georgia) issued for the benefit of Georgia Power approximately \$200 million aggregate principal amount of Solid Waste Disposal Facility Revenue Bonds (Georgia Power Company Plant Bowen Project), First Series 2022 (\$100 million aggregate principal amount) and Second Series 2022 (\$100 million aggregate principal amount) due November 1, 2062. The proceeds from the revenue bonds were used to finance certain solid waste disposal facilities at Plant Bowen.

Also in November 2022, Georgia Power entered into a \$1.2 billion short-term floating rate bank loan bearing interest based on term SOFR.

Mississippi Power

In June 2022, Mississippi Power repaid \$20 million, which was borrowed in March 2022 under its \$125 million revolving credit arrangement.

In November 2022, the Mississippi Business Finance Corporation issued for the benefit of Mississippi Power \$35 million aggregate principal amount of Solid Waste Disposal Facility and Wastewater Facility Revenue Bonds (Mississippi Power Company Project), First Series 2022 due November 1, 2052. The proceeds from the revenue bonds were used to finance certain solid waste disposal and wastewater facilities at Plant Daniel.

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Southern Power

In June 2022, Southern Power repaid at maturity €600 million (approximately \$677 million) aggregate principal amount of its Series 2016A 1.00% Senior Notes.

In October 2022, Southern Power borrowed \$100 million pursuant to a short-term uncommitted bank credit arrangement, which it repaid in December 2022.

Subsequent to December 31, 2022, Southern Power borrowed \$100 million pursuant to the short-term uncommitted bank credit arrangement bearing interest at a mutually agreed upon rate and payable on demand.

Southern Company Gas

During the first quarter 2022, Nicor Gas repaid one of its three \$100 million short-term floating rate bank loans entered into in March 2021. Nicor Gas also repaid \$50 million of one of the other loans and increased the borrowing amount under the other loan to \$150 million. In addition, both loans were renewed and amended to extend the maturity dates and change the interest rate provisions so the loans bear interest based on term SOFR.

During the second quarter 2022, Atlanta Gas Light repaid at maturity \$46 million aggregate principal amount of medium-term notes with a weighted average interest rate of 8.63%.

In August 2022, Nicor Gas issued in a private placement \$100 million aggregate principal amount of 2.21% Series First Mortgage Bonds due August 31, 2032.

In September 2022, Southern Company Gas Capital issued \$500 million aggregate principal amount of Series 2022A 5.15% Senior Notes due September 15, 2032, guaranteed by Southern Company Gas.

In October 2022, Nicor Gas issued in a private placement \$75 million aggregate principal amount of 3.18% Series First Mortgage Bonds due October 27, 2062.

During 2022, Southern Company Gas received \$22 million under a long-term financing agreement related to a construction contract.

Credit Rating Risk

At December 31, 2022, the Registrants did not have any credit arrangements that would require material changes in payment schedules or terminations as a result of a credit rating downgrade.

There are certain contracts that could require collateral, but not accelerated payment, in the event of a credit rating change of certain Registrants to BBB and/or Baa2 or below. These contracts are primarily for physical electricity and natural gas purchases and sales, fuel purchases, fuel transportation and storage, energy price risk management, transmission, interest rate management, and, for Georgia Power, construction of new generation at Plant Vogtle Units 3 and 4.

The maximum potential collateral requirements under these contracts at December 31, 2022 were as follows:

Credit Ratings	Southern Company ^(*)	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(*)	Southern Company Gas
				(in millions)		
At BBB and/or Baa2	\$ 33	\$ 1	\$ —	\$ —	\$ 32	\$ —
At BBB- and/or Baa3	395	2	61	1	334	—
At BB+ and/or Ba1 or below	2,036	434	948	330	1,225	21

(*) Southern Power has PPAs that could require collateral, but not accelerated payment, in the event of a downgrade of Southern Power's credit. The PPAs require credit assurances without stating a specific credit rating. The amount of collateral required would depend upon actual losses resulting from a credit downgrade. Southern Power had \$106 million of cash collateral posted related to PPA requirements at December 31, 2022.

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The amounts in the previous table for the traditional electric operating companies and Southern Power include certain agreements that could require collateral if either Alabama Power or Georgia Power has a credit rating change to below investment grade. Generally, collateral may be provided by a Southern Company guaranty, letter of credit, or cash. Additionally, a credit rating downgrade could impact the ability of the Registrants to access capital markets and would be likely to impact the cost at which they do so.

Mississippi Power and its largest retail customer, Chevron Products Company (Chevron), have agreements under which Mississippi Power provides retail service to the Chevron refinery in Pascagoula, Mississippi through at least 2038. The agreements grant Chevron a security interest in the co-generation assets owned by Mississippi Power located at the refinery that is exercisable upon the occurrence of (i) certain bankruptcy events or (ii) other events of default coupled with specific reductions in steam output at the facility and a downgrade of Mississippi Power's credit rating to below investment grade by two of the three rating agencies.

On February 22, 2022, Fitch downgraded the senior unsecured long-term debt rating of Georgia Power to BBB+ from A- with a stable outlook.

Also on February 22, 2022, Fitch revised the ratings outlook of Southern Company, Alabama Power, Southern Power, Nicor Gas, and SEGCO to negative from stable.

On December 15, 2022, Moody's revised its rating outlook for Mississippi Power from stable to positive.

Market Price Risk

The Registrants had no material change in market risk exposure for the year ended December 31, 2022 when compared to the year ended December 31, 2021. See Note 14 to the financial statements for an in-depth discussion of the Registrants' derivatives, as well as Note 1 to the financial statements under "Financial Instruments" for additional information.

Due to cost-based rate regulation and other various cost recovery mechanisms, the traditional electric operating companies and the natural gas distribution utilities that sell natural gas directly to end-use customers continue to have limited exposure to market volatility in interest rates, foreign currency exchange rates, commodity fuel prices, and prices of electricity. The traditional electric operating companies and certain of the natural gas distribution utilities manage fuel-hedging programs implemented per the guidelines of their respective state PSCs or other applicable state regulatory agencies to hedge the impact of market fluctuations in natural gas prices for customers. Mississippi Power also manages wholesale fuel-hedging programs under agreements with its wholesale customers. Because energy from Southern Power's facilities is primarily sold under long-term PPAs with tolling agreements and provisions shifting substantially all of the responsibility for fuel cost to the counterparties, Southern Power's exposure to market volatility in commodity fuel prices and prices of electricity is generally limited. However, Southern Power has been and may continue to be exposed to market volatility in energy-related commodity prices as a result of uncontracted generating capacity. To mitigate residual risks relative to movements in electricity prices, the traditional electric operating companies and Southern Power may enter into physical fixed-price contracts for the purchase and sale of electricity through the wholesale electricity market and, to a lesser extent, financial hedge contracts for natural gas purchases; however, a significant portion of contracts are priced at market.

Certain of Southern Company Gas' non-regulated operations routinely utilize various types of derivative instruments to economically hedge certain commodity price and weather risks inherent in the natural gas industry. These instruments include a variety of exchange-traded and OTC energy contracts, such as forward contracts, futures contracts, options contracts, and swap agreements. Southern Company Gas' gas marketing services business also actively manages storage positions through a variety of hedging transactions for the purpose of managing exposures arising from changing natural gas prices. These hedging instruments are used to substantially protect economic margins (as spreads between wholesale and retail natural gas prices widen between periods) and thereby minimize exposure to declining earnings. Some of these economic hedge activities may not qualify, or may not be designated, for hedge accounting treatment.

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The following table provides information related to variable interest rate exposure on long-term debt (including amounts due within one year) at December 31, 2022 for the applicable Registrants:

At December 31, 2022	Southern Company ^(*)	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions, except percentages)</i>				
Long-term variable interest rate exposure	\$5,071	\$ 834	\$ 819	\$ 269	\$ 500
Weighted average interest rate on long-term variable interest rate exposure	5.14%	3.89%	3.91%	3.88%	4.70%
Impact on annualized interest expense of 100 basis point change in interest rates	\$ 51	\$ 8	\$ 8	\$ 3	\$ 5

(*) Includes \$2.550 billion of long-term variable interest rate exposure at the Southern Company parent entity, \$550 million of which was redeemed subsequent to December 31, 2022. See "Financing Activities" herein for additional information.

The Registrants may enter into interest rate derivatives designated as hedges, which are intended to mitigate interest rate volatility related to forecasted debt financings and existing fixed and floating rate obligations. See Note 14 to the financial statements under "Interest Rate Derivatives" for additional information.

Southern Company and Southern Power had foreign currency denominated debt at December 31, 2022 and have each mitigated exposure to foreign currency exchange rate risk through the use of foreign currency swaps. See Note 14 to the financial statements under "Foreign Currency Derivatives" for additional information.

Changes in fair value of energy-related derivative contracts for Southern Company and Southern Company Gas for the years ended December 31, 2022 and 2021 are provided in the table below. At December 31, 2022 and 2021, substantially all of the traditional electric operating companies' and certain of the natural gas distribution utilities' energy-related derivative contracts were designated as regulatory hedges and were related to the applicable company's fuel-hedging program.

	Southern Company ^(a)	Southern Company Gas ^(a)
	<i>(in millions)</i>	
Contracts outstanding at December 31, 2020, assets (liabilities), net	\$ 107	\$ 101
Contracts realized or settled	(252)	(85)
Current period changes ^(b)	243	(84)
Sale of Sequent ^(c)	76	76
Contracts outstanding at December 31, 2021, assets (liabilities), net	\$ 174	\$ 8
Contracts realized or settled	(327)	10
Current period changes ^(b)	142	(55)
Contracts outstanding at December 31, 2022, assets (liabilities), net	\$ (11)	\$ (37)

(a) Excludes cash collateral held on deposit in broker margin accounts of \$41 million, \$3 million, and \$28 million at December 31, 2022, 2021, and 2020, respectively, and immaterial premium and intrinsic value associated with weather derivatives for all periods presented.

(b) The changes in fair value of energy-related derivative contracts are substantially attributable to both the volume and the price of natural gas. Current period changes also include the changes in fair value of new contracts entered into during the period, if any.

(c) As a result of the sale of Sequent on July 1, 2021, Southern Company Gas' market risk exposure decreased significantly. See Note 15 to the financial statements under "Southern Company Gas" for information regarding the sale of Sequent.

The net hedge volumes of energy-related derivative contracts for natural gas purchased (sold) at December 31, 2022 and 2021 for Southern Company and Southern Company Gas were as follows:

	Southern Company	Southern Company Gas
	<i>mmbtu Volume (in millions)</i>	
At December 31, 2022:		
Commodity – Natural gas swaps	217	—
Commodity – Natural gas options	214	93
Total hedge volume	431	93
At December 31, 2021:		
Commodity – Natural gas swaps	57	—
Commodity – Natural gas options	253	68
Total hedge volume	310	68

Management's Discussion and Analysis of Financial Condition and Results of Operations

Southern Company Gas' derivative contracts are comprised of both long and short natural gas positions. A long position is a contract to purchase natural gas, and a short position is a contract to sell natural gas. The volumes presented above for Southern Company Gas represent the net of long natural gas positions of 98 million mmBtu and short natural gas positions of 5 million mmBtu at December 31, 2022 and the net of long natural gas positions of 74 million mmBtu and short natural gas positions of 6 million mmBtu at December 31, 2021.

For the Southern Company system, the weighted average swap contract cost per mmBtu was approximately \$0.08 per mmBtu above market prices at December 31, 2022 and was approximately \$0.74 per mmBtu below market prices at December 31, 2021. The change in option fair value is primarily attributable to the volatility of the market and the underlying change in the natural gas price. Substantially all of the traditional electric operating companies' natural gas hedge gains and losses are recovered through their respective fuel cost recovery clauses.

The Registrants use over-the-counter contracts that are not exchange traded but are fair valued using prices which are market observable, and thus fall into Level 2 of the fair value hierarchy. In addition, Southern Company Gas uses exchange-traded market-observable contracts, which are categorized as Level 1. See Note 13 to the financial statements for further discussion of fair value measurements. The maturities of the energy-related derivative contracts for Southern Company and Southern Company Gas at December 31, 2022 were as follows:

	Fair Value Measurements of Contracts at December 31, 2022				
	Total Fair Value	Maturity			
		2023	2024 – 2025	2026 – 2027	Thereafter
		<i>(in millions)</i>			
Southern Company					
Level 1 ^(a)	\$(14)	\$(11)	\$ (3)	\$—	\$—
Level 2 ^(b)	3	(11)	7	2	5
Southern Company total ^(c)	\$(11)	\$(22)	\$ 4	\$ 2	\$ 5
Southern Company Gas					
Level 1 ^(a)	\$(14)	\$(11)	\$ (3)	\$—	\$—
Level 2 ^(b)	(23)	(23)	—	—	—
Southern Company Gas total ^(c)	\$(37)	\$(34)	\$ (3)	\$—	\$—

(a) Valued using NYMEX futures prices.

(b) Level 2 amounts for Southern Company Gas are valued using basis transactions that represent the cost to transport natural gas from a NYMEX delivery point to the contract delivery point. These transactions are based on quotes obtained either through electronic trading platforms or directly from brokers.

(c) Excludes cash collateral of \$41 million as well as immaterial premium and associated intrinsic value associated with weather derivatives.

The Registrants are exposed to risk in the event of nonperformance by counterparties to energy-related and interest rate derivative contracts, as applicable. The Registrants only enter into agreements and material transactions with counterparties that have investment grade credit ratings by Moody's and S&P, or with counterparties who have posted collateral to cover potential credit exposure. Therefore, the Registrants do not anticipate market risk exposure from nonperformance by the counterparties. For additional information, see Note 1 to the financial statements under "Financial Instruments" and Note 14 to the financial statements.

Credit Risk

Except as discussed herein, the Southern Company system is not exposed to any concentrations of credit risk.

Concentration of credit risk occurs at Atlanta Gas Light for amounts billed for services and other costs to its customers, which consist of the 14 Marketers in Georgia. For 2022, the four largest Marketers based on customer count, which includes SouthStar, accounted for 13% of Southern Company Gas' operating revenues.

Consolidated Statements of Income

For the Years Ended December 31, 2022, 2021, and 2020

	2022	2021	2020
	(in millions)		
Operating Revenues:			
Retail electric revenues	\$ 18,197	\$14,852	\$13,643
Wholesale electric revenues	3,641	2,455	1,945
Other electric revenues	747	718	672
Natural gas revenues	5,962	4,380	3,434
Other revenues	732	708	681
Total operating revenues	29,279	23,113	20,375
Operating Expenses:			
Fuel	6,835	4,010	2,967
Purchased power	1,593	978	799
Cost of natural gas	3,004	1,619	972
Cost of other sales	396	357	327
Other operations and maintenance	6,630	6,088	5,413
Depreciation and amortization	3,663	3,565	3,518
Taxes other than income taxes	1,411	1,290	1,234
Estimated loss on Plant Vogtle Units 3 and 4	183	1,692	325
Impairment charges	251	2	—
Gain on dispositions, net	(57)	(186)	(65)
Total operating expenses	23,909	19,415	15,490
Operating Income	5,370	3,698	4,885
Other Income and (Expense):			
Allowance for equity funds used during construction	224	190	149
Earnings from equity method investments	151	76	153
Interest expense, net of amounts capitalized	(2,022)	(1,837)	(1,821)
Impairment of leveraged leases	—	(7)	(206)
Other income (expense), net	500	456	336
Total other income and (expense)	(1,147)	(1,122)	(1,389)
Earnings Before Income Taxes	4,223	2,576	3,496
Income taxes	795	267	393
Consolidated Net Income	3,428	2,309	3,103
Dividends on preferred stock of subsidiaries	11	15	15
Net loss attributable to noncontrolling interests	(107)	(99)	(31)
Consolidated Net Income Attributable to Southern Company	\$ 3,524	\$ 2,393	\$ 3,119
Common Stock Data:			
Earnings per share —			
Basic	\$ 3.28	\$ 2.26	\$ 2.95
Diluted	3.26	2.24	2.93
Average number of shares of common stock outstanding — (in millions)			
Basic	1,075	1,061	1,058
Diluted	1,081	1,068	1,065

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Comprehensive Income

For the Years Ended December 31, 2022, 2021, and 2020

	2022	2021	2020
		<i>(in millions)</i>	
Consolidated Net Income	\$3,428	\$2,309	\$3,103
Other comprehensive income (loss):			
Qualifying hedges:			
Changes in fair value, net of tax of \$(19), \$(16), and \$3, respectively	(60)	(49)	10
Reclassification adjustment for amounts included in net income, net of tax of \$23, \$31, and \$(13), respectively	73	96	(40)
Pension and other postretirement benefit plans:			
Benefit plan net gain (loss), net of tax of \$18, \$37, and \$(17), respectively	48	98	(55)
Reclassification adjustment for amounts included in net income, net of tax of \$3, \$5, and \$3, respectively	10	13	10
Total other comprehensive income (loss)	71	158	(75)
Dividends on preferred stock of subsidiaries	11	15	15
Comprehensive loss attributable to noncontrolling interests	(107)	(99)	(31)
Consolidated Comprehensive Income Attributable to Southern Company	\$3,595	\$2,551	\$3,044

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Cash Flows

For the Years Ended December 31, 2022, 2021, and 2020

	2022	2021	2020
	<i>(in millions)</i>		
Operating Activities:			
Consolidated net income	\$ 3,428	\$ 2,309	\$ 3,103
Adjustments to reconcile consolidated net income to net cash provided from operating activities —			
Depreciation and amortization, total	4,064	3,973	3,905
Deferred income taxes	670	(49)	(241)
Utilization of federal investment tax credits	88	288	341
Allowance for equity funds used during construction	(224)	(190)	(149)
Pension, postretirement, and other employee benefits	(436)	(305)	(261)
Settlement of asset retirement obligations	(455)	(456)	(442)
Storm damage and reliability reserve accruals	430	288	325
Stock based compensation expense	127	144	113
Estimated loss on Plant Vogtle Units 3 and 4	183	1,692	325
Impairment charges	251	91	206
Gain on dispositions, net	(42)	(176)	(66)
Retail fuel cost under recovery – long-term	(2,166)	(536)	—
Natural gas cost under recovery – long-term	207	(207)	—
Other, net	17	87	(75)
Changes in certain current assets and liabilities —			
–Receivables	(769)	(81)	(222)
–Fossil fuel for generation	(125)	99	(29)
–Materials and supplies	(160)	(130)	(157)
–Natural gas cost under recovery	158	(266)	—
–Other current assets	(288)	(270)	(132)
–Accounts payable	1,021	(8)	(27)
–Accrued taxes	51	(54)	242
–Customer refunds	119	130	(236)
–Other current liabilities	153	(204)	173
Net cash provided from operating activities	6,302	6,169	6,696
Investing Activities:			
Property additions	(7,923)	(7,586)	(7,522)
Nuclear decommissioning trust fund purchases	(1,125)	(1,598)	(877)
Nuclear decommissioning trust fund sales	1,112	1,593	871
Proceeds from dispositions	275	917	1,049
Cost of removal, net of salvage	(649)	(442)	(361)
Payments pursuant to LTSAs	(190)	(188)	(211)
Other investing activities	70	(49)	21
Net cash used for investing activities	(8,430)	(7,353)	(7,030)

Consolidated Statements of Cash Flows (continued)

For the Years Ended December 31, 2022, 2021, and 2020

	2022	2021	2020
	<i>(in millions)</i>		
Financing Activities:			
Increase (decrease) in notes payable, net	(337)	530	(1,096)
Proceeds —			
Long-term debt	5,132	8,262	8,047
Short-term borrowings	2,650	325	615
Common stock	1,808	73	74
Redemptions and repurchases —			
Long-term debt	(2,158)	(4,327)	(4,458)
Preferred stock	(298)	—	—
Short-term borrowings	(1,150)	(25)	(840)
Capital contributions from noncontrolling interests	73	501	363
Distributions to noncontrolling interests	(259)	(351)	(271)
Payment of common stock dividends	(2,907)	(2,777)	(2,685)
Other financing activities	(218)	(266)	(325)
Net cash provided from (used for) financing activities	2,336	1,945	(576)
Net Change in Cash, Cash Equivalents, and Restricted Cash	208	761	(910)
Cash, Cash Equivalents, and Restricted Cash at Beginning of Year	1,829	1,068	1,978
Cash, Cash Equivalents, and Restricted Cash at End of Year	\$ 2,037	\$ 1,829	\$ 1,068
Supplemental Cash Flow Information:			
Cash paid during the period for —			
Interest (net of \$103, \$92, and \$81 capitalized, respectively)	\$ 1,758	\$ 1,718	\$ 1,683
Income taxes, net	146	93	64
Noncash transactions —			
Accrued property additions at year-end	1,024	866	989
Contributions from noncontrolling interests	15	89	12
Contributions of wind turbine equipment	—	82	17

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Balance Sheets

At December 31, 2022 and 2021

Assets	2022	2021
	<i>(in millions)</i>	
Current Assets:		
Cash and cash equivalents	\$ 1,917	\$ 1,798
Receivables —		
Customer accounts	2,138	1,806
Unbilled revenues	1,012	711
Other accounts and notes	637	523
Accumulated provision for uncollectible accounts	(71)	(78)
Materials and supplies	1,664	1,543
Fossil fuel for generation	575	450
Natural gas for sale	438	362
Prepaid expenses	347	330
Assets from risk management activities, net of collateral	115	151
Regulatory assets – asset retirement obligations	332	219
Natural gas cost under recovery	108	266
Other regulatory assets	860	653
Other current assets	344	231
Total current assets	10,416	8,965
Property, Plant, and Equipment:		
In service	117,529	115,592
Less: Accumulated depreciation	35,297	34,079
Plant in service, net of depreciation	82,232	81,513
Other utility plant, net	599	—
Nuclear fuel, at amortized cost	843	824
Construction work in progress	10,896	8,771
Total property, plant, and equipment	94,570	91,108
Other Property and Investments:		
Goodwill	5,161	5,280
Nuclear decommissioning trusts, at fair value	2,145	2,542
Equity investments in unconsolidated subsidiaries	1,443	1,282
Other intangible assets, net of amortization of \$340 and \$307, respectively	406	445
Miscellaneous property and investments	602	653
Total other property and investments	9,757	10,202
Deferred Charges and Other Assets:		
Operating lease right-of-use assets, net of amortization	1,531	1,701
Deferred charges related to income taxes	866	824
Prepaid pension costs	2,290	1,657
Unamortized loss on reacquired debt	238	258
Deferred under recovered fuel clause revenues	2,056	410
Regulatory assets – asset retirement obligations, deferred	5,764	5,466
Other regulatory assets, deferred	5,918	5,577
Other deferred charges and assets	1,485	1,366
Total deferred charges and other assets	20,148	17,259
Total Assets	\$134,891	\$127,534

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Balance Sheets (continued)

At December 31, 2022 and 2021

Liabilities and Stockholders' Equity	2022	2021
	(in millions)	
Current Liabilities:		
Securities due within one year	\$ 4,285	\$ 2,157
Notes payable	2,609	1,440
Accounts payable	3,525	2,169
Customer deposits	502	479
Accrued taxes —		
Accrued income taxes	60	50
Other accrued taxes	764	641
Accrued interest	614	533
Accrued compensation	1,127	1,070
Asset retirement obligations	694	697
Operating lease obligations	197	250
Other regulatory liabilities	382	563
Other current liabilities	965	872
Total current liabilities	15,724	10,921
Long-Term Debt	50,656	50,120
Deferred Credits and Other Liabilities:		
Accumulated deferred income taxes	10,036	8,862
Deferred credits related to income taxes	5,235	5,401
Accumulated deferred ITCs	2,133	2,216
Employee benefit obligations	1,238	1,550
Operating lease obligations, deferred	1,388	1,503
Asset retirement obligations, deferred	10,146	10,990
Other cost of removal obligations	1,903	2,103
Other regulatory liabilities, deferred	733	485
Other deferred credits and liabilities	1,167	816
Total deferred credits and other liabilities	33,979	33,926
Total Liabilities	100,359	94,967
Redeemable Preferred Stock of Subsidiaries:		
Cumulative preferred stock		
\$100 par or stated value – 4.20% to 4.92%	—	48
Authorized – 10 million shares		
Outstanding – 2022: no shares; 2021: 0.5 million shares		
\$1 par value – 5.00%	—	243
Authorized – 28 million shares		
Outstanding – 2022: no shares; 2021: 10 million shares		
Total redeemable preferred stock of subsidiaries (annual dividend requirement – \$15 million)	—	291
Common Stockholders' Equity:		
Common stock, par value \$5 per share (Authorized – 1.5 billion shares)	5,417	5,279
(Issued – 1.1 billion shares; Treasury – 1.0 million shares)		
Paid-in capital	13,673	11,950
Treasury, at cost	(53)	(47)
Retained earnings	11,538	10,929
Accumulated other comprehensive loss	(167)	(237)
Total common stockholders' equity	30,408	27,874
Noncontrolling interests	4,124	4,402
Total Stockholders' Equity (See accompanying statements)	34,532	32,276
Total Liabilities and Stockholders' Equity	\$134,891	\$127,534
Commitments and Contingent Matters (See notes)		

The accompanying notes are an integral part of these consolidated financial statements.

Consolidated Statements of Stockholders' Equity

For the Years Ended December 31, 2022, 2021, and 2020

Southern Company Common Stockholders' Equity

	Number of Common Shares		Common Stock			Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Noncontrolling Interests	Total
	Issued	Treasury	Par Value	Paid-In Capital	Treasury				
	<i>(in millions)</i>								
Balance at December 31, 2019	1,054	(1)	\$5,257	\$11,734	\$(42)	\$10,877	\$(321)	\$4,254	\$31,759
Consolidated net income (loss)	—	—	—	—	—	3,119	—	(31)	3,088
Other comprehensive income (loss)	—	—	—	—	—	—	(75)	—	(75)
Stock issued	4	—	11	63	—	—	—	—	74
Stock-based compensation	—	—	—	44	—	—	—	—	44
Cash dividends of \$2.5400 per share	—	—	—	—	—	(2,685)	—	—	(2,685)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	307	307
Distributions to noncontrolling interests	—	—	—	—	—	—	—	(271)	(271)
Purchase of membership interests from noncontrolling interests	—	—	—	5	—	—	—	(65)	(60)
Sale of noncontrolling interests	—	—	—	(2)	—	—	—	67	65
Other	—	—	—	(10)	(4)	—	1	1	(12)
Balance at December 31, 2020	1,058	(1)	5,268	11,834	(46)	11,311	(395)	4,262	32,234
Consolidated net income (loss)	—	—	—	—	—	2,393	—	(99)	2,294
Other comprehensive income	—	—	—	—	—	—	158	—	158
Stock issued	3	—	11	62	—	—	—	—	73
Stock-based compensation	—	—	—	62	—	—	—	—	62
Cash dividends of \$2.6200 per share	—	—	—	—	—	(2,777)	—	—	(2,777)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	590	590
Distributions to noncontrolling interests	—	—	—	—	—	—	—	(351)	(351)
Other	—	—	—	(8)	(1)	2	—	—	(7)
Balance at December 31, 2021	1,061	(1)	5,279	11,950	(47)	10,929	(237)	4,402	32,276
Consolidated net income (loss)	—	—	—	—	—	3,524	—	(107)	3,417
Other comprehensive income	—	—	—	—	—	—	71	—	71
Stock issued	29	—	138	1,670	—	—	—	—	1,808
Stock-based compensation	—	—	—	44	—	—	—	—	44
Cash dividends of \$2.7000 per share	—	—	—	—	—	(2,907)	—	—	(2,907)
Contributions from noncontrolling interests	—	—	—	—	—	—	—	88	88
Distributions to noncontrolling interests	—	—	—	—	—	—	—	(259)	(259)
Other	—	—	—	9	(6)	(8)	(1)	—	(6)
Balance at December 31, 2022	1,090	(1)	\$5,417	\$13,673	\$(53)	\$11,538	\$(167)	\$4,124	\$34,532

The accompanying notes are an integral part of these consolidated financial statements.

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Notes to Financial Statements

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

General

Southern Company is the parent company of three traditional electric operating companies, as well as Southern Power, Southern Company Gas, SCS, Southern Linc, Southern Holdings, Southern Nuclear, PowerSecure, and other direct and indirect subsidiaries. The traditional electric operating companies – Alabama Power, Georgia Power, and Mississippi Power – are vertically integrated utilities providing electric service in three Southeastern states. Southern Power develops, constructs, acquires, owns, and manages power generation assets, including renewable energy projects, and sells electricity at market-based rates in the wholesale market. Southern Company Gas distributes natural gas through natural gas distribution utilities, including Nicor Gas (Illinois), Atlanta Gas Light (Georgia), Virginia Natural Gas, and Chattanooga Gas (Tennessee). Southern Company Gas is also involved in several other complementary businesses including gas pipeline investments and gas marketing services. Prior to the sale of Sequent on July 1, 2021, these businesses also included wholesale gas services. SCS, the system service company, provides, at cost, specialized services to Southern Company and its subsidiary companies. Southern Linc provides digital wireless communications for use by Southern Company and its subsidiary companies and also markets these services to the public and provides fiber optics services within the Southeast. Southern Holdings is an intermediate holding company subsidiary. Southern Nuclear operates and provides services to the Southern Company system's nuclear power plants, including Alabama Power's Plant Farley and Georgia Power's Plant Hatch and Plant Vogtle Units 1 and 2, and is currently managing construction and start-up of Plant Vogtle Units 3 and 4, which are co-owned by Georgia Power. PowerSecure develops distributed energy and resilience solutions and deploys microgrids for commercial, industrial, governmental, and utility customers. See Note 15 for information regarding the sale of Sequent.

The Registrants' financial statements reflect investments in subsidiaries on a consolidated basis. Intercompany transactions have been eliminated in consolidation. The equity method is used for investments in entities in which a Registrant has significant influence but does not have control and for VIEs where a Registrant has an equity investment but is not the primary beneficiary. Southern Power has controlling ownership in certain legal entities for which the contractual provisions represent profit-sharing arrangements because the allocations of cash distributions and tax benefits are not based on fixed ownership percentages. For these arrangements, the noncontrolling interest is accounted for under a balance sheet approach utilizing the HLBV method. The HLBV method calculates each partner's share of income based on the change in net equity the partner can legally claim in a HLBV at the end of the period compared to the beginning of the period. See "Variable Interest Entities" herein and Note 7 for additional information.

The traditional electric operating companies, Southern Power, certain subsidiaries of Southern Company Gas, and certain other subsidiaries are subject to regulation by the FERC, and the traditional electric operating companies and the natural gas distribution utilities are also subject to regulation by their respective state PSCs or other applicable state regulatory agencies. As such, the respective financial statements of the applicable Registrants reflect the effects of rate regulation in accordance with GAAP and comply with the accounting policies and practices prescribed by relevant state PSCs or other applicable state regulatory agencies.

The preparation of financial statements in conformity with GAAP requires the use of estimates, and the actual results may differ from those estimates. Certain prior years' data presented in the financial statements have been reclassified to conform to the current year presentation. These reclassifications had no impact on the Registrants' results of operations, financial position, or cash flows.

Notes to Financial Statements

Recently Adopted Accounting Standards

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting* (ASU 2020-04) providing temporary guidance to ease the potential burden in accounting for reference rate reform primarily resulting from the discontinuation of LIBOR, which began phasing out on December 31, 2021. The discontinuation date of the overnight 1-, 3-, 6-, and 12-month tenors of LIBOR is June 30, 2023, which is beyond the original effective date of ASU 2020-04; therefore, on December 21, 2022, the FASB issued ASU 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848* (ASU 2022-06) to defer the sunset date of ASU 2020-04 from December 31, 2022 to December 31, 2024.

The amendments are elective and apply to all entities that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued. The guidance (i) simplifies accounting analyses under current GAAP for contract modifications; (ii) simplifies the assessment of hedge effectiveness and allows hedging relationships affected by reference rate reform to continue; and (iii) allows a one-time election to sell or transfer debt securities classified as held to maturity that reference a rate affected by reference rate reform. An entity may elect to apply the amendments prospectively from March 12, 2020 through December 31, 2024 by accounting topic. The Registrants have elected to apply the amendments to modifications of debt and derivative arrangements that meet the scope of ASU 2020-04 and ASU 2022-06.

The Registrants currently reference LIBOR for certain debt and hedging arrangements. In addition, certain provisions in PPAs at Southern Power include references to LIBOR. Contract language has been, or is expected to be, incorporated into each of these agreements to address the transition to an alternative rate for agreements that will be in place at the transition date. No material impacts are expected from modifications to the arrangements and effective hedging relationships are expected to continue. See Note 14 under "Interest Rate Derivatives" for additional information.

Affiliate Transactions

The traditional electric operating companies, Southern Power, and Southern Company Gas have agreements with SCS under which certain of the following services are rendered to them at direct or allocated cost: general executive and advisory, general and design engineering, operations, purchasing, accounting, finance, treasury, legal, tax, information technology, marketing, auditing, insurance and pension administration, human resources, systems and procedures, digital wireless communications, cellular tower space, and other services with respect to business and operations, construction management, and Southern Company power pool transactions. These costs are primarily included in other operations and maintenance expenses or capitalized to property, plant, and equipment. Costs for these services from SCS in 2022, 2021, and 2020 were as follows:

	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
			<i>(in millions)</i>		
2022	\$549	\$762	\$115	\$86	\$262
2021	504	663	120	89	239
2020	478	639	149	87	237

Alabama Power and Georgia Power also have agreements with Southern Nuclear under which Southern Nuclear renders the following nuclear-related services at cost: general executive and advisory services; general operations, management, and technical services; administrative services including procurement, accounting, employee relations, systems, and procedures services; strategic planning and budgeting services; other services with respect to business and operations; and, for Georgia Power, construction management. These costs are primarily included in other operations and maintenance expenses or capitalized to property, plant, and equipment. Costs for these services in 2022, 2021, and 2020 amounted to \$267 million, \$258 million, and \$262 million, respectively, for Alabama Power and \$895 million, \$906 million, and \$883 million, respectively, for Georgia Power. See Note 2 under "Georgia Power – Nuclear Construction" for additional information regarding Southern Nuclear's construction management of Plant Vogtle Units 3 and 4 for Georgia Power.

Cost allocation methodologies used by SCS and Southern Nuclear prior to the repeal of the Public Utility Holding Company Act of 1935, as amended, were approved by the SEC. Subsequently, additional cost allocation methodologies have been reported to the FERC and management believes they are reasonable. The FERC permits services to be rendered at cost by system service companies.

Alabama Power's and Georgia Power's power purchases from affiliates through the Southern Company power pool are included in purchased power, affiliates on their respective statements of income. Mississippi Power's and Southern Power's power purchases from affiliates through the Southern Company power pool are included in purchased power on their respective statements of income and were as follows:

	Mississippi Power	Southern Power
	<i>(in millions)</i>	
2022	\$4	\$29
2021	9	15
2020	4	8

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Georgia Power has entered into several PPAs with Southern Power for capacity and energy. Georgia Power's total expenses associated with these PPAs were \$151 million, \$132 million, and \$141 million in 2022, 2021, and 2020, respectively. Southern Power's total revenues from all PPAs with Georgia Power, included in wholesale revenue affiliates on Southern Power's consolidated statements of income, were \$154 million, \$139 million, and \$139 million for 2022, 2021, and 2020, respectively. Included within these revenues were affiliate PPAs accounted for as operating leases, which totaled \$116 million, \$112 million, and \$115 million for 2022, 2021, and 2020, respectively. See Note 9 for additional information.

SCS (as agent for Alabama Power, Georgia Power, and Southern Power) and Southern Company Gas have long-term interstate natural gas transportation agreements with SNG that are governed by the terms and conditions of SNG's natural gas tariff and are subject to FERC regulation. See Note 7 under "Southern Company Gas – Equity Method Investments" for additional information. Transportation costs under these agreements in 2022, 2021, and 2020 were as follows:

	Alabama Power	Georgia Power	Southern Power	Southern Company Gas
		<i>(in millions)</i>		
2022	\$18	\$ 99	\$37	\$27
2021	14	108	31	29
2020	15	108	29	29

SCS, as agent for the traditional electric operating companies and Southern Power, has agreements with certain subsidiaries of Southern Company Gas to purchase natural gas. Natural gas purchases made under these agreements were immaterial for Alabama Power, Georgia Power, and Mississippi Power for all periods presented and immaterial, \$18 million, and \$26 million for Southern Power in 2022, 2021, and 2020, respectively.

Alabama Power and Mississippi Power jointly own Plant Greene County. The companies have an agreement under which Alabama Power operates Plant Greene County and Mississippi Power reimburses Alabama Power for its proportionate share of non-fuel operations and maintenance expenses, which totaled \$6 million, \$10 million, and \$9 million in 2022, 2021, and 2020, respectively. See Note 5 under "Joint Ownership Agreements" for additional information.

Alabama Power, Georgia Power, and Mississippi Power each have agreements with PowerSecure for equipment purchases and/or services related to utility infrastructure construction, distributed energy, and energy efficiency projects. Costs under these agreements were immaterial for all periods presented.

In 2022, Southern Company Gas entered into a \$70 million contract with the U.S. General Services Administration to increase energy efficiency at certain federal buildings across Georgia, with completion expected to occur in 2024. Southern Company Gas engaged PowerSecure to provide the majority of the construction services under the contract. During 2022, Southern Company Gas paid \$10 million to PowerSecure related to this agreement.

See Note 7 under "SEGCO" for information regarding Alabama Power's and Georgia Power's equity method investment in SEGCO and related affiliate purchased power costs, as well as Alabama Power's gas pipeline ownership agreement with SEGCO.

Southern Power has several agreements with SCS for transmission services, which are billed to Southern Power based on the Southern Company Open Access Transmission Tariff as filed with the FERC. Transmission services purchased by Southern Power from SCS totaled \$39 million, \$28 million, and \$15 million for 2022, 2021, and 2020, respectively, and were charged to other operations and maintenance expenses in Southern Power's consolidated statements of income.

The traditional electric operating companies and Southern Power may jointly enter into various types of wholesale energy, natural gas, and certain other contracts, either directly or through SCS as agent. Each participating company may be jointly and severally liable for the obligations incurred under these agreements. See Note 14 under "Contingent Features" for additional information. Southern Power and the traditional electric operating companies generally settle amounts related to the above transactions on a monthly basis in the month following the performance of such services or the purchase or sale of electricity. See "Revenues – Southern Power" herein for additional information.

The traditional electric operating companies, Southern Power, and Southern Company Gas provide incidental services to and receive such services from other Southern Company subsidiaries which are generally minor in duration and amount. Except as described herein, the traditional electric operating companies, Southern Power, and Southern Company Gas neither provided nor received any material services to or from affiliates in any year presented.

Regulatory Assets and Liabilities

The traditional electric operating companies and the natural gas distribution utilities are subject to accounting requirements for the effects of rate regulation. Regulatory assets represent probable future revenues associated with certain costs that are expected to be recovered from

Notes to Financial Statements

customers through the ratemaking process. Regulatory liabilities represent costs recovered that are expected to be incurred in the future or probable future reductions in revenues associated with amounts that are expected to be credited to customers through the ratemaking process.

In the event that a portion of a traditional electric operating company's or a natural gas distribution utility's operations is no longer subject to applicable accounting rules for rate regulation, such company would be required to write off to income or reclassify to AOCI related regulatory assets and liabilities that are not specifically recoverable through regulated rates. In addition, the traditional electric operating company or the natural gas distribution utility would be required to determine if any impairment to other assets, including plant, exists and write down the assets, if impaired, to their fair values. All regulatory assets and liabilities are to be reflected in rates. See Note 2 for additional information including details of regulatory assets and liabilities reflected in the balance sheets for Southern Company, the traditional electric operating companies, and Southern Company Gas.

Revenues

The Registrants generate revenues from a variety of sources which are accounted for under various revenue accounting guidance, including revenue from contracts with customers, lease, derivative, and regulatory accounting. See Notes 4, 9, and 14 for additional information.

Traditional Electric Operating Companies

The majority of the revenues of the traditional electric operating companies are generated from contracts with retail electric customers. These revenues, generated from the integrated service to deliver electricity when and if called upon by the customer, are recognized as a single performance obligation satisfied over time, at a tariff rate, and as electricity is delivered to the customer during the month. Unbilled revenues related to retail sales are accrued at the end of each fiscal period. Retail rates may include provisions to adjust revenues for fluctuations in fuel costs, fuel hedging, the energy component of purchased power costs, and certain other costs. Revenues are adjusted for differences between these actual costs and amounts billed in current regulated rates. Under or over recovered regulatory clause revenues are recorded in the balance sheets and are recovered from or returned to customers, respectively, through adjustments to the billing factors. See Note 2 for additional information regarding regulatory matters of the traditional electric operating companies.

Wholesale capacity revenues from PPAs are recognized in amounts billable under the contract terms. Energy and other revenues are generally recognized as services are provided. The contracts for capacity and energy in a wholesale PPA have multiple performance obligations where the contract's total transaction price is allocated to each performance obligation based on the standalone selling price. The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, the traditional electric operating companies recognize revenue as the performance obligations are satisfied over time as electricity is delivered to the customer or as generation capacity is available to the customer.

For both retail and wholesale revenues, the traditional electric operating companies have elected to recognize revenue for their sales of electricity and capacity using the invoice practical expedient as they generally have a right to consideration in an amount that corresponds directly with the value to the customer of the performance completed to date and that may be invoiced. Payment for goods and services rendered is typically due in the subsequent month following satisfaction of the Registrants' performance obligation.

Southern Power

Southern Power sells capacity and energy at rates specified under contractual terms in long-term PPAs. These PPAs are accounted for as leases, non-derivatives, or normal sale derivatives. Capacity revenues from PPAs classified as operating leases are recognized on a straight-line basis over the term of the agreement. Energy revenues are recognized in the period the energy is delivered. Capacity revenues from PPAs classified as sales-type leases are recognized by accounting for interest income on the net investment in the lease.

Southern Power's non-lease contracts commonly include capacity and energy which are considered separate performance obligations. In these contracts, the total transaction price is allocated to each performance obligation based on the standalone selling price. The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, Southern Power recognizes revenue as the performance obligations are satisfied over time, as electricity is delivered to the customer or as generation capacity is made available to the customer.

Southern Power generally has a right to consideration in an amount that corresponds directly with the value to the customer of the performance completed to date and may recognize revenue in the amount to which the entity has a right to invoice. Payment for goods and services rendered is typically due in the subsequent month following satisfaction of Southern Power's performance obligation.

When multiple contracts exist with the same counterparty, the revenues from each contract are accounted for as separate arrangements.

Southern Power may also enter into contracts to sell short-term capacity in the wholesale electricity markets. These sales are generally classified as mark-to-market derivatives and net unrealized gains and losses on such contracts are recorded in wholesale revenues. See Note 14 and "Financial Instruments" herein for additional information.

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Southern Company Gas

Gas Distribution Operations

Southern Company Gas records revenues when goods or services are provided to customers. Those revenues are based on rates approved by the state regulatory agencies of the natural gas distribution utilities. Atlanta Gas Light operates in a deregulated natural gas market whereby Marketers, rather than a traditional utility, sell natural gas to end-use customers in Georgia and handle customer billing functions. As required by the Georgia PSC, Atlanta Gas Light bills Marketers in equal monthly installments for each residential, commercial, and industrial end-use customer's distribution costs as well as for capacity costs utilizing a seasonal rate design for the calculation of each residential end-use customer's annual straight-fixed-variable charge, which reflects the historic volumetric usage pattern for the entire residential class.

The majority of the revenues of Southern Company Gas are generated from contracts with natural gas distribution customers. Revenues from this integrated service to deliver gas when and if called upon by the customer are recognized as a single performance obligation satisfied over time and are recognized at a tariff rate as gas is delivered to the customer during the month.

The standalone selling price is primarily determined by the price charged to customers for the specific goods or services transferred with the performance obligations. Generally, Southern Company Gas recognizes revenue as the performance obligations are satisfied over time as natural gas is delivered to the customer. The performance obligations related to wholesale gas services are satisfied, and revenue is recognized, at a point in time when natural gas is delivered to the customer.

Southern Company Gas has elected to recognize revenue for sales of gas using the invoice practical expedient as it generally has a right to consideration in an amount that corresponds directly with the value to the customer of the performance completed to date and that may be invoiced. Payment for goods and services rendered is typically due in the subsequent month following satisfaction of Southern Company Gas' performance obligation.

With the exception of Atlanta Gas Light, the natural gas distribution utilities have rate structures that include volumetric rate designs that allow the opportunity to recover certain costs based on gas usage. Revenues from sales and transportation services are recognized in the same period in which the related volumes are delivered to customers. Revenues from residential and certain commercial and industrial customers are recognized on the basis of scheduled meter readings. Additionally, unbilled revenues are recognized for estimated deliveries of gas not yet billed to these customers, from the last bill date to the end of the accounting period. For other commercial and industrial customers, revenues are based on actual deliveries through the end of the period.

The tariffs for the natural gas distribution utilities include provisions which allow for the recognition of certain revenues prior to the time such revenues are billed to customers. These provisions are referred to as alternative revenue programs and provide for the recognition of certain revenues prior to billing, as long as the amounts recognized will be collected from customers within 24 months of recognition. Revenue related to alternative revenue programs was \$(5) million, \$11 million, and \$3 million in 2022, 2021, and 2020, respectively. These programs are as follows:

- *Weather normalization adjustments* – reduce customer bills when winter weather is colder than normal and increase customer bills when weather is warmer than normal and are included in the tariffs for Virginia Natural Gas and Chattanooga Gas;
- *Revenue normalization mechanisms* – mitigate the impact of conservation and declining customer usage and are contained in the tariffs for Virginia Natural Gas and Nicor Gas; and
- *Revenue true-up adjustment* – included within the provisions of the GRAM program in which Atlanta Gas Light participates as a short-term alternative to formal rate case filings, the revenue true-up feature provides for a positive (or negative) adjustment to record revenue in the amount of any variance to budgeted revenues, which are submitted and approved annually as a requirement of GRAM. Such adjustments are reflected in customer billings in a subsequent program year.

Wholesale Gas Services

Prior to the sale of Sequent on July 1, 2021, Southern Company Gas netted revenues from energy and risk management activities with the associated costs. Profits from sales between segments were eliminated and recognized as goods or services sold to end-use customers. Southern Company Gas recorded wholesale gas services' transactions that qualified as derivatives at fair value with changes in fair value recognized in earnings in the period of change and characterized as unrealized gains or losses. Gains and losses on derivatives held for energy trading purposes were presented on a net basis in revenue. See Note 15 under "Southern Company Gas" for additional information on the sale of Sequent.

Gas Marketing Services

Southern Company Gas recognizes revenues from natural gas sales and transportation services in the same period in which the related volumes are delivered to customers and recognizes sales revenues from residential and certain commercial and industrial customers on the basis of scheduled meter readings. Southern Company Gas also recognizes unbilled revenues for estimated deliveries of gas not yet billed to these customers from the most recent meter reading date to the end of the accounting period. For other commercial and industrial customers and for all wholesale customers, revenues are based on actual deliveries during the period.

Notes to Financial Statements

Southern Company Gas recognizes revenues on 12-month utility-bill management contracts as the lesser of cumulative earned or cumulative billed amounts.

Concentration of Revenue

Southern Company, Alabama Power, Georgia Power, Mississippi Power (with the exception of its full requirements cost-based MRA electric tariffs described below), Southern Power, and Southern Company Gas each have a diversified base of customers and no single customer or industry comprises 10% or more of each company's revenues.

Mississippi Power provides service under long-term contracts with rural electric cooperative associations and a municipality located in southeastern Mississippi under requirements cost-based MRA electric tariffs, which are subject to regulation by the FERC. The contracts with these wholesale customers represented 12.4% of Mississippi Power's total operating revenues in 2022. Historically, these wholesale customers have acted as a group and any changes in contractual relationships for one customer are likely to be followed by the other wholesale customers.

Fuel Costs

Fuel costs for the traditional electric operating companies and Southern Power are expensed as the fuel is used. Fuel expense generally includes fuel transportation costs and the cost of purchased emissions allowances as they are used. For Alabama Power and Georgia Power, fuel expense also includes the amortization of the cost of nuclear fuel. For the traditional electric operating companies, fuel costs also include gains and/or losses from fuel-hedging programs as approved by their respective state PSCs.

Cost of Natural Gas

Excluding Atlanta Gas Light, which does not sell natural gas to end-use customers, Southern Company Gas charges its utility customers for natural gas consumed using natural gas cost recovery mechanisms set by the applicable state regulatory agencies. Under these mechanisms, all prudently-incurred natural gas costs are passed through to customers without markup, subject to regulatory review. Southern Company Gas defers or accrues the difference between the actual cost of natural gas and the amount of commodity revenue earned in a given period such that no operating income is recognized related to these costs. The deferred or accrued amount is either billed or refunded to customers prospectively through adjustments to the commodity rate. Deferred and accrued natural gas costs are included in the balance sheets as regulatory assets and regulatory liabilities, respectively.

Southern Company Gas' gas marketing services' customers are charged for actual or estimated natural gas consumed. Within cost of natural gas, Southern Company Gas also includes costs of lost and unaccounted for gas, adjustments to reduce the value of inventories to market value, and gains and losses associated with certain derivatives.

Income Taxes

The Registrants use the liability method of accounting for deferred income taxes and provide deferred income taxes for all significant income tax temporary differences. In accordance with regulatory requirements, deferred federal ITCs for the traditional electric operating companies are amortized over the average life of the related property, with such amortization normally applied as a credit to reduce depreciation and amortization in the statements of income. Southern Power's and the natural gas distribution utilities' deferred federal ITCs, as well as certain state ITCs for Nicor Gas, are amortized to income tax expense over the life of the respective asset.

Under current tax law, certain projects at Southern Power related to the construction of renewable facilities are eligible for federal ITCs. Southern Power estimates eligible costs which, as they relate to acquisitions, may not be finalized until the allocation of the purchase price to assets has been finalized. Southern Power applies the deferred method to ITCs, whereby the ITCs are recorded as a deferred credit and amortized to income tax expense over the life of the respective asset. Furthermore, the tax basis of the asset is reduced by 50% of the ITCs received, resulting in a net deferred tax asset. Southern Power has elected to recognize the tax benefit of this basis difference as a reduction to income tax expense in the year in which the plant reaches commercial operation. State ITCs are recognized as an income tax benefit in the period in which the credits are generated. In addition, certain projects are eligible for federal and state PTCs, which are recognized as an income tax benefit based on KWH production.

Federal ITCs and PTCs, as well as state ITCs and other state tax credits available to reduce income taxes payable, were not fully utilized in 2022 and will be carried forward and utilized in future years. In addition, Southern Company is expected to have various state net operating loss (NOL) carryforwards for certain of its subsidiaries, including Mississippi Power and Southern Power, which would result in income tax benefits in the future, if utilized. See Note 10 under "Current and Deferred Income Taxes – Tax Credit Carryforwards" and " – Net Operating Loss Carryforwards" for additional information.

The Registrants recognize tax positions that are "more likely than not" of being sustained upon examination by the appropriate taxing authorities. See Note 10 under "Unrecognized Tax Benefits" for additional information.

Notes to Financial Statements

Other Taxes

Taxes imposed on and collected from customers on behalf of governmental agencies are presented net on the Registrants' statements of income and are excluded from the transaction price in determining the revenue related to contracts with a customer.

Southern Company Gas is taxed on its gas revenues by various governmental authorities, but is allowed to recover these taxes from its customers. Revenue taxes imposed on the natural gas distribution utilities are recorded at the amount charged to customers, which may include a small administrative fee, as operating revenues, and the related taxes imposed on Southern Company Gas are recorded as operating expenses on the statements of income. Revenue taxes included in operating expenses were \$158 million, \$119 million, and \$104 million in 2022, 2021, and 2020, respectively.

Allowance for Funds Used During Construction and Interest Capitalized

The traditional electric operating companies and the natural gas distribution utilities record AFUDC, which represents the estimated debt and equity costs of capital funds that are necessary to finance the construction of new regulated facilities. While cash is not realized currently, AFUDC increases the revenue requirement and is recovered over the service life of the asset through a higher rate base and higher depreciation. The equity component of AFUDC is not taxable.

Interest related to financing the construction of new facilities at Southern Power and new facilities not included in the traditional electric operating companies' and Southern Company Gas' regulated rates is capitalized in accordance with standard interest capitalization requirements.

Total AFUDC and interest capitalized for the Registrants in 2022, 2021, and 2020 was as follows:

	Southern Company	Alabama Power	Georgia Power ^(*)	Mississippi Power	Southern Power	Southern Company Gas
			(in millions)			
2022	\$ 327	\$ 90	\$ 213	\$ —	\$ —	\$ 24
2021	282	68	190	—	6	18
2020	230	61	138	1	11	18

(*) See Note 2 under "Georgia Power – Nuclear Construction" for information on the inclusion of a portion of construction costs related to Plant Vogtle Units 3 and 4 in Georgia Power's rate base.

The average AFUDC composite rates for 2022, 2021, and 2020 for the traditional electric operating companies and the natural gas distribution utilities were as follows:

	2022	2021	2020
Alabama Power	7.9%	7.9%	8.1%
Georgia Power ^(*)	7.3%	7.2%	6.9%
Mississippi Power	5.3%	2.5%	5.4%
Southern Company Gas:			
Atlanta Gas Light	7.6%	7.7%	7.7%
Chattanooga Gas	7.1%	7.1%	7.1%
Nicor Gas	2.0%	0.1%	0.7%

(*) Excludes AFUDC related to the construction of Plant Vogtle Units 3 and 4. See Note 2 under "Georgia Power – Nuclear Construction" for additional information.

Impairment of Long-Lived Assets

The Registrants evaluate long-lived assets and finite-lived intangible assets for impairment when events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. The determination of whether an impairment has occurred is based on either a specific regulatory disallowance, a sales transaction price that is less than the asset group's carrying amount, or an estimate of undiscounted future cash flows attributable to the asset group, as compared with the carrying amount of the assets. If an impairment has occurred, the amount of the impairment recognized is determined by either the amount of regulatory disallowance or by estimating the fair value of the assets and recording a loss if the carrying amount is greater than the fair value. For assets identified as held for sale, the carrying amount is compared to the estimated fair value less the cost to sell in order to determine if an impairment loss is required. Until the assets are disposed of, their estimated fair value is re-evaluated when circumstances or events change. See Notes 7 and 9 under "Southern Company Gas" and "Southern Company Leveraged Lease," respectively, and Note 15 under "Southern Company" and "Southern Company Gas" for information regarding impairment charges recorded during the periods presented.

Notes to Financial Statements

Goodwill and Other Intangible Assets and Liabilities

Southern Power's intangible assets consist primarily of certain PPAs acquired, which are amortized over the term of the respective PPA. Southern Company Gas' goodwill and other intangible assets and liabilities primarily relate to its 2016 acquisition by Southern Company. In addition to these items, Southern Company's goodwill and other intangible assets also relate to its 2016 acquisition of PowerSecure.

For its 2022 and 2020 annual impairment tests, Southern Company Gas management performed the qualitative assessment and determined that it was more likely than not that the fair value of all of its reporting units with goodwill exceeded their carrying amounts, and therefore no quantitative assessment was required. For its 2021 annual impairment test, Southern Company Gas management performed the quantitative assessment and confirmed that the fair values of all of its reporting units with goodwill exceeded their carrying amounts.

For its 2021 and 2020 annual impairment tests, PowerSecure management performed the quantitative assessment, which resulted in the fair value of PowerSecure exceeding its carrying amount. For its 2022 annual impairment test, PowerSecure management performed the quantitative assessment, which resulted in the fair value of PowerSecure being lower than its carrying amount. The fair value was estimated using a discounted cash flow analysis. The decline in fair value primarily resulted from declining macroeconomic conditions, reducing sales growth and estimated cash flows. As a result, a goodwill impairment of \$119 million was recorded in the fourth quarter 2022. The worldwide disruptions in supply chain, reduced labor availability and productivity, and reduced economic activity in the United States have had a variety of adverse impacts on Southern Company and its subsidiaries, including PowerSecure. If these factors continue to negatively affect the operating results of PowerSecure, all or a portion of its remaining goodwill of \$144 million may become impaired.

At December 31, 2022 and 2021, goodwill was as follows:

	At December 31, 2022	At December 31, 2021
	<i>(in millions)</i>	
Southern Company	\$5,161	\$5,280
Southern Company Gas:		
Gas distribution operations	\$4,034	\$4,034
Gas marketing services	981	981
Southern Company Gas total	\$5,015	\$5,015

At December 31, 2022 and 2021, other intangible assets were as follows:

	At December 31, 2022			At December 31, 2021		
	Gross Carrying Amount	Accumulated Amortization	Other Intangible Assets, Net	Gross Carrying Amount	Accumulated Amortization	Other Intangible Assets, Net
	<i>(in millions)</i>			<i>(in millions)</i>		
Southern Company						
Subject to amortization:						
Customer relationships	\$ 212	\$ (162)	\$ 50	\$212	\$ (150)	\$ 62
Trade names	64	(44)	20	64	(38)	26
PPA fair value adjustments	390	(129)	261	390	(109)	281
Other	5	(5)	—	11	(10)	1
Total subject to amortization	\$ 671	\$ (340)	\$331	\$677	\$ (307)	\$370
Not subject to amortization:						
FCC licenses	75	—	75	75	—	75
Total other intangible assets	\$ 746	\$ (340)	\$406	\$752	\$ (307)	\$445
Southern Power^(*)						
PPA fair value adjustments	\$ 390	\$ (129)	\$261	\$390	\$ (109)	\$281
Southern Company Gas^(*)						
Gas marketing services						
Customer relationships	\$ 156	\$ (139)	\$ 17	\$156	\$ (130)	\$ 26
Trade names	26	(17)	9	26	(15)	11
Total other intangible assets	\$ 182	\$ (156)	\$ 26	\$182	\$ (145)	\$ 37

(*) All subject to amortization.

Notes to Financial Statements

Amortization associated with other intangible assets in 2022, 2021, and 2020 was as follows:

	2022	2021	2020
		<i>(in millions)</i>	
Southern Company ^(a)	\$39	\$44	\$49
Southern Power ^(b)	20	20	20
Southern Company Gas:			
Gas marketing services	\$11	\$15	\$17
Wholesale gas services ^(b)	—	—	2
Southern Company Gas total	\$11	\$15	\$19

(a) Includes \$20 million, \$20 million, and \$22 million in 2022, 2021, and 2020, respectively, recorded as a reduction to operating revenues.

(b) Recorded as a reduction to operating revenues.

At December 31, 2022, the estimated amortization associated with other intangible assets for the next five years is as follows:

	2023	2024	2025	2026	2027
			<i>(in millions)</i>		
Southern Company	\$36	\$35	\$31	\$26	\$23
Southern Power	20	20	20	20	20
Southern Company Gas	9	8	6	3	—

Acquisition Accounting

At the time of an acquisition, management will assess whether acquired assets and activities meet the definition of a business. Acquisitions that meet the definition of a business are accounted for under the acquisition method, and operating results from the date of acquisition are included in the acquiring entity's financial statements. The purchase price, including any contingent consideration, is allocated based on the fair value of the identifiable assets acquired and liabilities assumed (including any intangible assets). Assets acquired that do not meet the definition of a business are accounted for as an asset acquisition. The purchase price of each asset acquisition is allocated based on the relative fair value of assets acquired.

Determining the fair value of assets acquired and liabilities assumed requires management judgment and management may engage independent valuation experts to assist in this process. Fair values are determined by using market participant assumptions and typically include the timing and amounts of future cash flows, incurred construction costs, the nature of acquired contracts, discount rates, power market prices, and expected asset lives. Any due diligence or transition costs incurred for potential or successful acquisitions are expensed as incurred.

Historically, contingent consideration primarily relates to fixed amounts due to the seller once an acquired construction project is placed in service. For contingent consideration with variable payments, management fair values the arrangement with any changes recorded in the statements of income. See Note 13 for additional fair value information.

Development Costs

For Southern Power, development costs are capitalized once a project is probable of completion, primarily based on a review of its economics and operational feasibility, as well as the status of power off-take agreements and regulatory approvals, if applicable. Southern Power's capitalized development costs are included in CWIP on the balance sheets. All of Southern Power's development costs incurred prior to the determination that a project is probable of completion are expensed as incurred and included in other operations and maintenance expense in the statements of income. If it is determined that a project is no longer probable of completion, any of Southern Power's capitalized development costs are expensed and included in other operations and maintenance expense in the statements of income.

Long-Term Service Agreements

The traditional electric operating companies and Southern Power have entered into LTSAs for the purpose of securing maintenance support for certain of their generating facilities. The LTSAs cover all planned inspections on the covered equipment, which generally includes the cost of all labor and materials. The LTSAs also obligate the counterparties to cover the costs of unplanned maintenance on the covered equipment subject to limits and scope specified in each contract.

Payments made under the LTSAs for the performance of any planned inspections or unplanned capital maintenance are recorded in the statements of cash flows as investing activities. Receipts of major parts into materials and supplies inventory prior to planned inspections are treated as noncash transactions in the statements of cash flows. Any payments made prior to the work being performed are recorded

Notes to Financial Statements

as prepayments in other current assets and noncurrent assets on the balance sheets. At the time work is performed, an appropriate amount is accrued for future payments or transferred from the prepayment and recorded as property, plant, and equipment or expensed.

Transmission Receivables/Prepayments

As a result of Southern Power's acquisition and construction of generating facilities, Southern Power has transmission receivables and/or prepayments representing the portion of interconnection network and transmission upgrades that will be reimbursed to Southern Power. Upon completion of the related project, transmission costs are generally reimbursed by the interconnection provider within a five-year period and the receivable/prepayments are reduced as payments or services are received.

Cash, Cash Equivalents, and Restricted Cash

For purposes of the financial statements, temporary cash investments are considered cash equivalents. Temporary cash investments are securities with original maturities of 90 days or less.

The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the balance sheets that total to the amount shown in the statements of cash flows for the applicable Registrants:

	Southern Company		Georgia Power	Southern Power		Southern Company Gas	
	December 31,						
	2022	2021	2022	2022	2021	2022	2021
	<i>(in millions)</i>		<i>(in millions)</i>	<i>(in millions)</i>		<i>(in millions)</i>	
Cash and cash equivalents	\$1,917	\$1,798	\$364	\$131	\$107	\$81	\$45
Restricted cash ^(a) :							
Other current assets	62	2	60	—	—	2	2
Other deferred charges and assets	58	29	56	3	29	—	—
Total cash, cash equivalents, and restricted cash ^(b)	\$2,037	\$1,829	\$480	\$133	\$135	\$83	\$48

(a) For Georgia Power, reflects proceeds from the issuance of solid waste disposal facility revenue bonds. See Note 8 under "Long-term Debt" for additional information. Georgia Power did not have any restricted cash at December 31, 2021. For Southern Power, reflects \$3 million and \$10 million at December 31, 2022 and 2021, respectively, held to fund estimated construction completion costs at the Deuel Harvest wind facility and \$19 million at December 31, 2021 related to tax equity contributions restricted until the Garland battery energy storage facility achieved final contracted capacity. See Note 15 under "Southern Power" for additional information. For Southern Company Gas, reflects collateral for workers' compensation, life insurance, and long-term disability insurance.

(b) Total may not add due to rounding.

Storm Damage and Reliability Reserves

Each traditional electric operating company maintains a reserve to cover or is allowed to defer and recover the cost of damages from major storms to its transmission and distribution lines and, for Mississippi Power, the cost of uninsured damages to its generation facilities and other property. Alabama Power also has authority from the Alabama PSC to accrue certain additional amounts as circumstances warrant. Alabama Power recorded additional accruals of \$65 million and \$100 million in 2021 and 2020, respectively, which are included in the table below. In accordance with their respective state PSC orders, the traditional electric operating companies accrued the following amounts related to storm damage recovery in 2022, 2021, and 2020:

	Southern Company ^(*)	Alabama Power	Georgia Power	Mississippi Power ^(*)
	<i>(in millions)</i>			
2022	\$239	\$19	\$213	\$7
2021	286	75	213	(2)
2020	326	112	213	1

(*) Mississippi Power's net accrual includes carrying costs, as well as amortization of related excess deferred income tax benefits.

In 2022, costs for weather-related damages charged against storm damage reserves totaled \$24 million and \$82 million for Alabama Power and Georgia Power, respectively, and were immaterial for Mississippi Power. See Note 2 under "Alabama Power – Rate NDR," "Georgia Power – Storm Damage Recovery," and "Mississippi Power – System Restoration Rider" for additional information regarding each company's storm damage reserve.

Notes to Financial Statements

During 2022, the Alabama PSC and the Mississippi PSC authorized Alabama Power and Mississippi Power, respectively, to make accruals to a reliability reserve if certain conditions are met. During 2022, Alabama Power and Mississippi Power accrued the following amounts to their reliability reserves:

	Southern Company	Alabama Power	Mississippi Power
2022	\$191	\$166	\$ 25

See Note 2 under "Alabama Power – Reliability Reserve Accounting Order" and "Mississippi Power – Reliability Reserve Accounting Order" for additional information.

Materials and Supplies

Materials and supplies for the traditional electric operating companies generally includes the average cost of transmission, distribution, and generating plant materials. Materials and supplies for Southern Company Gas generally includes propane gas inventory, liquefied natural gas inventory, fleet fuel, and other materials and supplies. Materials and supplies for Southern Power generally includes the average cost of generating plant materials.

Materials are recorded to inventory when purchased and then expensed or capitalized to property, plant, and equipment, as appropriate, at weighted average cost when installed. In addition, certain major parts are recorded as inventory when acquired and then capitalized at cost when installed to property, plant, and equipment.

Fuel Inventory

Fuel inventory for the traditional electric operating companies includes the average cost of coal, natural gas, oil, transportation, and emissions allowances. Fuel inventory for Southern Power, which is included in other current assets, includes the average cost of oil, natural gas, and emissions allowances. Fuel is recorded to inventory when purchased and then expensed, at weighted average cost, as used. Emissions allowances granted by the EPA are included in inventory at zero cost. The traditional electric operating companies recover fuel expense through fuel cost recovery rates approved by each state PSC or, for wholesale rates, the FERC.

Natural Gas for Sale

With the exception of Nicor Gas, Southern Company Gas records natural gas inventories on a WACOG basis. In Georgia's deregulated, competitive environment, Marketers sell natural gas to firm end-use customers at market-based prices. On a monthly basis, Atlanta Gas Light assigns to Marketers the majority of the pipeline storage services that it has under contract, along with a corresponding amount of inventory. Atlanta Gas Light retains and manages a portion of its pipeline storage assets and related natural gas inventories for system balancing and to serve system demand.

Nicor Gas' natural gas inventory is carried at cost on a LIFO basis. Inventory decrements occurring during the year that are restored prior to year end are charged to cost of natural gas at the estimated annual replacement cost. Inventory decrements that are not restored prior to year end are charged to cost of natural gas at the actual LIFO cost of the inventory layers liquidated. The cost of natural gas, including inventory costs, is recovered from customers under a purchased gas recovery mechanism adjusted for differences between actual costs and amounts billed; therefore, LIFO liquidations have no impact on Southern Company's or Southern Company Gas' net income. At December 31, 2022, the Nicor Gas LIFO inventory balance was \$170 million. Based on the average cost of gas purchased in December 2022, the estimated replacement cost of Nicor Gas' inventory at December 31, 2022 was \$613 million.

Southern Company Gas' gas marketing services and all other segments record inventory at LOCOM, with cost determined on a WACOG basis. For these segments, Southern Company Gas evaluates the weighted average cost of its natural gas inventories against market prices to determine whether any declines in market prices below the WACOG are other than temporary. For any declines considered to be other than temporary, Southern Company Gas records LOCOM adjustments to cost of natural gas to reduce the value of its natural gas inventories to market value. LOCOM adjustments were immaterial for all periods presented.

Provision for Uncollectible Accounts

The customers of the traditional electric operating companies and the natural gas distribution utilities are billed monthly. For the majority of receivables, a provision for uncollectible accounts is established based on historical collection experience and other factors. For the remaining receivables, if the company is aware of a specific customer's inability to pay, a provision for uncollectible accounts is recorded to reduce the receivable balance to the amount reasonably expected to be collected. If circumstances change, the estimate of the

Notes to Financial Statements

recoverability of accounts receivable could change as well. Circumstances that could affect this estimate include, but are not limited to, customer credit issues, customer deposits, and general economic conditions. Customers' accounts are written off once they are deemed to be uncollectible. For all periods presented, uncollectible accounts averaged less than 1% of revenues for each Registrant.

Credit risk exposure at Nicor Gas is mitigated by a bad debt rider approved by the Illinois Commission. The bad debt rider provides for the recovery from (or refund to) customers of the difference between Nicor Gas' actual bad debt experience on an annual basis and the benchmark bad debt expense used to establish its base rates for the respective year.

Concentration of Credit Risk

Concentration of credit risk occurs at Atlanta Gas Light for amounts billed for services and other costs to its customers, which consist of 14 Marketers in Georgia (including SouthStar). The credit risk exposure to the Marketers varies seasonally, with the lowest exposure in the non-peak summer months and the highest exposure in the peak winter months. Marketers are responsible for the retail sale of natural gas to end-use customers in Georgia. The functions of the retail sale of gas include the purchase and sale of natural gas, customer service, billings, and collections. The provisions of Atlanta Gas Light's tariff allow Atlanta Gas Light to obtain credit security support in an amount equal to a minimum of two times a Marketer's highest month's estimated bill from Atlanta Gas Light.

Financial Instruments

The traditional electric operating companies and Southern Power use derivative financial instruments to limit exposure to fluctuations in interest rates, the prices of certain fuel purchases, electricity purchases and sales, and occasionally foreign currency exchange rates. Southern Company Gas uses derivative financial instruments to limit exposure to fluctuations in natural gas prices, weather, interest rates, and commodity prices. All derivative financial instruments are recognized as either assets or liabilities on the balance sheets (included in "Other" or shown separately as "Risk Management Activities") and are measured at fair value. See Note 13 for additional information regarding fair value. Substantially all of the traditional electric operating companies' and Southern Power's bulk energy purchases and sales contracts that meet the definition of a derivative are excluded from fair value accounting requirements because they qualify for the "normal" scope exception, and are accounted for under the accrual method. Derivative contracts that qualify as cash flow hedges of anticipated transactions or are recoverable through the traditional electric operating companies' and the natural gas distribution utilities' fuel-hedging programs result in the deferral of related gains and losses in AOCI or regulatory assets and liabilities, respectively, until the hedged transactions occur. Other derivative contracts that qualify as fair value hedges are marked to market through current period income and are recorded on a net basis in the statements of income. Cash flows from derivatives are classified on the statements of cash flows in the same category as the hedged item. See Note 14 for additional information regarding derivatives.

The Registrants offset fair value amounts recognized for multiple derivative instruments executed with the same counterparty under netting arrangements. The Registrants had no outstanding collateral repayment obligations or rights to reclaim collateral arising from derivative instruments recognized at December 31, 2022.

The Registrants are exposed to potential losses related to financial instruments in the event of counterparties' nonperformance. The Registrants have established risk management policies and controls to determine and monitor the creditworthiness of counterparties in order to mitigate their exposure to counterparty credit risk.

Southern Company Gas

Southern Company Gas enters into weather derivative contracts as economic hedges of natural gas revenues in the event of warmer-than-normal weather in the Heating Season. Exchange-traded options are carried at fair value, with changes reflected in natural gas revenues. Non-exchange-traded options are accounted for using the intrinsic value method. Changes in the intrinsic value for non-exchange-traded contracts are also reflected in natural gas revenues in the statements of income.

Southern Company Gas enters into transactions to secure transportation capacity between delivery points in order to serve its customers and various markets. NYMEX futures and OTC contracts are used to capture the price differential or spread between the locations served by the capacity to substantially protect the natural gas revenues that will ultimately be realized when the physical flow of natural gas between delivery points occurs. These contracts generally meet the definition of derivatives and are carried at fair value on the balance sheets, with changes in fair value included in earnings in the period of change. These contracts are not designated as hedges for accounting purposes.

The purchase, transportation, storage, and sale of natural gas are accounted for on a weighted average cost or accrual basis, as appropriate, rather than on the fair value basis utilized for the derivatives used to mitigate the natural gas price risk associated with the storage and transportation portfolio. Monthly demand charges are incurred for the contracted storage and transportation capacity and payments associated with asset management agreements, and these demand charges and payments are recognized on the statements of income in the period they are incurred. This difference in accounting methods can result in volatility in reported earnings, even though the economic margin is substantially unchanged from the dates the transactions were consummated.

Notes to Financial Statements

Comprehensive Income

The objective of comprehensive income is to report a measure of all changes in common stock equity of an enterprise that result from transactions and other economic events of the period other than transactions with owners. Comprehensive income consists of net income attributable to the Registrant, changes in the fair value of qualifying cash flow hedges, and reclassifications for amounts included in net income. Comprehensive income also consists of certain changes in pension and other postretirement benefit plans for Southern Company, Southern Power, and Southern Company Gas.

AOCI (loss) balances, net of tax effects, for Southern Company, Southern Power, and Southern Company Gas were as follows:

	Qualifying Hedges	Pension and Other Postretirement Benefit Plans	Accumulated Other Comprehensive Income (Loss) ^(*)
	<i>(in millions)</i>		
Southern Company			
Balance at December 31, 2021	\$(162)	\$ (76)	\$(237)
Current period change	13	58	71
Balance at December 31, 2022	\$(149)	\$ (18)	\$(167)
Southern Power			
Balance at December 31, 2021	\$ 1	\$ (29)	\$ (27)
Current period change	(10)	20	10
Balance at December 31, 2022	\$ (9)	\$ (9)	\$ (18)
Southern Company Gas			
Balance at December 31, 2021	\$ (14)	\$ 38	\$ 24
Current period change	(11)	18	7
Balance at December 31, 2022	\$ (25)	\$ 56	\$ 31

(*) May not add due to rounding.

Variable Interest Entities

The Registrants may hold ownership interests in a number of business ventures with varying ownership structures. Partnership interests and other variable interests are evaluated to determine if each entity is a VIE. The primary beneficiary of a VIE is required to consolidate the VIE when it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE. See Note 7 for additional information regarding VIEs.

Notes to Financial Statements

2. REGULATORY MATTERS

Regulatory Assets and Liabilities

Details of regulatory assets and (liabilities) reflected in the balance sheets at December 31, 2022 and 2021 are provided in the following tables:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
<i>(in millions)</i>					
At December 31, 2022					
AROs ^{(a)(u)}	\$ 6,096	\$ 1,971	\$ 3,829	\$ 242	\$ —
Retiree benefit plans ^{(b)(u)}	2,517	675	848	113	114
Remaining net book value of retired assets ^(c)	1,543	562	962	19	—
Under recovered regulatory clause revenues ^(d)	953	788	—	31	134
Deferred income tax charges ^(e)	866	250	583	30	—
Environmental remediation ^{(f)(u)}	294	—	25	—	269
Loss on reacquired debt ^(g)	257	38	213	5	1
Vacation pay ^{(h)(u)}	212	82	108	10	12
Regulatory clauses ⁽ⁱ⁾	142	142	—	—	—
Software and cloud computing costs ^(j)	111	46	59	—	6
Nuclear outage ^(k)	82	52	30	—	—
Long-term debt fair value adjustment ^(l)	69	—	—	—	69
Fuel-hedging (realized and unrealized) losses ^(m)	60	15	45	—	—
Storm damage ⁽ⁿ⁾	44	—	—	44	—
Plant Daniel Units 3 and 4 ^(o)	27	—	—	27	—
Kemper County energy facility assets, net ^(p)	20	—	—	20	—
Other regulatory assets ^(q)	197	36	27	16	118
Deferred income tax credits ^(e)	(5,251)	(1,925)	(2,244)	(269)	(788)
Other cost of removal obligations ^(a)	(1,430)	11	462	(196)	(1,707)
Storm/property damage reserves ^(r)	(216)	(97)	(83)	(36)	—
Reliability reserves ^(r)	(191)	(166)	—	(25)	—
Customer refunds ^(s)	(183)	(62)	(121)	—	—
Fuel-hedging (realized and unrealized) gains ^(m)	(83)	(38)	(21)	(24)	—
Over recovered regulatory clause revenues ^(d)	(64)	—	(38)	—	(26)
Other regulatory liabilities ^(t)	(239)	(40)	(21)	(3)	(93)
Total regulatory assets (liabilities), net	\$ 5,833	\$ 2,340	\$ 4,663	\$ 4	\$ (1,891)

At December 31, 2021

AROs ^{(a)(u)}	\$ 5,685	\$ 1,576	\$ 3,866	\$ 236	\$ —
Retiree benefit plans ^{(b)(u)}	2,998	747	962	145	95
Remaining net book value of retired assets ^(c)	1,050	574	455	21	—
Deferred income tax charges ^(e)	829	240	555	31	—
Under recovered regulatory clause revenues ^(d)	806	225	—	49	532
Environmental remediation ^{(f)(u)}	302	—	35	—	267
Loss on reacquired debt ^(g)	281	42	231	6	2
Vacation pay ^{(h)(u)}	207	81	102	10	14
Regulatory clauses ⁽ⁱ⁾	142	142	—	—	—
Storm damage ⁽ⁿ⁾	97	—	48	49	—
Long-term debt fair value adjustment ^(l)	79	—	—	—	79
Nuclear outage ^(k)	75	41	34	—	—
Software and cloud computing costs ^(j)	73	35	33	—	5
Kemper County energy facility assets, net ^(p)	35	—	—	35	—
Plant Daniel Units 3 and 4 ^(o)	28	—	—	28	—
Other regulatory assets ^(q)	168	38	29	7	94
Deferred income tax credits ^(e)	(5,636)	(1,968)	(2,537)	(288)	(816)
Other cost of removal obligations ^(a)	(1,826)	(192)	278	(195)	(1,683)
Customer refunds ^(s)	(189)	(181)	(8)	—	—
Fuel-hedging (realized and unrealized) gains ^(m)	(176)	(50)	(72)	(54)	—
Storm/property damage reserves ^(r)	(133)	(103)	—	(30)	—
Over recovered regulatory clause revenues ^(d)	(63)	(1)	(59)	—	(3)
Other regulatory liabilities ^(t)	(121)	(29)	(24)	(4)	(57)
Total regulatory assets (liabilities), net	\$ 4,711	\$ 1,217	\$ 3,928	\$ 46	\$ (1,471)

Notes to Financial Statements

Unless otherwise noted, the following recovery and amortization periods for these regulatory assets and (liabilities) have been approved by the respective state PSC or regulatory agency:

- (a) AROs and other cost of removal obligations generally are recorded over the related property lives, which may range up to 53 years for Alabama Power, 57 years for Georgia Power, 55 years for Mississippi Power, and 80 years for Southern Company Gas. AROs and cost of removal obligations are settled and trued up following completion of the related activities. Alabama Power is recovering CCR ARO expenditures over a 38-year period ending in 2054 through Rate CNP Compliance. Effective January 1, 2023, Georgia Power is recovering CCR ARO expenditures over four-year periods through its ECCR tariff. Prior to 2023, expenditures were recovered over three-year periods. See "Georgia Power – Rate Plans" herein and Note 6 for additional information.
- (b) Recovered and amortized over the average remaining service period, which may range up to 13 years for Alabama Power, Georgia Power, and Mississippi Power and up to 14 years for Southern Company Gas. Southern Company's balances also include amounts at SCS and Southern Nuclear that are allocated to the applicable regulated utilities. See Note 11 for additional information.
- (c) Alabama Power: Primarily represents the net book value of Plant Gorgas Units 8, 9, and 10 (\$492 million at December 31, 2022) being amortized over remaining periods not exceeding 15 years (through 2037). Balance at December 31, 2022 also includes approximately \$42 million related to Plant Barry Unit 4 being amortized over the unit's remaining useful life (through 2034). See "Alabama Power – Environmental Accounting Order" herein for additional information.
Georgia Power: Net book values of Plant Wansley Units 1 and 2 (totaling \$562 million at December 31, 2022) are being amortized over a remaining period of eight years (through 2030) and net book values of Plant Hammond Units 1 through 4 and Plant Branch Units 3 and 4 (totaling \$396 million at December 31, 2022) are being amortized over remaining periods of between one and 13 years (between 2023 and 2035). Balance at December 31, 2022 also includes unusable materials and supplies inventories, as discussed further under "Georgia Power – Integrated Resource Plans" herein.
Mississippi Power: Represents net book value of certain environmental compliance assets at Plant Watson and Plant Greene County. The retail portion is being amortized over a 10-year period through 2030 and the wholesale portion is being amortized over a 14-year period through 2035. See "Mississippi Power – Environmental Compliance Overview Plan" herein for additional information.
- (d) Alabama Power: Balances are recorded monthly and expected to be recovered over periods of up to eight years, with the majority expected to be recovered within two years. See "Alabama Power – Rate CNP PPA," " – Rate CNP Compliance," and " – Rate ECR" herein for additional information.
Georgia Power: Balances are recorded monthly and expected to be recovered or returned within two years. See "Georgia Power – Rate Plans" herein for additional information.
Mississippi Power: At December 31, 2022, \$12 million is being amortized over a three-year period ending in 2023 and the remaining \$18 million is expected to be recovered through various rate recovery mechanisms over a period to be determined in future rate filings. See "Mississippi Power – Ad Valorem Tax Adjustment" herein for additional information.
Southern Company Gas: Balances are recorded and recovered or amortized over periods generally not exceeding five years. In addition to natural gas cost recovery mechanisms, the natural gas distribution utilities have various other cost recovery mechanisms for the recovery of costs, including those related to infrastructure replacement programs.
- (e) Deferred income tax charges are recovered and deferred income tax credits are amortized over the related property lives, which may range up to 53 years for Alabama Power, 57 years for Georgia Power, 55 years for Mississippi Power, and 80 years for Southern Company Gas. See Note 10 for additional information. As a result of the Tax Reform Legislation, these accounts include certain deferred income tax assets and liabilities not subject to normalization, as described further below:
Alabama Power: Related amounts at December 31, 2022 include excess federal deferred income tax liabilities that are being returned to customers through bill credits of up to approximately \$318 million in 2023, as discussed under "Alabama Power – Excess Accumulated Deferred Income Tax Accounting Order" herein. The Alabama PSC will determine the treatment of any remaining excess federal accumulated deferred income taxes at a future date. Remaining amounts are being recovered and amortized ratably over the related property lives.
Georgia Power: Related amounts at December 31, 2022 include \$145 million of deferred income tax assets related to CWIP for Plant Vogtle Units 3 and 4, the recovery of which is expected to be determined in a future regulatory proceeding.
Mississippi Power: Related amounts at December 31, 2022 include \$33 million of retail deferred income tax liabilities generally being amortized over three years through 2025.
Southern Company Gas: Related amounts at December 31, 2022 include \$1 million of deferred income tax liabilities being amortized through 2024. See "Southern Company Gas – Rate Proceedings" herein for additional information.
- (f) Effective January 1, 2023, Georgia Power is recovering \$5 million annually for environmental remediation under the 2022 ARP. Southern Company Gas' costs are recovered through environmental cost recovery mechanisms when the remediation work is performed. See Note 3 under "Environmental Remediation" for additional information.
- (g) Recovered over either the remaining life of the original issue or, if refinanced, over the remaining life of the new issue. At December 31, 2022, the remaining amortization periods do not exceed 25 years for Alabama Power, 30 years for Georgia Power, 19 years for Mississippi Power, and five years for Southern Company Gas.
- (h) Recorded as earned by employees and recovered as paid, generally within one year. Includes both vacation and banked holiday pay, if applicable.
- (i) Effective January 1, 2023, balance is being amortized through Rate RSE over a five-year period ending in 2027.
- (j) Represents certain deferred operations and maintenance costs associated with software and cloud computing projects. For Alabama Power, costs are amortized ratably over the life of the related software, which ranges up to 10 years. See "Alabama Power – Software Accounting Order" herein for additional information. For Georgia Power, costs incurred through 2022 will be amortized over five years starting in 2023 and the recovery period for all future costs will be determined in its next base rate case. For Southern Company Gas, costs began being amortized ratably in July 2022 over the life of the related software, which ranges up to 10 years.
- (k) Nuclear outage costs are deferred to a regulatory asset when incurred and amortized over a subsequent period of 18 months for Alabama Power and up to 24 months for Georgia Power. See Note 5 for additional information.
- (l) Recovered over the remaining lives of the original debt issuances at acquisition, which range up to 16 years at December 31, 2022.
- (m) Fuel-hedging assets and liabilities are recorded over the life of the underlying hedged purchase contracts. Upon final settlement, actual costs incurred are recovered through the applicable traditional electric operating company's fuel cost recovery mechanism. Purchase contracts generally do not exceed three and a half years for Alabama Power, three years for Georgia Power, and four years for Mississippi Power.
- (n) Mississippi Power's balance represents deferred storm costs associated with Hurricanes Ida and Zeta being recovered through PEP over an eight-year period through 2029.

Notes to Financial Statements

- (o) Represents the difference between Mississippi Power's revenue requirement for Plant Daniel Units 3 and 4 under purchase accounting and operating lease accounting. At December 31, 2022, consists of the \$18 million retail portion being amortized through 2039 over the remaining life of the related property and the \$9 million wholesale portion being amortized through 2035.
- (p) Includes \$26 million of regulatory assets and \$6 million of regulatory liabilities at December 31, 2022. The retail portion includes \$17 million of regulatory assets and \$6 million of regulatory liabilities that are expected to be fully amortized by 2023 and 2025, respectively. The wholesale portion includes \$10 million of regulatory assets that are expected to be fully amortized by 2035.
- (q) Comprised of numerous immaterial components with remaining amortization periods generally not exceeding 21 years for Alabama Power, 10 years for Georgia Power, 14 years for Mississippi Power, and 20 years for Southern Company Gas at December 31, 2022.
- (r) Utilized as related expenses are incurred. See "Alabama Power – Rate NDR" and " – Reliability Reserve Accounting Order," "Georgia Power – Storm Damage Recovery," and "Mississippi Power – System Restoration Rider" and " – Reliability Reserve Accounting Order" herein and Note 1 under "Storm Damage and Reliability Reserves" for additional information.
- (s) Primarily includes approximately \$62 million and \$181 million at December 31, 2022 and 2021, respectively, for Alabama Power and \$119 million and \$5 million at December 31, 2022 and 2021, respectively, for Georgia Power as a result of each company exceeding its allowed retail return range. Georgia Power's balances also include immaterial amounts related to refunds for transmission service customers. See "Alabama Power – Rate RSE" and "Georgia Power – Rate Plans" herein for additional information.
- (t) Comprised of numerous immaterial components with remaining amortization periods generally not exceeding 11 years for Alabama Power, 10 years for Georgia Power, four years for Mississippi Power, and 20 years for Southern Company Gas at December 31, 2022.
- (u) Generally not earning a return as they are excluded from rate base or are offset in rate base by a corresponding asset or liability.

Alabama Power

Alabama Power's revenues from regulated retail operations are collected through various rate mechanisms subject to the oversight of the Alabama PSC. Alabama Power currently recovers its costs from the regulated retail business primarily through Rate RSE, Rate CNP, Rate ECR, and Rate NDR. In addition, the Alabama PSC issues accounting orders to address current events impacting Alabama Power.

Certificates of Convenience and Necessity

In 2020, the Alabama PSC issued its order regarding Alabama Power's 2019 petition for a CCN, which authorized Alabama Power to (i) construct an approximately 720-MW combined cycle facility at Alabama Power's Plant Barry (Plant Barry Unit 8) that is expected to be placed in service in November 2023, (ii) complete the acquisition of the Central Alabama Generating Station, which occurred in August 2020, (iii) purchase approximately 240 MWs of combined cycle generation under a long-term PPA, which began in September 2020, and (iv) pursue up to approximately 200 MWs of cost-effective demand-side management and distributed energy resource programs. Alabama Power's petition for a CCN was predicated on the results of Alabama Power's 2019 IRP provided to the Alabama PSC, which identified an approximately 2,400-MW resource need for Alabama Power, driven by the need for additional winter reserve capacity. See Note 15 under "Alabama Power" for additional information on the acquisition of the Central Alabama Generating Station.

The Alabama PSC authorized the recovery of actual costs for the construction of Plant Barry Unit 8 up to 5% above the estimated in-service cost of \$652 million. In so doing, it recognized the potential for developments that could cause the project costs to exceed the capped amount, in which case Alabama Power would provide documentation to the Alabama PSC to explain and justify potential recovery of the additional costs. At December 31, 2022, project expenditures associated with Plant Barry Unit 8 totaled approximately \$518 million, of which \$513 million and \$5 million was included in CWIP and property, plant, and equipment in service, respectively. The ultimate outcome of this matter cannot be determined at this time.

Alabama Power expects to recover costs associated with Plant Barry Unit 8 pursuant to its Rate CNP New Plant. The recovery of costs associated with laws, regulations, and other such mandates directed at the utility industry are expected to be recovered through Rate CNP Compliance. Alabama Power expects to recover the capacity-related costs associated with the PPAs through its Rate CNP PPA. In addition, fuel and energy-related costs are expected to be recovered through Rate ECR. Any remaining costs associated with Plant Barry Unit 8 are expected to be recovered through Rate RSE.

Through May 2023, Alabama Power expects to recover substantially all costs associated with the Central Alabama Generating Station through Rate RSE, offset by revenues from a previous power sales agreement. Beginning in July 2022, fuel costs associated with Central Alabama Generating Station are being recovered through Rate ECR.

On July 12, 2022, the Alabama PSC approved a CCN authorizing Alabama Power to complete the acquisition of the Calhoun Generating Station, a 743-MW winter peak, simple-cycle, combustion turbine generation facility in Calhoun County, Alabama. The acquisition was approved by the FERC on March 25, 2022. The transaction closed on September 30, 2022 and, on October 3, 2022, Alabama Power filed Rate CNP New Plant with the Alabama PSC to recover the related costs, as described further under "Rate CNP New Plant" herein. Alabama Power is recovering the remaining costs associated with the Calhoun Generating Station through its existing rate structure, primarily Rate CNP Compliance, Rate ECR, and Rate RSE.

Notes to Financial Statements

Renewable Generation Certificate

Alabama Power is authorized by the Alabama PSC to procure up to 500 MWs of renewable capacity and energy by September 16, 2027 and to market the related energy and environmental attributes to customers and other third parties. Through December 31, 2022, Alabama Power has procured solar capacity totaling approximately 330 MWs.

Rate RSE

The Alabama PSC has adopted Rate RSE that provides for periodic annual adjustments based upon Alabama Power's projected weighted common equity return (WCER) compared to an allowable range. Rate RSE adjustments are based on forward-looking information for the applicable upcoming calendar year. Rate RSE adjustments for any two-year period, when averaged together, cannot exceed 4.0% and any annual adjustment is limited to 5.0%. When the projected WCER is under the allowed range, there is an adjusting point of 5.98% and eligibility for a performance-based adder of seven basis points, or 0.07%, to the WCER adjusting point if Alabama Power (i) has an "A" credit rating equivalent with at least one of the recognized rating agencies or (ii) is in the top one-third of a designated customer value benchmark survey.

Alabama Power continues to reduce growth in total debt by increasing equity, with corresponding reductions in debt issuances, thereby de-leveraging its capital structure. Alabama Power's goal is to achieve an equity ratio of approximately 55% by the end of 2025. At December 31, 2022 and 2021, Alabama Power's equity ratio was approximately 52.2% and 51.6%, respectively.

Generally, during a year without a Rate RSE upward adjustment, if Alabama Power's actual WCER is between 6.15% and 7.65%, customers will receive 25% of the amount between 6.15% and 6.65%, 40% of the amount between 6.65% and 7.15%, and 75% of the amount between 7.15% and 7.65%. Customers will receive all amounts in excess of an actual WCER of 7.65%. During a year with a Rate RSE upward adjustment, if Alabama Power's actual WCER exceeds 6.15%, customers receive 50% of the amount between 6.15% and 6.90% and all amounts in excess of an actual WCER of 6.90%. Alabama Power's ability to retain a portion of the revenue that causes the actual WCER for a given year to exceed the allowed range positions Alabama Power to address the growing pressure on its credit quality, without increasing retail rates under Rate RSE in the near term. There is no provision for additional customer billings should the actual retail return fall below the WCER range.

Retail rates under Rate RSE did not change for 2020 or 2022 and increased by 4.09%, or approximately \$228 million annually, effective with the billing month of January 2021.

At December 31, 2020, 2021, and 2022 Alabama Power's WCER exceeded 6.15%, resulting in Alabama Power establishing a current regulatory liability of \$50 million, \$181 million, and \$62 million, respectively, for Rate RSE refunds. The 2020 refund was issued to customers through bill credits in April 2021. In accordance with an Alabama PSC order issued on February 1, 2022, Alabama Power applied \$126 million of the 2021 refund to reduce the Rate ECR under recovered balance and the remaining \$55 million was refunded to customers through bill credits in July 2022. See "Rate ECR" herein for additional information. On February 7, 2023, the Alabama PSC directed Alabama Power to issue the 2022 refund to customers through bill credits in August 2023.

On December 1, 2022, Alabama Power made its required annual Rate RSE submission to the Alabama PSC of projected data for calendar year 2023. Projected earnings were within the specified range; therefore, retail rates under Rate RSE remain unchanged for 2023.

Excess Accumulated Deferred Income Tax Accounting Order

On December 6, 2022, the Alabama PSC directed Alabama Power to accelerate the amortization of a regulatory liability associated with excess federal accumulated deferred income taxes, which is being returned to customers through bill credits of up to approximately \$318 million in 2023 to offset the impact of the rate increase discussed under "Rate CNP Depreciation" herein. The Alabama PSC will determine the treatment of any remaining excess federal accumulated deferred income taxes at a future date. The ultimate outcome of this matter cannot be determined at this time.

Rate CNP New Plant

Rate CNP New Plant allows for recovery of Alabama Power's retail costs associated with newly developed or acquired certificated generating facilities placed into retail service. No adjustments to Rate CNP New Plant occurred during the period January 2020 through October 2022. On October 3, 2022, Alabama Power filed Rate CNP New Plant with the Alabama PSC to recover costs related to the acquisition of the Calhoun Generating Station. The filing reflected an increase in annual revenues of \$34 million, or 0.6%, effective with November 2022 billings. See "Certificates of Convenience and Necessity" herein for additional information.

Notes to Financial Statements

Rate CNP PPA

Rate CNP PPA allows for the recovery of Alabama Power's retail costs associated with certificated PPAs. Revenues for Rate CNP PPA, as recorded on the financial statements, are adjusted for differences in actual recoverable costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will have no significant effect on Southern Company's or Alabama Power's revenues or net income but will affect annual cash flow. No adjustments to Rate CNP PPA occurred during the period 2020 through 2022 and no adjustment is expected for 2023. At December 31, 2022, Alabama Power had an under recovered Rate CNP PPA balance of \$120 million, of which \$18 million is included in other regulatory assets, current and \$102 million is included in other regulatory assets, deferred on the balance sheet. At December 31, 2021, Alabama Power had an under recovered Rate CNP PPA balance of \$84 million included in other regulatory assets, deferred on the balance sheet.

Rate CNP Compliance

Rate CNP Compliance allows for the recovery of Alabama Power's retail costs associated with laws, regulations, and other such mandates directed at the utility industry involving the environment, security, reliability, safety, sustainability, or similar considerations impacting Alabama Power's facilities or operations. Rate CNP Compliance is based on forward-looking information and provides for the recovery of these costs pursuant to factors that are calculated and submitted to the Alabama PSC by December 1 with rates effective for the following calendar year. Compliance costs to be recovered include operations and maintenance expenses, depreciation, and a return on certain invested capital. Revenues for Rate CNP Compliance, as recorded on the financial statements, are adjusted for differences in actual recoverable costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will have no significant effect on Southern Company's or Alabama Power's revenues or net income, but will affect annual cash flow. Changes in Rate CNP Compliance-related operations and maintenance expenses and depreciation generally will have no effect on net income.

In November 2020, November 2021, and December 2022, Alabama Power submitted calculations associated with its cost of complying with governmental mandates for the following calendar year, as provided under Rate CNP Compliance. Both the 2020 and 2021 filings reflected a projected under recovered retail revenue requirement of approximately \$59 million. In December 2020 and 2021, the Alabama PSC issued consent orders that Alabama Power leave the 2020 Rate CNP Compliance factors in effect for 2021 and 2022, respectively, with any prior year under collected amount deemed recovered before any current year amounts are recovered, and any remaining under recovery reflected in the 2022 filing. The 2022 filing reflected a \$255 million, or 3.7%, annual increase effective with January 2023 billings, primarily due to updated depreciation rates.

At December 31, 2022 and 2021, Alabama Power had an under recovered Rate CNP Compliance balance of \$47 million and \$16 million, respectively, included in other regulatory assets, current and other regulatory assets, deferred, respectively, on the balance sheet.

Rate CNP Depreciation

On December 6, 2022, the Alabama PSC approved Rate CNP Depreciation, which allows Alabama Power to recover changes in depreciation resulting from updates to certain depreciation rates, excluding any depreciation recovered through Rate CNP New Plant, Rate CNP Compliance, or costs associated with the capitalization of asset retirement costs. Rate CNP Depreciation will result in an annual revenue increase of approximately \$318 million, or 4.6%, effective with January 2023 billings. See "Excess Accumulated Deferred Income Tax Accounting Order" herein for information related to 2023 customer bill credits approved by the Alabama PSC.

Rate ECR

Rate ECR recovers Alabama Power's retail energy costs based on an estimate of future energy costs and the current over or under recovered balance. Revenues recognized under Rate ECR and recorded on the financial statements are adjusted for the difference in actual recoverable fuel costs and amounts billed in current regulated rates. The difference in the recoverable fuel costs and amounts billed gives rise to the over or under recovered amounts recorded as regulatory assets or liabilities. Alabama Power, along with the Alabama PSC, continually monitors the over or under recovered cost balance to determine whether an adjustment to billing rates is required. Changes in the Rate ECR factor have no significant effect on Southern Company's or Alabama Power's net income but will impact the related operating cash flows. The Alabama PSC may approve billing rates under Rate ECR of up to 5.910 cents per KWH.

In 2020, Alabama Power reduced its over-collected fuel balance by \$94 million in accordance with an Alabama PSC order and returned that amount to customers in the form of bill credits.

Also in 2020, the Alabama PSC approved a decrease to Rate ECR from 2.160 cents per KWH to 1.960 cents per KWH, equal to 1.84%, or approximately \$103 million annually, that became effective with January 2021 billings and remained in effect through July 2022 billings.

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The Alabama PSC approved adjustments to Rate ECR from 1.960 cents per KWH to 2.557 cents per KWH, or approximately \$310 million annually, effective with August 2022 billings and from 2.557 cents per KWH to 3.510 cents per KWH, or approximately \$500 million annually, effective with December 2022 billings. The rate will adjust to 5.910 cents per KWH in January 2025 absent a further order from the Alabama PSC.

In accordance with an Alabama PSC order issued on February 1, 2022, Alabama Power applied \$126 million of its 2021 Rate RSE refund to reduce the Rate ECR under recovered balance. See "Rate RSE" herein for additional information. At December 31, 2022, Alabama Power's under recovered fuel costs totaled \$622 million, of which \$102 million is included in other regulatory assets, current and \$520 million is included in other regulatory assets, deferred on the balance sheet. At December 31, 2021, Alabama Power's under recovered fuel costs totaled \$126 million and is included in other regulatory assets, deferred on the balance sheet. These classifications are based on estimates, which include such factors as weather, generation availability, energy demand, and the price of energy. A change in any of these factors could have a significant impact on the timing of any recovery or return of fuel costs.

Software Accounting Order

The Alabama PSC authorizes Alabama Power to establish a regulatory asset for operations and maintenance costs associated with software implementation projects. The regulatory asset is amortized ratably over the life of the related software. At December 31, 2022 and 2021, the regulatory asset balance totaled \$46 million and \$35 million, respectively, and is included in other regulatory assets, deferred on the balance sheet.

Plant Greene County

Alabama Power jointly owns Plant Greene County with an affiliate, Mississippi Power. See Note 5 under "Joint Ownership Agreements" for additional information. In September 2021, the Mississippi PSC issued an order confirming the conclusion of its review of Mississippi Power's 2021 IRP with no deficiencies identified. Mississippi Power's 2021 IRP included a schedule to retire Mississippi Power's 40% ownership interest in Plant Greene County Units 1 and 2 in December 2025 and 2026, respectively, consistent with each unit's remaining useful life. The Plant Greene County unit retirements identified by Mississippi Power require the completion of transmission and system reliability improvements, as well as agreement by Alabama Power. Alabama Power will continue to monitor the status of the transmission and system reliability improvements. Currently, Alabama Power plans to retire Plant Greene County Units 1 and 2 at the dates indicated. The ultimate outcome of this matter cannot be determined at this time.

Rate NDR

Based on an order from the Alabama PSC, Alabama Power maintains a reserve for operations and maintenance expenses to cover the cost of damages from major storms to its transmission and distribution facilities. The order approves a separate monthly Rate NDR charge to customers consisting of two components. The first component is intended to establish and maintain a reserve balance for future storms and is an on-going part of customer billing. When the reserve balance falls below \$50 million, a reserve establishment charge will be activated (and the on-going reserve maintenance charge concurrently suspended) until the reserve balance reaches \$75 million.

The second component of the Rate NDR charge is intended to allow recovery of any existing deferred storm-related operations and maintenance costs and any future reserve deficits over a 48-month period (24-month period prior to modifications approved by the Alabama PSC on July 12, 2022). The Alabama PSC order gives Alabama Power authority to record a deficit balance in the NDR when costs of storm damage exceed any established reserve balance. The maximum total Rate NDR charge was limited to \$10.00 per month per non-residential customer account and \$5.00 per month per residential customer account through July 12, 2022. Subsequently, modifications approved by the Alabama PSC replaced the maximum total Rate NDR charge with a maximum charge to recover a deficit of \$5 per month per non-residential customer account and \$2.50 per month per residential customer account. Alabama Power has the authority, based on an order from the Alabama PSC, to accrue certain additional amounts as circumstances warrant, which can be used to offset storm charges. Alabama Power made additional accruals of \$65 million and \$100 million in 2021 and 2020, respectively.

Alabama Power collected approximately \$14 million, \$6 million, and \$5 million in 2022, 2021, and 2020, respectively, under Rate NDR. Beginning with August 2022 billings, the reserve establishment charge was suspended and the reserve maintenance charge was activated as a result of the NDR balance exceeding \$75 million. Alabama Power expects to collect approximately \$12 million annually under Rate NDR unless the NDR balance falls below \$50 million. At December 31, 2022 and 2021, the NDR balance was \$97 million and \$103 million, respectively, and is included in other regulatory liabilities, deferred on the balance sheets.

As revenue from the Rate NDR charge is recognized, an equal amount of operations and maintenance expenses related to the NDR will also be recognized. As a result, the Rate NDR charge will not have an effect on net income but will impact operating cash flows.

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Reliability Reserve Accounting Order

On July 12, 2022, the Alabama PSC approved an accounting order authorizing Alabama Power to create a reliability reserve separate from the NDR and transition the previous Rate NDR authority related to reliability expenditures to the reliability reserve. Alabama Power may make accruals to the reliability reserve if the NDR balance exceeds \$35 million. At December 31, 2022, Alabama Power accrued \$166 million to the reserve, which is included in other regulatory liabilities, deferred on the balance sheet.

Environmental Accounting Order

Based on an order from the Alabama PSC (Environmental Accounting Order), Alabama Power is authorized to establish a regulatory asset to record the unrecovered investment costs, including the unrecovered plant asset balance and the unrecovered costs associated with site removal and closure associated with future unit retirements caused by environmental regulations. The regulatory asset is amortized and recovered over the affected unit's remaining useful life, as established prior to the decision regarding early retirement, through Rate CNP Compliance.

With the completion of the Calhoun Generating Station acquisition, Alabama Power expects to retire Plant Barry Unit 5 in late 2023 or early 2024, subject to certain operating conditions. In September 2022, Alabama Power reclassified approximately \$600 million for Plant Barry Unit 5 from plant in service, net of depreciation to other utility plant, net and will continue to depreciate the asset according to the original depreciation rates. At retirement, Alabama Power will reclassify the remaining net investment costs of the unit to a regulatory asset to be recovered over the unit's remaining useful life, as established prior to the decision to retire, through Rate CNP Compliance. See "Certificates of Convenience and Necessity" herein for additional information.

On December 5, 2022, in conjunction with Alabama Power's compliance plan for the EPA's final steam electric ELG reconsideration rule, Plant Barry Unit 4 ceased using coal and began operating solely on natural gas. As a result, approximately \$42 million of plant in service, net of depreciation was reclassified to a regulatory asset to be recovered through Rate CNP Compliance through 2034, the unit's remaining useful life.

Georgia Power

Georgia Power's revenues from regulated retail operations are collected through various rate mechanisms subject to the oversight of the Georgia PSC. Georgia Power recovers its costs from the regulated retail business through traditional base tariffs, Demand-Side Management (DSM) tariffs, the ECCR tariff, and Municipal Franchise Fee (MFF) tariffs. These tariffs were set under the 2019 ARP for the years 2020 through 2022 and under the 2022 ARP for the years 2023 through 2025 as described herein. In addition, financing costs on certified construction costs of Plant Vogtle Units 3 and 4 are being collected through the NCCR tariff and fuel costs are collected through a fuel cost recovery tariff, both under separate regulatory proceedings.

See "Plant Vogtle Unit 3 and Common Facilities Rate Proceeding" herein for information regarding the approved recovery through retail base rates of certain costs related to Plant Vogtle Unit 3 and the common facilities shared between Plant Vogtle Units 3 and 4 (Common Facilities) that will become effective the month after Unit 3 is placed in service. As costs are included in retail base rates, the related financing costs will no longer be recovered through the NCCR tariff. See "Nuclear Construction" herein for additional information on Plant Vogtle Units 3 and 4.

Rate Plans

2022 ARP

On December 20, 2022, the Georgia PSC voted to approve the 2022 ARP, under which Georgia Power increased its rates on January 1, 2023 and will increase rates annually for 2024 and 2025 as detailed below, with the incremental revenue requirements related to DSM tariffs and CCR AROs subject to updates through annual compliance filings to be made at least 90 days prior to the effective date. Georgia Power will recover estimated adjustments through its existing tariffs as follows:

Tariff	2023	2024	2025
	<i>(in millions)</i>		
Traditional base	\$ 194	\$ 275	\$ 315
ECCR	(21)	66	81
DSM	37	27	(2)
MFF	6	9	9
Total	\$ 216	\$ 377	\$ 403

Notes to Financial Statements

In the 2022 ARP, the Georgia PSC approved recovery through the ECCR tariff of estimated CCR ARO compliance costs for 2023, 2024, and 2025 over four-year periods beginning January 1 of each respective year, with recovery of construction contingency beginning in the year following actual expenditures, resulting in an estimated \$20 million reduction in the related amortization expense for 2023. The estimated compliance costs expected to be incurred in 2023, 2024, and 2025 are \$320 million, \$410 million, and \$510 million, respectively. The CCR ARO costs are expected to be revised for actual expenditures and updated estimates through future annual compliance filings. See "Integrated Resource Plans" herein for additional information.

Further, under the 2022 ARP, Georgia Power's retail ROE is set at 10.50% and its equity ratio is set at 56%. Earnings will be evaluated against a retail ROE range of 9.50% to 11.90%. Any retail earnings above 11.90% will be shared, with 40% being applied to reduce regulatory assets, 40% directly refunded to customers, and the remaining 20% retained by Georgia Power. There will be no recovery of any earnings shortfall below 9.50% on an actual basis. However, if at any time during the term of the 2022 ARP, Georgia Power projects that its retail earnings will be below 9.50% for any calendar year, it may petition the Georgia PSC for implementation of the Interim Cost Recovery (ICR) tariff to adjust Georgia Power's retail rates to achieve a 9.50% ROE. The Georgia PSC would have 90 days to rule on Georgia Power's request. The ICR tariff would expire at the earlier of January 1, 2026 or the end of the calendar year in which the ICR tariff becomes effective. In lieu of requesting implementation of an ICR tariff, or if the Georgia PSC chooses not to implement the ICR tariff, Georgia Power may file a full rate case.

Except as provided above, Georgia Power will not file for a general base rate increase while the 2022 ARP is in effect. Georgia Power is required to file a general base rate case by July 1, 2025, in response to which the Georgia PSC would be expected to determine whether the 2022 ARP should be continued, modified, or discontinued.

2019 ARP

The Georgia PSC approved the following tariff adjustments under the 2019 ARP effective January 1, 2021 and 2022, respectively:

Tariff	2021	2022
	<i>(in millions)</i>	
Traditional base	\$ 120	\$ 192
ECCR	2	(12)
DSM	(15)	(25)
MFF	4	2
Total	\$ 111	\$ 157

In the 2019 ARP, the Georgia PSC approved recovery through the ECCR tariff of the estimated under recovered balance of CCR ARO compliance costs. Under the 2019 ARP, the under recovered balance at December 31, 2019 and compliance costs for 2020 were recovered over the three-year period ended December 31, 2022. Recovery of estimated compliance costs for 2021 and 2022 are being recovered over four-year periods beginning January 1 of each respective year, as authorized under the 2019 ARP and modified under the 2022 ARP, with recovery of construction contingency beginning in the year following actual expenditure. The CCR ARO costs recovered through the ECCR tariff are revised for actual expenditures and updated estimates through annual compliance filings, which resulted in an approximate \$90 million decrease and \$10 million increase effective January 1, 2021 and 2022, respectively, in the related cost recovery. See "Integrated Resource Plans" herein for additional information.

Georgia Power's retail ROE under the 2019 ARP was set at 10.50% and earnings were evaluated against a retail ROE range of 9.50% to 12.00%. Any retail earnings above 12.00% were shared, with 40% applied to reduce regulatory assets, 40% directly refunded to customers, and the remaining 20% retained by Georgia Power. In 2020, Georgia Power's retail ROE was within the allowed retail ROE range. In 2021, Georgia Power's retail ROE exceeded 12.00%, and Georgia Power reduced regulatory assets by approximately \$5 million and accrued approximately \$5 million which was refunded to customers in 2022. In 2022, Georgia Power's retail ROE exceeded 12.00%, and Georgia Power reduced regulatory assets by approximately \$119 million and accrued approximately \$119 million, which is expected to be refunded to customers through bill credits later in the first quarter 2023, prior to review and approval by the Georgia PSC, in accordance with the 2022 ARP.

Plant Vogtle Unit 3 and Common Facilities Rate Proceeding

In accordance with a Georgia PSC order approved in November 2021, Georgia Power will include in rate base an allocation of \$2.1 billion to Unit 3 and Common Facilities from the \$3.6 billion of Plant Vogtle Units 3 and 4 previously deemed prudent by the Georgia PSC and will recover the related depreciation expense through retail base rates effective the month after Unit 3 is placed in service. Financing costs on the remaining portion of the total Unit 3 and the Common Facilities construction costs will continue to be recovered through the NCCR tariff or deferred. Georgia Power will defer as a regulatory asset the remaining depreciation expense (approximately \$40 million annually) until Unit 4 costs are placed in retail base rates. In addition, the stipulated agreement clarified that following the prudency review, the remaining amount to be placed in retail base rates will be net of the proceeds from the Guarantee Settlement Agreement and will not be used to offset imprudent costs, if any.

Notes to Financial Statements

The related increase in annual retail base rates of approximately \$302 million also includes recovery of all projected operations and maintenance expenses for Unit 3 and the Common Facilities and other related costs of operation, partially offset by the related production tax credits, and will become effective the month after Unit 3 is placed in service. As approved by the Georgia PSC, the increase in annual retail base rates will be adjusted based on the actual in-service date of Plant Vogtle Unit 3.

See "Nuclear Construction" herein for additional information on Plant Vogtle Units 3 and 4.

Integrated Resource Plans

In 2021, as authorized in its 2019 IRP, Georgia Power requested and received certification from the Georgia PSC for 970 MWs of utility-scale PPAs for solar generation resources. In response to supply chain challenges in the solar industry, the Georgia PSC approved a request by Georgia Power to extend the required commercial operation dates for the PPAs from 2023 to 2024.

On July 21, 2022, the Georgia PSC approved Georgia Power's triennial IRP (2022 IRP), as modified by a stipulated agreement among Georgia Power, the staff of the Georgia PSC, and certain intervenors and as further modified by the Georgia PSC. In the 2022 IRP decision, the Georgia PSC approved the following:

- Decertification and retirement of Plant Wansley Units 1 and 2 (926 MWs based on 53.5% ownership), which occurred on August 31, 2022, and reclassification to regulatory asset accounts of the remaining net book values and any remaining unusable materials and supplies inventories upon retirement. The regulatory asset accounts for the remaining net book values of the units (\$292 million and \$270 million for Unit 1 and Unit 2, respectively, at December 31, 2022) were amortized at a rate equal to the unit depreciation rates authorized in the 2019 ARP through December 31, 2022. Under the 2022 ARP, the Georgia PSC approved recovery of the remaining regulatory asset balances for the net book values of the units through 2030 and deferred a decision on the timing of recovery of the regulatory asset account for the unusable materials and supplies inventories (\$13 million at December 31, 2022) to a future base rate case.
- Decertification and retirement of Plant Scherer Unit 3 (614 MWs based on 75% ownership) by December 31, 2028 and reclassification to regulatory asset accounts of the remaining net book value (approximately \$601 million at December 31, 2022). Under the 2022 ARP, \$43 million annually of the related depreciation is being deferred to a regulatory asset, which will be amortized over six years beginning in 2029. Any remaining unusable materials and supplies inventory will be reclassified to regulatory asset accounts upon retirement, with the timing of recovery to be determined in a future base rate case.
- Decertification and retirement of Plant Gaston Units 1 through 4 (500 MWs based on 50% ownership through SEGCO) by December 31, 2028. See Note 7 under "SEGCO" for additional information.
- Georgia Power's environmental compliance strategy, including approval of Georgia Power's plans to address CCR at its ash ponds and landfills. Recovery of the related costs incurred beyond 2025 is expected to be determined in future base rate cases. The Georgia PSC's approval of the 2022 IRP included a change in the method of closure for one ash pond. See "Rate Plans" herein and Note 6 for additional information.
- Installation of environmental controls at Plants Bowen and Scherer for compliance with rules related to effluent limitations guidelines.
- Initiation of a license renewal application with the NRC for Plant Hatch.
- Investments related to the continued hydro operations of Plants Sinclair and Burton.
- Provisional authorization for development of a 265-MW battery energy storage facility with expected commercial operation in 2026.
- Issuance of requests for proposals (RFP) for 2,300 MWs of renewable resources, an additional 500 MWs of energy storage, and up to 140 MWs of biomass generation.
- Related transmission projects necessary to support the generation facilities plan.
- Certification of six PPAs (including five affiliate PPAs with Southern Power that are subject to approval by the FERC) with capacities of 1,567 MWs beginning in 2024, 380 MWs beginning in 2025, and 228 MWs beginning in 2028, procured through RFPs authorized in the 2019 IRP. See Note 9 for additional information.

The Georgia PSC deferred a decision on the requested decertification and retirement of Plant Bowen Units 1 and 2 (1,400 MWs) to the 2025 IRP. Under the 2022 ARP, \$40 million annually of the related depreciation is being deferred to a regulatory asset, which will be amortized over four years beginning in 2031. The Georgia PSC rejected Georgia Power's request to certify approximately 88 MWs of wholesale capacity to be placed in retail rate base between January 1, 2024 and January 1, 2025. Georgia Power may offer such capacity in the wholesale market or to the retail jurisdiction in a future regulatory proceeding.

On August 26, 2022, Restore Chattooga Gorge Coalition (RCG) filed a petition in the Superior Court of Fulton County, Georgia against Georgia Power and the Georgia PSC. The petition challenges Georgia Power's plan to expend \$115 million to modernize Plant Tugaloo, as approved in the 2019 IRP, and seeks judicial review of the Georgia PSC's order in the 2022 IRP proceeding with respect to the denial of RCG's challenge to the modernization plan. On November 7, 2022, Georgia Power and the Georgia PSC both filed motions to dismiss the RCG petition.

The ultimate outcome of these matters cannot be determined at this time.

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Deferral of Incremental COVID-19 Costs

During 2020, in response to the COVID-19 pandemic, the Georgia PSC approved orders directing Georgia Power to defer as a regulatory asset the incremental bad debt resulting from the approved suspension of customer disconnections during certain periods in 2020. The Georgia PSC approved orders establishing a methodology for identifying incremental bad debt and allowing the deferral of other incremental costs associated with the COVID-19 pandemic. At December 31, 2022 and 2021, the incremental costs deferred totaled approximately \$25 million and \$21 million, respectively. In the 2022 ARP, the Georgia PSC approved a three-year recovery period ending December 31, 2025.

Fuel Cost Recovery

Georgia Power has established fuel cost recovery rates approved by the Georgia PSC. In 2020, the Georgia PSC approved a stipulation agreement among Georgia Power, the staff of the Georgia PSC, and certain intervenors to lower total fuel billings by approximately \$740 million over a two-year period effective June 1, 2020. In addition, Georgia Power further lowered fuel billings by approximately \$44 million under an interim fuel rider effective June 1, 2020 through September 30, 2020. During the second half of 2021, the price of natural gas rose significantly and resulted in an under recovered fuel balance exceeding \$200 million. Therefore, in November 2021, the Georgia PSC voted to approve Georgia Power's interim fuel rider, which increased fuel rates by 15%, or approximately \$252 million annually, effective January 1, 2022. During 2022, Georgia Power's under recovered fuel balance continued to increase significantly due to higher fuel and purchased power costs. Georgia Power is scheduled to file its next fuel case no later than February 28, 2023.

Georgia Power's under recovered fuel balance totaled \$2.1 billion and \$0.4 billion at December 31, 2022 and 2021, respectively, and is included in deferred under recovered fuel clause revenues on Southern Company's and Georgia Power's balance sheets.

Georgia Power's fuel cost recovery mechanism includes costs associated with a natural gas hedging program, as revised and approved by the Georgia PSC, allowing the use of an array of derivative instruments within a 36-month time horizon.

Fuel cost recovery revenues as recorded on the financial statements are adjusted for differences in actual recoverable fuel costs and amounts billed in current regulated rates. Accordingly, changes in the billing factor will not have a significant effect on Southern Company's or Georgia Power's revenues or net income but will affect operating cash flows.

Storm Damage Recovery

Georgia Power defers and recovers certain costs related to damages from major storms as mandated by the Georgia PSC. During 2020 through 2022, Georgia Power recovered \$213 million annually under the 2019 ARP. Effective January 1, 2023, Georgia Power is recovering \$31 million annually under the 2022 ARP. At December 31, 2022, Georgia Power's storm damage reserve balance was \$83 million and is included in other regulatory liabilities, deferred on Southern Company's balance sheets and other deferred credits and liabilities on Georgia Power's balance sheets. At December 31, 2021, Georgia Power's regulatory asset balance related to storm damage was \$48 million and is included in other regulatory assets, current on Southern Company's and Georgia Power's balance sheets. The rate of storm damage cost recovery is expected to be adjusted in future regulatory proceedings as necessary. As a result of this regulatory treatment, costs related to storms are not expected to have a material impact on Southern Company's or Georgia Power's financial statements. See Note 1 under "Storm Damage and Reliability Reserves" for additional information.

Nuclear Construction

In 2009, the Georgia PSC certified construction of Plant Vogtle Units 3 and 4, in which Georgia Power currently holds a 45.7% ownership interest. In 2012, the NRC issued the related combined construction and operating licenses, which allowed full construction of the two AP1000 nuclear units (with electric generating capacity of approximately 1,100 MWs each) and related facilities to begin. Until March 2017, construction on Plant Vogtle Units 3 and 4 continued under the Vogtle 3 and 4 Agreement, which was a substantially fixed price agreement.

In connection with the EPC Contractor's bankruptcy filing in March 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, entered into several transitional arrangements to allow construction to continue. In July 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, entered into the Vogtle Services Agreement, whereby Westinghouse provides facility design and engineering services, procurement and technical support, and staff augmentation on a time and materials cost basis. The Vogtle Services Agreement provides that it will continue until the start-up and testing of Plant Vogtle Units 3 and 4 are complete and electricity is generated and sold from both units. The Vogtle Services Agreement is terminable by the Vogtle Owners upon 30 days' written notice.

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In October 2017, Georgia Power, acting for itself and as agent for the other Vogtle Owners, executed the Bechtel Agreement, under which Bechtel is reimbursed for actual costs plus a base fee and an at-risk fee, subject to adjustment based on Bechtel's performance against cost and schedule targets. Each Vogtle Owner is severally (not jointly) liable for its proportionate share, based on its ownership interest, of all amounts owed to Bechtel under the Bechtel Agreement. The Vogtle Owners may terminate the Bechtel Agreement at any time for their convenience, provided that the Vogtle Owners will be required to pay amounts related to work performed prior to the termination (including the applicable portion of the base fee), certain termination-related costs, and, at certain stages of the work, the applicable portion of the at-risk fee. Bechtel may terminate the Bechtel Agreement under certain circumstances, including certain Vogtle Owner suspensions of work, certain breaches of the Bechtel Agreement by the Vogtle Owners, Vogtle Owner insolvency, and certain other events.

See Note 8 under "Long-term Debt – DOE Loan Guarantee Borrowings" for information on the Amended and Restated Loan Guarantee Agreement, including applicable covenants, events of default, and mandatory prepayment events.

Cost and Schedule

Georgia Power's approximate proportionate share of the remaining estimated capital cost to complete Plant Vogtle Units 3 and 4, including contingency, through the end of the second quarter 2023 and the first quarter 2024, respectively, is as follows:

	<i>(in millions)</i>
Base project capital cost forecast ^{(a)(b)}	\$10,533
Construction contingency estimate	60
Total project capital cost forecast ^{(a)(b)}	10,593
Net investment at December 31, 2022 ^(b)	(9,521)
Remaining estimate to complete	\$ 1,072

(a) Includes approximately \$610 million of costs that are not shared with the other Vogtle Owners, including \$33 million of construction monitoring costs approved for recovery by the Georgia PSC in its nineteenth VCM order, and approximately \$407 million of incremental costs under the cost-sharing and tender provisions of the joint ownership agreements described below. Excludes financing costs expected to be capitalized through AFUDC of approximately \$421 million, of which \$304 million had been accrued through December 31, 2022.

(b) Net of \$1.7 billion received from Toshiba under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds.

Georgia Power estimates that its financing costs for construction of Plant Vogtle Units 3 and 4 will total approximately \$3.5 billion, of which \$3.2 billion had been incurred through December 31, 2022.

As part of its ongoing processes, Southern Nuclear continues to evaluate cost and schedule forecasts on a regular basis to incorporate current information available, particularly in the areas of start-up testing and related test results, engineering support, commodity installation, system turnovers, and workforce statistics. Southern Nuclear establishes aggressive target values for monthly construction production and system turnover activities, which are reflected in the site work plans.

Since March 2020, the number of active COVID-19 cases at the site has fluctuated consistent with the surrounding area and impacted productivity levels and pace of activity completion, with the site experiencing peaks in the number of active cases in January 2021, August 2021, and January 2022. Georgia Power estimates the productivity impacts of the COVID-19 pandemic have consumed approximately three to four months of schedule margin previously embedded in the site work plans. As of December 31, 2022, Georgia Power's proportionate share of the estimated incremental cost associated with COVID-19 mitigation actions and impacts on construction productivity is estimated to be between \$160 million and \$200 million and is included in the total project capital cost forecast. Future COVID-19 variants could further disrupt or delay construction and testing activities.

On July 29, 2022, Southern Nuclear announced that all Unit 3 ITAACs had been submitted to the NRC. On August 3, 2022, the NRC published its 103(g) finding that the acceptance criteria in the combined license for Unit 3 had been met, which allowed nuclear fuel to be loaded and start-up testing to begin. Fuel load for Unit 3 was completed on October 17, 2022. In early 2023, during the start-up and pre-operational testing for Unit 3, Southern Nuclear identified and is remediating certain equipment and component issues. As a result, Unit 3 is projected to be placed in service during May or June 2023. After considering the timeframe and duration of hot functional and other testing and recent experience with Unit 3 start-up and pre-operational testing, Unit 4 is now projected to be placed in service during late fourth quarter 2023 or the first quarter 2024.

During 2022, established construction contingency and additional costs totaling \$307 million were assigned to the base capital cost forecast for costs primarily associated with schedule extensions, construction productivity, the pace of system turnovers, additional craft and support resources, procurement for Units 3 and 4, and the equipment and component issues identified during Unit 3 start-up and pre-operational testing. During 2022, Georgia Power also increased its total project capital cost forecast by \$125 million to replenish construction contingency and \$9 million for construction monitoring costs, which were approved for recovery by the Georgia PSC in its nineteenth VCM order.

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After considering the significant level of uncertainty that exists regarding the future recoverability of these costs since the ultimate outcome of these matters is subject to the outcome of future assessments by management, as well as Georgia PSC decisions in future regulatory proceedings, Georgia Power recorded pre-tax charges to income in the second quarter 2022, the third quarter 2022, and the fourth quarter 2022 of \$36 million (\$27 million after tax), \$32 million (\$24 million after tax), and \$148 million (\$110 million after tax), respectively, for the increases in the total project capital cost forecast. Georgia Power may request the Georgia PSC to evaluate those expenditures for rate recovery during the prudence review following the Unit 4 fuel load pursuant to the twenty-fourth VCM stipulation described below.

The projected schedule for Unit 3 primarily depends on the progression of final component and pre-operational testing and start-up, which may be impacted by further equipment, component, and/or other operational challenges. The projected schedule for Unit 4 primarily depends on potential impacts arising from Unit 4 testing activities overlapping with Unit 3 start-up and commissioning; maintaining overall construction productivity and production levels, particularly in subcontractor scopes of work; and maintaining appropriate levels of craft laborers. As Unit 4 completes construction and transitions further into testing, ongoing and potential future challenges include the timeframe and duration of hot functional and other testing; the pace and quality of remaining commodities installation; completion of documentation to support ITAAC submittals; the pace of remaining work package closures and system turnovers; and the availability of craft, supervisory, and technical support resources. Ongoing or future challenges for both units also include management of contractors and vendors; subcontractor performance; and/or related cost escalation. New challenges also may continue to arise, as Unit 3 completes start-up and commissioning and Unit 4 moves further into testing and start-up, which may result in required engineering changes or remediation related to plant systems, structures, or components (some of which are based on new technology that only within the last few years began initial operation in the global nuclear industry at this scale). These challenges may result in further schedule delays and/or cost increases.

There have been technical and procedural challenges to the construction and licensing of Plant Vogtle Units 3 and 4 at the federal and state level and additional challenges may arise. Processes are in place that are designed to ensure compliance with the requirements specified in the Westinghouse Design Control Document and the combined construction and operating licenses, including inspections by Southern Nuclear and the NRC that occur throughout construction. With the receipt of the NRC's 103(g) finding, Unit 3 is now subject to the NRC's operating reactor oversight process and must meet applicable technical and operational requirements contained in its operating license. Various design and other licensing-based compliance matters, including the timely submittal by Southern Nuclear of the ITAAC documentation and the related reviews and approvals by the NRC necessary to support NRC authorization to load fuel for Unit 4, may arise, which may result in additional license amendment requests or require other resolution. If any license amendment requests or other licensing-based compliance issues, including inspections and ITAACs for Unit 4, are not resolved in a timely manner, there may be delays in the project schedule that could result in increased costs.

The ultimate outcome of these matters cannot be determined at this time. However, any extension of the in-service date beyond the second quarter 2023 for Unit 3 or the first quarter 2024 for Unit 4, including the joint owner cost sharing and tender impacts described below, is estimated to result in additional base capital costs for Georgia Power of up to \$15 million per month for Unit 3 and \$35 million per month for Unit 4, as well as the related AFUDC and any additional related construction, support resources, or testing costs. While Georgia Power is not precluded from seeking retail recovery of any future capital cost forecast increase other than the amounts related to the cost-sharing and tender provisions of the joint ownership agreements described below, management will ultimately determine whether or not to seek recovery. Any further changes to the capital cost forecast that are not expected to be recoverable through regulated rates will be required to be charged to income and such charges could be material.

Joint Owner Contracts

In November 2017, the Vogtle Owners entered into an amendment to their joint ownership agreements for Plant Vogtle Units 3 and 4 to provide for, among other conditions, additional Vogtle Owner approval requirements. Effective in August 2018, the Vogtle Owners further amended the joint ownership agreements to clarify and provide procedures for certain provisions of the joint ownership agreements related to adverse events that require the vote of the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 to continue construction (as amended, and together with the November 2017 amendment, the Vogtle Joint Ownership Agreements). The Vogtle Joint Ownership Agreements also confirm that the Vogtle Owners' sole recourse against Georgia Power or Southern Nuclear for any action or inaction in connection with their performance as agent for the Vogtle Owners is limited to removal of Georgia Power and/or Southern Nuclear as agent, except in cases of willful misconduct.

Amendments to the Vogtle Joint Ownership Agreements

In connection with a September 2018 vote by the Vogtle Owners to continue construction, Georgia Power entered into (i) a binding term sheet (Vogtle Owner Term Sheet) with the other Vogtle Owners and MEAG Power's wholly-owned subsidiaries MEAG Power SPVJ, LLC (MEAG SPVJ), MEAG Power SPVM, LLC (MEAG SPVM), and MEAG Power SPVP, LLC (MEAG SPVP) to take certain actions which partially mitigate potential financial exposure for the other Vogtle Owners, including additional amendments to the Vogtle Joint Ownership

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Agreements and the purchase of PTCs from the other Vogtle Owners at pre-established prices, and (ii) a term sheet (MEAG Term Sheet) with MEAG Power and MEAG SPVJ to provide up to \$300 million of funding with respect to MEAG SPVJ's ownership interest in Plant Vogtle Units 3 and 4 under certain circumstances. In January 2019, Georgia Power, MEAG Power, and MEAG SPVJ entered into an agreement to implement the provisions of the MEAG Term Sheet. In February 2019, Georgia Power, the other Vogtle Owners, and MEAG Power's wholly-owned subsidiaries MEAG SPVJ, MEAG SPVM, and MEAG SPVP entered into certain amendments to the Vogtle Joint Ownership Agreements to implement the provisions of the Vogtle Owner Term Sheet (Global Amendments).

Pursuant to the Global Amendments: (i) each Vogtle Owner must pay its proportionate share of qualifying construction costs for Plant Vogtle Units 3 and 4 based on its ownership percentage up to the estimated cost at completion (EAC) for Plant Vogtle Units 3 and 4, of which Georgia Power's share is \$8.4 billion (VCM 19 Forecast Amount), plus \$800 million; (ii) Georgia Power will be responsible for 55.7% of actual qualifying construction costs between \$800 million and \$1.6 billion over the VCM 19 Forecast Amount (resulting in \$80 million of potential additional costs to Georgia Power), with the remaining Vogtle Owners responsible for 44.3% of such costs pro rata in accordance with their respective ownership interests; and (iii) Georgia Power will be responsible for 65.7% of qualifying construction costs between \$1.6 billion and \$2.1 billion over the VCM 19 Forecast Amount (resulting in a further \$100 million of potential additional costs to Georgia Power), with the remaining Vogtle Owners responsible for 34.3% of such costs pro rata in accordance with their respective ownership interests. The Global Amendments provide that if the EAC is revised and exceeds the VCM 19 Forecast Amount by more than \$2.1 billion, each of the other Vogtle Owners will have a one-time option at the time the project budget cost forecast is so revised to tender a portion of its ownership interest to Georgia Power in exchange for Georgia Power's agreement to pay 100% of such Vogtle Owner's remaining share of total construction costs in excess of the VCM 19 Forecast Amount plus \$2.1 billion.

For purposes of the foregoing provisions, qualifying construction costs will not include costs (i) resulting from force majeure events, including epidemics and quarantines, governmental actions or inactions (or significant delays associated with issuance of such actions) that affect the licensing, completion, start-up, operations, or financing of Plant Vogtle Units 3 and 4, administrative proceedings or litigation regarding ITAAC or other regulatory challenges to commencement of operation of Plant Vogtle Units 3 and 4, and changes in laws or regulations governing Plant Vogtle Units 3 and 4, (ii) legal fees and legal expenses incurred due to litigation with contractors or subcontractors that are not subsidiaries or affiliates of Southern Company, and (iii) additional costs caused by requests from the Vogtle Owners other than Georgia Power, except for the exercise of a right to vote granted under the Vogtle Joint Ownership Agreements, that increase costs by \$100,000 or more.

In addition, pursuant to the Global Amendments, the holders of at least 90% of the ownership interests in Plant Vogtle Units 3 and 4 must vote to continue construction if certain adverse events (Project Adverse Events) occur, including, among other events: (i) the bankruptcy of Toshiba; (ii) the termination or rejection in bankruptcy of certain agreements, including the Vogtle Services Agreement, the Bechtel Agreement, or the agency agreement with Southern Nuclear; (iii) Georgia Power's public announcement of its intention not to submit for rate recovery any portion of its investment in Plant Vogtle Units 3 and 4 or the Georgia PSC determines that any of Georgia Power's costs relating to the construction of Plant Vogtle Units 3 and 4 will not be recovered in retail rates, excluding any additional amounts paid by Georgia Power on behalf of the other Vogtle Owners pursuant to the Global Amendments described above and the first 6% of costs during any six-month VCM reporting period that are disallowed by the Georgia PSC for recovery, or for which Georgia Power elects not to seek cost recovery, through retail rates; and (iv) an incremental extension of one year or more from the seventeenth VCM report estimated in-service dates of November 2021 and November 2022 for Units 3 and 4, respectively. The schedule extension announced in February 2022 triggered the requirement for a vote to continue construction. Effective February 25, 2022, all of the Vogtle Owners had voted to continue construction.

Georgia Power and the other Vogtle Owners do not agree on either the starting dollar amount for the determination of cost increases subject to the cost-sharing and tender provisions of the Global Amendments or the extent to which COVID-19-related costs impact those provisions. The other Vogtle Owners notified Georgia Power that they believe the project capital cost forecast approved by the Vogtle Owners on February 14, 2022 triggered the tender provisions. On June 17, 2022 and July 26, 2022, OPC and Dalton, respectively, notified Georgia Power of their purported exercises of their tender options. Georgia Power did not accept these purported tender exercises.

On June 18, 2022, OPC and MEAG Power each filed a separate lawsuit against Georgia Power in the Superior Court of Fulton County, Georgia seeking a declaratory judgment that the starting dollar amount is \$17.1 billion and that the cost-sharing and tender provisions have been triggered. The lawsuits also assert other claims, including breach of contract allegations, and seek, among other remedies, damages and injunctive relief requiring Georgia Power to track and allocate construction costs consistent with MEAG Power's and OPC's interpretations of the Global Amendments. On July 25, 2022 and July 28, 2022, Georgia Power filed its answers in the lawsuits filed by MEAG Power and OPC, respectively, and included counterclaims seeking a declaratory judgment that the starting dollar amount is \$18.38 billion and that costs related to force majeure events are excluded prior to calculating the cost-sharing and tender provisions and when calculating Georgia Power's related financial obligations. On September 26, 2022, Dalton filed complaints in each of these lawsuits. On September 29, 2022, Georgia Power and MEAG Power reached an agreement to resolve their dispute regarding the proper interpretation

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of the cost-sharing and tender provisions of the Global Amendments. Under the terms of the agreement, among other items, (i) MEAG Power will not exercise its tender option and will retain its full ownership interest in Plant Vogtle Units 3 and 4; (ii) Georgia Power will reimburse a portion of MEAG Power's costs of construction for Plant Vogtle Units 3 and 4 as such costs are incurred and with no further adjustment for force majeure costs, which payments will total approximately \$92 million based on the current project capital cost forecast; and (iii) Georgia Power will reimburse 20% of MEAG Power's costs of construction with respect to any amounts over the current project capital cost forecast, with no further adjustment for force majeure costs. In addition, MEAG Power agreed to vote to continue construction upon occurrence of a Project Adverse Event unless the commercial operation date of either of Plant Vogtle Unit 3 or Unit 4 is not projected to occur by December 31, 2025. On October 4, 2022, MEAG Power and Georgia Power filed a notice of settlement and voluntary dismissal of their pending litigation, including Georgia Power's counterclaim, and, on October 6, 2022, Dalton dismissed its related complaint.

Georgia Power recorded pre-tax charges (credits) to income in the fourth quarter 2021, the second quarter 2022, the third quarter 2022, and the fourth quarter 2022 of approximately \$440 million (\$328 million after tax), \$16 million (\$12 million after tax), \$(102) million (\$76 million after tax), and \$53 million (\$40 million after tax), respectively, associated with the cost-sharing and tender provisions of the Global Amendments, including the settlement with MEAG Power. A total of \$407 million associated with these provisions is included in the total project capital cost forecast and will not be recovered from retail customers. The settlement with MEAG Power does not resolve the separate pending litigation with OPC, including Dalton's associated complaint, described above. Georgia Power may be required to record further pre-tax charges to income of up to approximately \$345 million associated with the cost-sharing and tender provisions of the Global Amendments for OPC and Dalton based on the current project capital cost forecast.

Georgia Power's ownership interest in Plant Vogtle Units 3 and 4 continues to be 45.7%. Georgia Power believes the increases in the total project capital cost forecast through December 31, 2022 will trigger the tender provisions, but Georgia Power disagrees with OPC and Dalton on the tender provisions trigger date. Valid notices of tender from OPC and Dalton would require Georgia Power to pay 100% of their respective remaining shares of the costs necessary to complete Plant Vogtle Units 3 and 4. Georgia Power's incremental ownership interest will be calculated and conveyed to Georgia Power after Plant Vogtle Units 3 and 4 are placed in service.

The ultimate outcome of these matters cannot be determined at this time.

Regulatory Matters

In 2009, the Georgia PSC voted to certify construction of Plant Vogtle Units 3 and 4 with a certified capital cost of \$4.418 billion. In addition, in 2009 the Georgia PSC approved inclusion of the Plant Vogtle Units 3 and 4 related CWIP accounts in rate base, and the State of Georgia enacted the Georgia Nuclear Energy Financing Act, which allows Georgia Power to recover financing costs for Plant Vogtle Units 3 and 4. Financing costs are recovered on all applicable certified costs through annual adjustments to the NCCR tariff up to the certified capital cost of \$4.418 billion. At December 31, 2022, Georgia Power had recovered approximately \$2.9 billion of financing costs. Financing costs related to capital costs above \$4.418 billion are being recognized through AFUDC and are expected to be recovered through retail rates over the life of Plant Vogtle Units 3 and 4; however, Georgia Power is not recording AFUDC related to any capital costs in excess of the total deemed reasonable by the Georgia PSC (currently \$7.3 billion) and not requested for rate recovery. On December 20, 2022, the Georgia PSC approved Georgia Power's filing to increase the NCCR tariff by \$36 million annually, effective January 1, 2023.

Georgia Power is required to file semi-annual VCM reports with the Georgia PSC by February 28 and August 31 of each year. In 2013, in connection with the eighth VCM report, the Georgia PSC approved a stipulation between Georgia Power and the staff of the Georgia PSC to waive the requirement to amend the Plant Vogtle Units 3 and 4 certificate in accordance with the 2009 certification order until the completion of Plant Vogtle Unit 3, or earlier if deemed appropriate by the Georgia PSC and Georgia Power.

In 2016, the Georgia PSC voted to approve a settlement agreement (Vogtle Cost Settlement Agreement) resolving certain prudence matters in connection with the fifteenth VCM report. In December 2017, the Georgia PSC voted to approve (and issued its related order on January 11, 2018) Georgia Power's seventeenth VCM report and modified the Vogtle Cost Settlement Agreement. The Vogtle Cost Settlement Agreement, as modified by the January 11, 2018 order, resolved the following regulatory matters related to Plant Vogtle Units 3 and 4: (i) none of the \$3.3 billion of costs incurred through December 31, 2015 and reflected in the fourteenth VCM report should be disallowed from rate base on the basis of imprudence; (ii) the Contractor Settlement Agreement was reasonable and prudent and none of the \$0.3 billion paid pursuant to the Contractor Settlement Agreement should be disallowed from rate base on the basis of imprudence; (iii) (a) capital costs incurred up to \$5.68 billion would be presumed to be reasonable and prudent with the burden of proof on any party challenging such costs, (b) Georgia Power would have the burden to show that any capital costs above \$5.68 billion were prudent, and (c) a revised capital cost forecast of \$7.3 billion (after reflecting the impact of payments received under the Guarantee Settlement Agreement and related customer refunds) was found reasonable; (iv) construction of Plant Vogtle Units 3 and 4 should be completed, with Southern Nuclear serving as project manager and Bechtel as primary contractor; (v) approved and deemed reasonable Georgia Power's revised schedule placing Plant Vogtle Units 3 and 4 in service in November 2021 and November 2022, respectively; (vi) confirmed that the revised cost forecast does not represent a cost cap and that a prudence proceeding on cost recovery will occur

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following Unit 4 fuel load, consistent with applicable Georgia law; (vii) reduced the ROE used to calculate the NCCR tariff (a) from 10.95% (the ROE rate setting point authorized by the Georgia PSC at that time) to 10.00% effective January 1, 2016, (b) from 10.00% to 8.30%, effective January 1, 2020, and (c) from 8.30% to 5.30%, effective January 1, 2021 (provided that the ROE in no case will be less than Georgia Power's average cost of long-term debt); (viii) reduced the ROE used for AFUDC equity for Plant Vogtle Units 3 and 4 from 10.00% to Georgia Power's average cost of long-term debt, effective January 1, 2018; and (ix) agreed that effective the first month after Unit 3 reaches commercial operation, retail base rates would be adjusted to include the costs related to Unit 3 and common facilities deemed prudent in the Vogtle Cost Settlement Agreement (see "Plant Vogtle Unit 3 and Common Facilities Rate Proceeding" herein for additional information). The January 11, 2018 order also stated that if Plant Vogtle Units 3 and 4 are not commercially operational by June 1, 2021 and June 1, 2022, respectively, the ROE used to calculate the NCCR tariff will be further reduced by 10 basis points each month (but not lower than Georgia Power's average cost of long-term debt) until the respective Unit is commercially operational. The ROE reductions negatively impacted earnings by approximately \$300 million, \$270 million, and \$150 million in 2022, 2021, and 2020, respectively, and are estimated to have negative earnings impacts of approximately \$270 million in 2023 and \$60 million in 2024. In its January 11, 2018 order, the Georgia PSC also stated if other conditions change and assumptions upon which Georgia Power's seventeenth VCM report are based do not materialize, the Georgia PSC reserved the right to reconsider the decision to continue construction.

In the August 2021 order approving the twenty-fourth VCM report, the Georgia PSC approved a stipulation addressing the following matters: (i) beginning with its twenty-fifth VCM report, Georgia Power will continue to report to the Georgia PSC all costs incurred during the period for review and will request for approval costs up to the \$7.3 billion determined to be reasonable in the Georgia PSC's seventeenth VCM order and (ii) Georgia Power will not seek rate recovery of the \$0.7 billion increase to the base capital cost forecast included in the nineteenth VCM report and charged to income by Georgia Power in the second quarter 2018. In addition, the stipulation confirms Georgia Power may request verification and approval of costs above \$7.3 billion for inclusion in rate base at a later time, but no earlier than the prudence review contemplated by the seventeenth VCM order described previously.

The Georgia PSC has approved 25 VCM reports covering periods through June 30, 2021. These reports reflect total construction capital costs incurred of \$7.9 billion (net of \$1.7 billion of payments received under the Guarantee Settlement Agreement and approximately \$188 million in related customer refunds), of which the Georgia PSC has verified and approved \$7.3 billion as described above. The Georgia PSC also has reviewed two additional VCM reports, which reflected \$1.1 billion of additional construction capital costs incurred through June 30, 2022. Georgia Power expects to file its twenty-eighth VCM report with the Georgia PSC on February 16, 2023, which will reflect the revised capital cost forecast described above and \$461 million of construction capital costs incurred from July 1, 2022 through December 31, 2022.

The ultimate outcome of these matters cannot be determined at this time.

Mississippi Power

Mississippi Power's rates and charges for service to retail customers are subject to the regulatory oversight of the Mississippi PSC. Mississippi Power's rates are a combination of base rates and several separate cost recovery clauses for specific categories of costs. These separate cost recovery clauses address such items as fuel and purchased power, ad valorem taxes, property damage, and the costs of compliance with environmental laws and regulations. Costs not addressed through one of the specific cost recovery clauses are expected to be recovered through Mississippi Power's base rates.

2019 Base Rate Case

In 2020, the Mississippi PSC approved a settlement agreement between Mississippi Power and the Mississippi Public Utilities Staff related to Mississippi Power's base rate case filed in 2019 (Mississippi Power Rate Case Settlement Agreement).

Under the terms of the Mississippi Power Rate Case Settlement Agreement, annual retail rates decreased approximately \$16.7 million, or 1.85%, effective for the first billing cycle of April 2020, based on a test year period of January 1, 2020 through December 31, 2020, a 53% average equity ratio, an allowed maximum actual equity ratio of 55% by the end of 2020, and a 7.57% return on investment.

Additionally, the Mississippi Power Rate Case Settlement Agreement: (i) established common amortization periods of four years for regulatory assets and three years for regulatory liabilities included in the approved revenue requirement, including those related to unprotected deferred income taxes; (ii) established new depreciation rates reflecting an annual increase in depreciation of approximately \$10 million; and (iii) excluded certain compensation costs totaling approximately \$3.9 million. It also eliminated separate rates for costs associated with Plant Ratcliffe and energy efficiency initiatives and includes such costs in the PEP, ECO Plan, and ad valorem tax adjustment factor, as applicable.

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Performance Evaluation Plan

Mississippi Power's retail base rates generally are set under the PEP, a rate plan approved by the Mississippi PSC. In recognition that Mississippi Power's long-term financial success is dependent upon how well it satisfies its customers' needs, PEP includes performance indicators that directly tie customer service indicators to Mississippi Power's allowed ROE. PEP measures Mississippi Power's performance on a 10-point scale as a weighted average of results in three areas: average customer price, as compared to prices of other regional utilities (weighted at 40%); service reliability, measured in percentage of time customers had electric service (40%); and customer satisfaction, measured in a survey of residential customers (20%). Typically, two PEP filings are made for each calendar year: the PEP projected filing in March of the current year and the PEP lookback filing in March of the subsequent year. The annual PEP projected filings utilize a historic test year adjusted for "known and measurable" changes and discounted cash flow and regression formulas to determine base ROE. The PEP lookback filing reflects the actual revenue requirement.

Pursuant to a Mississippi PSC-approved settlement agreement between Mississippi Power and the MPUS, Mississippi Power was not required to make any PEP filings for the regulatory year 2020.

In June 2021 and June 2022, the Mississippi PSC approved Mississippi Power's annual retail PEP filings, resulting in annual increases in revenues of approximately \$16 million, or 1.8%, and \$18 million, or 1.9%, respectively, effective with the first billing cycle of April 2021 and April 2022, respectively.

Integrated Resource Plan

In 2020, the Mississippi PSC issued an order requiring Mississippi Power to incorporate into its 2021 IRP a schedule of early or anticipated retirement of 950 MWs of fossil-steam generation by year-end 2027 to reduce Mississippi Power's excess reserve margin. The order stated that Mississippi Power will be allowed to defer any retirement-related costs as regulatory assets for future recovery.

In September 2021, the Mississippi PSC concluded its review of Mississippi Power's 2021 IRP. The 2021 IRP included a schedule to retire Plant Watson Unit 4 (268 MWs) and Mississippi Power's 40% ownership interest in Plant Greene County Units 1 and 2 (103 MWs each) in December 2023, 2025, and 2026, respectively, consistent with each unit's remaining useful life in the most recent approved depreciation studies. In addition, the schedule reflects the early retirement of Mississippi Power's 50% undivided ownership interest in Plant Daniel Units 1 and 2 (502 MWs) by the end of 2027. The Plant Greene County unit retirements require the completion by Alabama Power of transmission and system reliability improvements, as well as agreement by Alabama Power. Mississippi Power is scheduled to file its next IRP in April 2024.

The remaining net book value of Plant Daniel Units 1 and 2 was approximately \$499 million at December 31, 2022 and Mississippi Power is continuing to depreciate these units using the current approved rates through the end of 2027. Mississippi Power expects to reclassify the net book value remaining at retirement, which is expected to total approximately \$397 million, to a regulatory asset to be amortized over a period to be determined by the Mississippi PSC in future proceedings, consistent with the 2020 order. The Plant Watson and Greene County units are expected to be fully depreciated upon retirement. The ultimate outcome of these matters cannot be determined at this time. See Note 3 under "Other Matters – Mississippi Power" for additional information on Plant Daniel Units 1 and 2.

Environmental Compliance Overview Plan

In accordance with a 2011 accounting order from the Mississippi PSC, Mississippi Power has the authority to defer in a regulatory asset for future recovery all plant retirement- or partial retirement-related costs resulting from environmental regulations.

In June 2021, the Mississippi PSC approved Mississippi Power's ECO Plan filing for 2021, resulting in a decrease in revenues of approximately \$9 million annually effective with the first billing cycle of July 2021.

On April 5, 2022, the Mississippi PSC approved Mississippi Power's ECO Plan filing for 2022, resulting in an increase in revenues of approximately \$1 million annually. The rate increase became effective with the first billing cycle of May 2022.

On February 14, 2023, Mississippi Power submitted its ECO Plan filing for 2023 indicating no change in retail rates. The ultimate outcome of this matter cannot be determined at this time.

Fuel Cost Recovery

Mississippi Power annually establishes, and is required to file for an adjustment to, the retail fuel cost recovery factor that is approved by the Mississippi PSC. The Mississippi PSC approved a decrease of \$24 million effective in February 2020 and increases of \$2 million and \$43 million effective in February 2021 and 2022, respectively. On November 15, 2022, Mississippi Power filed a request with the Mississippi PSC to increase retail fuel revenues by \$25 million annually effective with the first billing cycle of February 2023 and an additional \$25 million annually effective with the first billing cycle of June 2023. On January 10, 2023, the Mississippi PSC voted to defer approval of the filing. Mississippi Power is allowed to maintain current billing rates and continue accruing its weighted-average cost of capital on any under or over fuel recovery balance. The ultimate outcome of this matter cannot be determined at this time.

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At December 31, 2022 and 2021, under recovered retail fuel costs totaled approximately \$1 million and \$4 million, respectively, and were included in other customer accounts receivable on Southern Company's and Mississippi Power's balance sheets.

Mississippi Power has wholesale MRA and Market Based (MB) fuel cost recovery factors. Effective with the first billing cycles for January 2021, 2022, and 2023, annual revenues under the wholesale MRA fuel rate decreased \$5 million, increased \$11 million, and increased \$22 million, respectively. The wholesale MB fuel rate did not change materially in any period presented. At December 31, 2022 and 2021, under recovered wholesale fuel costs were \$6 million and \$1 million, respectively.

Mississippi Power's operating revenues are adjusted for differences in actual recoverable fuel cost and amounts billed in accordance with the currently approved cost recovery rate. Accordingly, changes in the billing factor should have no significant effect on Mississippi Power's revenues or net income but will affect operating cash flows.

Ad Valorem Tax Adjustment

Mississippi Power annually establishes an ad valorem tax adjustment factor that is approved by the Mississippi PSC. Effective with the first billing cycle of April 2020, May 2021, and July 2022, the Mississippi PSC approved increases in annual revenues collected through the ad valorem tax adjustment factor of \$10 million, \$28 million, and \$5 million, respectively. The 2021 increase included approximately \$19 million of ad valorem taxes previously recovered through PEP in accordance with the Mississippi Power Rate Case Settlement Agreement.

System Restoration Rider

Mississippi Power carries insurance for the cost of certain types of damage to generation plants and general property. However, Mississippi Power is self-insured for the cost of storm, fire, and other uninsured casualty damage to its property, including transmission and distribution facilities. As permitted by the Mississippi PSC and the FERC, Mississippi Power accrues for the cost of such damage through an annual expense accrual which is credited to regulatory liability accounts for the retail and wholesale jurisdictions. The cost of repairing actual damage resulting from such events that individually exceed \$50,000 is charged to the reserve. Every year, the Mississippi PSC, the MPUS, and Mississippi Power agree on SRR revenue level(s).

Mississippi Power's net retail SRR accrual, which includes carrying costs and amortization of related excess deferred income tax benefits, was \$6.9 million in 2022, \$(1.8) million in 2021, and \$0.8 million in 2020. At December 31, 2022 and 2021, the retail property damage reserve balance was \$37 million and \$31 million, respectively.

In December 2021, the Mississippi PSC approved Mississippi Power's annual SRR filing, which requested an increase in retail revenues of approximately \$9 million annually effective with the first billing cycle of March 2022. The Mississippi PSC also established \$8 million as the minimum annual accrual amount until a target property damage reserve balance of \$75 million is met. In the event the expected annual charges exceed the annual accrual or the target balance has been met, Mississippi Power and the Mississippi PSC will determine the appropriate change to the annual accrual. Additionally, if PEP earnings are above a certain threshold, Mississippi Power has the ability to apply any required PEP refund as an additional accrual to the property damage reserve in lieu of customer refunds.

On February 14, 2023, Mississippi Power submitted its annual SRR filing to the Mississippi PSC, which indicated no change in retail rates. The filing includes a request to increase the minimum annual accrual from \$8 million to \$12 million. The ultimate outcome of this matter cannot be determined at this time.

Reliability Reserve Accounting Order

On December 6, 2022, the Mississippi PSC approved an accounting order authorizing Mississippi Power to create a reliability reserve for the purpose of deferring generation, transmission, and distribution reliability-related expenditures for use in a future year. Mississippi Power may make accruals to the reliability reserve each year after meeting with the MPUS and Mississippi PSC staff. Mississippi Power will provide annually, through its capital plan, energy delivery plan, or PEP filing, any amounts to be charged against the reliability reserve during the current year. At December 31, 2022, Mississippi Power accrued \$25 million to the reliability reserve.

Software Accounting Order

On December 6, 2022, the Mississippi PSC approved an accounting order authorizing Mississippi Power to establish a regulatory asset for certain operations and maintenance expenditures related to major technology projects. The recovery period for this regulatory asset will be determined in Mississippi Power's annual PEP filing process. Mississippi Power will begin deferring these costs in 2023.

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Municipal and Rural Associations Tariff

Mississippi Power provides wholesale electric service to Cooperative Energy, East Mississippi Electric Power Association, and the City of Collins, all located in southeastern Mississippi, under a long-term, cost-based, FERC-regulated MRA tariff.

In 2017, Mississippi Power and Cooperative Energy executed, and the FERC accepted, a Shared Service Agreement (SSA), as part of the MRA tariff, under which Mississippi Power and Cooperative Energy share in providing electricity to the Cooperative Energy delivery points under the tariff. On August 26, 2022, the FERC accepted an amended SSA between Mississippi Power and Cooperative Energy, effective July 1, 2022, under which Cooperative Energy will continue to decrease its use of Mississippi Power's generation services under the MRA tariff up to 2.5% annually through 2035. At December 31, 2022, Mississippi Power is serving approximately 400 MWs of Cooperative Energy's annual demand. Beginning in 2036, Cooperative Energy will provide 100% of its electricity requirements at the MRA delivery points under the tariff. Neither party has the option to cancel the amended SSA.

On July 15, 2022, Mississippi Power filed a request with the FERC for a \$23 million increase in annual wholesale base revenues under the MRA tariff. Cooperative Energy filed a complaint with the FERC challenging the new rates. On September 13, 2022, the FERC issued an order that accepted Mississippi Power's request effective September 14, 2022, subject to refund, and established hearing and settlement judge procedures. The ultimate outcome of this matter cannot be determined at this time.

Southern Company Gas

Utility Regulation and Rate Design

The natural gas distribution utilities are subject to regulation and oversight by their respective state regulatory agencies. Rates charged to customers vary according to customer class (residential, commercial, or industrial) and rate jurisdiction. These agencies approve rates designed to provide the opportunity to generate revenues to recover all prudently-incurred costs, including a return on rate base sufficient to pay interest on debt and provide a reasonable ROE.

As a result of operating in a deregulated environment, Atlanta Gas Light earns revenue by charging rates to its customers based primarily on monthly fixed charges that are set by the Georgia PSC and adjusted periodically. The Marketers add these fixed charges when billing customers. This mechanism, called a straight-fixed-variable rate design, minimizes the seasonality of Atlanta Gas Light's revenues since the monthly fixed charge is not volumetric or directly weather dependent.

With the exception of Atlanta Gas Light, the earnings of the natural gas distribution utilities can be affected by customer consumption patterns that are largely a function of weather conditions and price levels for natural gas. Specifically, customer demand substantially increases during the Heating Season when natural gas is used for heating purposes. Southern Company Gas has various mechanisms, such as weather and revenue normalization mechanisms and weather derivative instruments, that limit exposure to weather changes within typical ranges in these utilities' respective service territories.

In addition to natural gas cost recovery mechanisms, other cost recovery mechanisms and regulatory riders, which vary by utility, allow recovery of certain costs, such as those related to infrastructure replacement programs as well as environmental remediation, energy efficiency plans, and bad debts. In traditional rate designs, utilities recover a significant portion of the fixed customer service and pipeline infrastructure costs based on assumed natural gas volumes used by customers. With the exception of Chattanooga Gas, the natural gas distribution utilities have decoupled regulatory mechanisms that Southern Company Gas believes encourage conservation by separating the recoverable amount of these fixed costs from the amounts of natural gas used by customers. See "Rate Proceedings" herein for additional information. Also see "Infrastructure Replacement Programs and Capital Projects" herein for additional information regarding infrastructure replacement programs at certain of the natural gas distribution utilities.

The following table provides regulatory information for Southern Company Gas' natural gas distribution utilities:

	Nicor Gas	Atlanta Gas Light	Virginia Natural Gas	Chattanooga Gas
Authorized ROE at December 31, 2022	9.75 %	10.25 %	9.50 %	9.80 %
Weather normalization mechanisms ^(a)			✓	✓
Decoupled, including straight-fixed-variable rates ^(b)	✓	✓	✓	
Regulatory infrastructure program rates ^(c)	✓	✓	✓	✓
Bad debt rider ^(d)	✓		✓	✓
Energy efficiency plan ^(e)	✓		✓	
Annual base rate adjustment mechanism ^(f)		✓		✓
Year of last base rate case decision	2021	2019	2021	2018

(a) Designed to help stabilize operating results by allowing recovery of costs in the event of unseasonal weather, but are not direct offsets to the potential impacts on earnings of weather and customer consumption.

Notes to Financial Statements

- (b) Allows for recovery of fixed customer service costs separately from assumed natural gas volumes used by customers and provides a benchmark level of revenue for recovery.
- (c) Programs that update or expand distribution systems and LNG facilities. Atlanta Gas Light's infrastructure program, System Reinforcement Rider, is effective for 2022 through 2024. See "Rate Proceedings – Atlanta Gas Light" herein for additional information. Chattanooga Gas' pipeline replacement program costs are recovered through its annual base rate review mechanism.
- (d) The recovery (refund) of bad debt expense over (under) an established benchmark expense. The gas portion of bad debt expense is recovered through purchased gas adjustment mechanisms. Nicor Gas also has a rider to recover the non-gas portion of bad debt expense.
- (e) Recovery of costs associated with plans to achieve specified energy savings goals.
- (f) Regulatory mechanism allowing annual adjustments to base rates up or down based on authorized ROE and/or ROE range.

Infrastructure Replacement Programs and Capital Projects

In addition to capital expenditures recovered through base rates by each of the natural gas distribution utilities, Nicor Gas and Virginia Natural Gas have separate rate riders that provide timely recovery of capital expenditures for specific infrastructure replacement programs. Total capital expenditures incurred during 2022 for gas distribution operations were \$1.5 billion.

The following table and discussions provide updates on the infrastructure replacement programs and capital projects at the natural gas distribution utilities at December 31, 2022. These programs are risk-based and designed to update and replace cast iron, bare steel, and mid-vintage plastic materials or expand Southern Company Gas' distribution systems to improve reliability and meet operational flexibility and growth.

Utility	Program	Recovery	Expenditures in 2022	Expenditures Since Project Inception	Pipe Installed Since Project Inception	Scope of Program	Program Duration	Last Year of Program
			<i>(in millions)</i>		<i>(miles)</i>	<i>(miles)</i>	<i>(years)</i>	
Nicor Gas	Investing in Illinois ^(*)	Rider	\$437	\$2,945	1,297	1,854	9	2023
Virginia Natural Gas	Steps to Advance Virginia's Energy (SAVE)	Rider	69	411	525	695	13	2024
Atlanta Gas Light	System Reinforcement Rider	Rider	76	76	10	N/A	3	2024
Chattanooga Gas	Pipeline Replacement Program	Rate Base	5	7	5	73	7	2027
Total			\$587	\$3,439	1,837	2,622		

(*) Includes replacement of pipes, compressors, and transmission mains along with other improvements such as new meters. Scope of program miles is an estimate and subject to change. Recovery of program costs is described under "Nicor Gas" herein.

Nicor Gas

Illinois legislation allows Nicor Gas to provide more widespread safety and reliability enhancements to its distribution system through 2023 and stipulates that rate increases to customers as a result of any infrastructure investments shall not exceed a cumulative annual average of 4.0% or, in any given year, 5.5% of base rate revenues. In 2014, the Illinois Commission approved the nine-year regulatory infrastructure program, Investing in Illinois, subject to annual review. In accordance with orders from the Illinois Commission, Nicor Gas recovers program costs incurred through a separate rider and base rates. The Illinois Commission's approval of Nicor Gas' rate case in November 2021 included recovery of program costs through December 31, 2021. See "Rate Proceedings – Nicor Gas" herein for additional information. Nicor Gas' capital expenditures related to qualifying projects under the Investing in Illinois program totaled \$408 million and \$389 million in 2021 and 2020, respectively.

Virginia Natural Gas

The Steps to Advance Virginia's Energy (SAVE) program, an accelerated infrastructure replacement program, allows Virginia Natural Gas to continue replacing aging pipeline infrastructure through 2024. The program includes authorized annual investments of \$50 million in 2020, \$60 million in 2021, and \$70 million in each year from 2022 through 2024, with a total potential variance of up to \$5 million allowed for the program, for a maximum total investment over the six-year term (2019 through 2024) of \$365 million. Virginia Natural Gas' capital expenditures under the SAVE program totaled \$51 million and \$49 million in 2021 and 2020, respectively.

Notes to Financial Statements

The SAVE program is subject to annual review by the Virginia Commission. In accordance with the base rate case approved by the Virginia Commission in 2021, Virginia Natural Gas is recovering program costs incurred prior to November 1, 2020 through base rates. Program costs incurred subsequent to November 1, 2020 are currently being recovered through a separate rider and are subject to future base rate case proceedings.

Atlanta Gas Light

In 2019, the Georgia PSC approved the continuation of GRAM as part of Atlanta Gas Light's 2019 rate case order. Various infrastructure programs previously authorized by the Georgia PSC, including the Integrated Vintage Plastic Replacement Program to replace aging plastic pipe and the Integrated System Reinforcement Program to upgrade Atlanta Gas Light's distribution system and LNG facilities in Georgia, continue under GRAM and the recovery of and return on the infrastructure program investments are included in annual base rate adjustments. The amounts to be recovered through rates related to allowed, but not incurred, costs have been recognized in an unrecognized ratemaking amount that is not reflected on the balance sheets. These allowed costs are primarily the equity return on the capital investment under the infrastructure programs in place prior to GRAM and are being recovered through GRAM and base rates until the earlier of the full recovery of the related under recovered amount or December 31, 2025. The under recovered balance at December 31, 2022 was \$68 million, including \$35 million of unrecognized equity return. The Georgia PSC reviews Atlanta Gas Light's performance annually under GRAM. See "Unrecognized Ratemaking Amounts" herein for additional information.

Atlanta Gas Light and the staff of the Georgia PSC previously agreed to a variation of the Integrated Customer Growth Program to extend pipeline facilities to serve customers in areas without pipeline access and create new economic development opportunities in Georgia. A separate tariff provides recovery of up to \$15 million annually for strategic economic development projects approved by the Georgia PSC.

See "Rate Proceedings – Atlanta Gas Light" herein for additional information regarding the Georgia PSC's November 2021 approval of Atlanta Gas Light's GRAM filing and Integrated Capacity and Delivery Plan. The Georgia PSC also approved a new System Reinforcement Rider for authorized large pressure improvement and system reliability projects, which is expected to recover related capital investments totaling \$286 million for the years 2022 through 2024, of which \$76 million was incurred in 2022.

Chattanooga Gas

In June 2021, the Tennessee Public Utilities Commission approved Chattanooga Gas' pipeline replacement program to replace approximately 73 miles of distribution main over a seven-year period. The estimated total cost of the program is \$118 million, which will be recovered through Chattanooga Gas' annual base rate review mechanism.

Natural Gas Cost Recovery

With the exception of Atlanta Gas Light, the natural gas distribution utilities are authorized by the relevant regulatory agencies in the states in which they serve to use natural gas cost recovery mechanisms that adjust rates to reflect changes in the wholesale cost of natural gas and ensure recovery of all costs prudently incurred in purchasing natural gas for customers. The natural gas distribution utilities defer or accrue the difference between the actual cost of natural gas and the amount of commodity revenue earned in a given period. The deferred or accrued amount is either billed or refunded to customers prospectively through adjustments to the commodity rate. Deferred natural gas costs are reflected as regulatory assets and accrued natural gas costs are reflected as regulatory liabilities. Changes in the billing factor will not have a significant effect on Southern Company's or Southern Company Gas' net income, but will affect cash flows. Since Atlanta Gas Light does not sell natural gas directly to its end-use customers, it does not utilize a traditional natural gas cost recovery mechanism. However, Atlanta Gas Light does maintain natural gas inventory for the Marketers in Georgia and recovers the cost through recovery mechanisms approved by the Georgia PSC. At December 31, 2022, the under recovered balance was \$108 million, which was included in natural gas cost under recovery on Southern Company's and Southern Company Gas' balance sheets. At December 31, 2021, the under recovered balance was \$473 million, \$266 million of which was included in natural gas cost under recovery and \$207 million of which was included in other regulatory assets, deferred on Southern Company's and Southern Company Gas' balance sheets.

Rate Proceedings

Nicor Gas

In November 2021, the Illinois Commission approved a \$240 million annual base rate increase effective November 24, 2021. The base rate increase included \$94 million related to the recovery of program costs under the Investing in Illinois program and was based on a ROE of 9.75% and an equity ratio of 54.5%.

Notes to Financial Statements

On January 3, 2023, Nicor Gas filed a general base rate case with the Illinois Commission requesting a \$321 million increase in annual base rate revenues, including \$59 million related to the recovery of investments under the Investing in Illinois program through December 31, 2023. The requested increase is based on a projected test year for the 12-month period ending December 31, 2024, a return on equity of 10.35%, and an equity ratio of 54.5%. Further, Nicor Gas is seeking to recover an additional \$32 million under three proposed riders related to recovery of vehicle fuel costs, company use gas, and customer payment fees. The Illinois Commission is expected to rule on the requested increase within the 11-month statutory time limit, after which rate adjustments will be effective. The ultimate outcome of this matter cannot be determined at this time.

Atlanta Gas Light

The Georgia PSC evaluates Atlanta Gas Light's earnings against a ROE range of 10.05% to 10.45%, with disposition of any earnings above 10.45% to be determined by the Georgia PSC. Additionally, the Georgia PSC allows inclusion in base rates of the recovery of and return on the infrastructure program investments, including, but not limited to, GRAM adjustments. GRAM filing rate adjustments are based on an authorized ROE of 10.25%. GRAM adjustments for 2021 could not exceed 5% of 2020 base rates. The 5% limitation does not set a precedent in any future rate proceedings by Atlanta Gas Light.

In 2020, Atlanta Gas Light filed its annual GRAM filing with the Georgia PSC requesting an annual base rate increase of \$37.6 million based on the projected 12-month period beginning January 1, 2021, which did not exceed the 5% limitation established by the Georgia PSC. Rates went into effect on January 1, 2021.

In February 2021, the Georgia PSC approved a stipulation between Atlanta Gas Light and the Georgia PSC staff establishing a long-range comprehensive planning process. Under the terms of the stipulation, Atlanta Gas Light was required to develop and file at least triennially an Integrated Capacity and Delivery Plan (i-CDP). Each i-CDP will include a 10-year forecast of interstate and intrastate capacity asset requirements, including a detailed plan for the first three years consistent with Atlanta Gas Light's current capacity supply plan, and a 10-year projection of capital budgets and related operations and maintenance spending. Recovery of the related revenue requirements will be included in either subsequent annual GRAM filings or a new System Reinforcement Rider for authorized large pressure improvement and system reliability projects.

In April 2021, Atlanta Gas Light filed its first i-CDP with the Georgia PSC, which included a series of ongoing and proposed pipeline safety, reliability, and growth programs for the next 10 years (2022 through 2031), as well as the required capital investments and related costs to implement the programs. The i-CDP reflected capital investments totaling approximately \$0.5 billion to \$0.6 billion annually.

In November 2021, the Georgia PSC approved a joint stipulation agreement between Atlanta Gas Light and the staff of the Georgia PSC, under which, for the years 2022 through 2024, Atlanta Gas Light will incrementally reduce its combined GRAM and System Reinforcement Rider request by 10% through Atlanta Gas Light's GRAM mechanism, which resulted in a reduction of \$5 million for 2022 and \$7 million for 2023. The stipulation agreement also provided for \$1.7 billion of total capital investment for the years 2022 through 2024.

Also in November 2021, the Georgia PSC approved Atlanta Gas Light's amended annual GRAM filing, which resulted in an annual rate increase of \$43 million effective January 1, 2022.

On December 20, 2022, the Georgia PSC approved Atlanta Gas Light's annual GRAM filing, which resulted in an annual rate increase of \$53 million effective January 1, 2023.

Virginia Natural Gas

In September 2021, the Virginia Commission approved a stipulation agreement related to Virginia Natural Gas' 2020 general rate case filing, which allowed for a \$43 million increase in annual base rate revenues, including \$14 million related to the recovery of investments under the SAVE program, based on a ROE of 9.5% and an equity ratio of 51.9%. Interim rate adjustments became effective as of November 1, 2020, subject to refund, based on Virginia Natural Gas' original request for an increase of approximately \$50 million. Refunds to customers related to the difference between the approved rates and the interim rates were completed during the fourth quarter 2021.

On August 1, 2022, Virginia Natural Gas filed a general base rate case with the Virginia Commission seeking an increase in annual base rate revenues of \$69 million, including \$15 million related to the recovery of investments under the SAVE program, primarily to recover investments and increased costs associated with infrastructure, technology, and workforce development. The requested increase is based on a projected 12-month period beginning January 1, 2023, a ROE of 10.35%, and an equity ratio of 53.2%. Rate adjustments became effective January 1, 2023, subject to refund. The Virginia Commission is expected to rule on the requested increase in the third quarter 2023. The ultimate outcome of this matter cannot be determined at this time.

Notes to Financial Statements

Unrecognized Ratemaking Amounts

The following table illustrates Southern Company Gas' authorized ratemaking amounts that are not recognized on its balance sheets. These amounts are primarily composed of an allowed equity rate of return on assets associated with certain regulatory infrastructure programs. These amounts will be recognized as revenues in Southern Company Gas' financial statements in the periods they are billable to customers, the majority of which will be recovered by 2025.

	December 31, 2022	December 31, 2021
	<i>(in millions)</i>	
Atlanta Gas Light	\$35	\$47
Virginia Natural Gas	10	10
Chattanooga Gas	2	4
Nicor Gas	3	—
Total	\$50	\$61

3. CONTINGENCIES, COMMITMENTS, AND GUARANTEES

General Litigation Matters

The Registrants are involved in various matters being litigated and regulatory matters. The ultimate outcome of such pending or potential litigation or regulatory matters against each Registrant and any subsidiaries cannot be determined at this time; however, for current proceedings not specifically reported herein, management does not anticipate that the ultimate liabilities, if any, arising from such current proceedings would have a material effect on such Registrant's financial statements.

The Registrants believe the pending legal challenges discussed below have no merit; however, the ultimate outcome of these matters cannot be determined at this time.

Alabama Power

On September 26, 2022, Mobile Baykeeper, through its counsel Southern Environmental Law Center, filed a citizen suit in the U.S. District Court for the Southern District of Alabama alleging that Alabama Power's plan to close the Plant Barry ash pond utilizing a closure-in-place methodology violates the Resource Conservation and Recovery Act (RCRA) and regulations governing CCR. Among other relief requested, Mobile Baykeeper seeks a declaratory judgment that the RCRA and regulations governing CCR are being violated, preliminary and injunctive relief to prevent implementation of Alabama Power's closure plan and the development of a closure plan that satisfies regulations governing CCR requirements. On January 31, 2023, the EPA issued a Notice of Potential Violations associated with Alabama Power's plan to close the Plant Barry ash pond. Alabama Power expects to respond by March 2, 2023, subject to any extension agreed upon by the parties. The ultimate outcome of these matters cannot be determined at this time but could have an impact on Alabama Power's ARO estimates. See Note 6 for a discussion of Alabama Power's ARO liabilities.

Georgia Power

Municipal Franchise Fees

In 2011, plaintiffs filed a putative class action against Georgia Power in the Superior Court of Fulton County, Georgia alleging that Georgia Power's collection in rates of amounts for municipal franchise fees (which fees are paid to municipalities) exceeded the amounts allowed in orders of the Georgia PSC and alleging certain state law claims. This case has been ruled upon and appealed numerous times over the last several years. In 2019, the Georgia PSC issued an order that found Georgia Power has appropriately implemented the municipal franchise fee schedule. In March 2021, the Superior Court of Fulton County granted class certification and Georgia Power's motion for summary judgment and the plaintiffs filed a notice of appeal. In April 2021, Georgia Power filed a notice of cross appeal on the issue of class certification. In December 2021, the Georgia Court of Appeals affirmed the Superior Court's ruling that granted summary judgment to Georgia Power and dismissed Georgia Power's cross appeal on the issue of class certification as moot. Also in December 2021, the plaintiffs filed a petition for writ of certiorari to the Georgia Supreme Court, which was denied on January 27, 2023. On February 6, 2023, the plaintiffs filed a motion for reconsideration with the Georgia Supreme Court. The amount of any possible losses cannot be estimated at this time because, among other factors, it is unknown whether any losses would be subject to recovery from any municipalities.

Notes to Financial Statements

Plant Scherer

In July 2020, a group of individual plaintiffs filed a complaint, which was amended on December 9, 2022, in the Superior Court of Fulton County, Georgia against Georgia Power alleging that the construction and operation of Plant Scherer has impacted groundwater and air, resulting in alleged personal injuries and property damage. The plaintiffs seek an unspecified amount of monetary damages including punitive damages, a medical monitoring fund, and injunctive relief. Georgia Power has filed multiple motions to dismiss the complaint. On December 29, 2022, the Superior Court of Fulton County, Georgia granted Georgia Power's motion to transfer the case to the Superior Court of Monroe County, Georgia.

In October 2021 and on February 7, 2022, a total of seven additional complaints were filed in the Superior Court of Monroe County, Georgia against Georgia Power alleging that releases from Plant Scherer have impacted groundwater and air, resulting in alleged personal injuries and property damage. The plaintiffs seek an unspecified amount of monetary damages including punitive damages. In November 2021 and March 2022, Georgia Power removed these cases to the U.S. District Court for the Middle District of Georgia. On November 16, 2022, the plaintiffs voluntarily dismissed their complaints without prejudice. Georgia Power anticipates that these plaintiffs will refile their complaints.

On January 9, 2023, an additional complaint was filed in the Superior Court of Monroe County, Georgia against Georgia Power alleging that the construction and operation of Plant Scherer have impacted groundwater and air, resulting in alleged personal injuries. The plaintiff seeks an unspecified amount of monetary damages, including punitive damages. On January 19, 2023, Georgia Power filed a notice to remove the case to the U.S. District Court for the Middle District of Georgia.

The amount of any possible losses from these matters cannot be estimated at this time.

Mississippi Power

In 2018, Ray C. Turnage and 10 other individual plaintiffs filed a putative class action complaint against Mississippi Power and the three then-serving members of the Mississippi PSC in the U.S. District Court for the Southern District of Mississippi, which was amended in March 2019 to include four additional plaintiffs. Mississippi Power received Mississippi PSC approval in 2013 to charge a mirror CWIP rate premised upon including in its rate base pre-construction and construction costs for the Kemper IGCC prior to placing the Kemper IGCC into service. The Mississippi Supreme Court reversed that approval and ordered Mississippi Power to refund the amounts paid by customers under the previously-approved mirror CWIP rate. The plaintiffs allege that the initial approval process, and the amount approved, were improper and make claims for gross negligence, reckless conduct, and intentional wrongdoing. They also allege that Mississippi Power underpaid customers by up to \$23.5 million in the refund process by applying an incorrect interest rate. The plaintiffs seek to recover, on behalf of themselves and their putative class, actual damages, punitive damages, pre-judgment interest, post-judgment interest, attorney's fees, and costs. The district court dismissed the amended complaint; however, in March 2020, the plaintiffs filed a motion seeking to name the new members of the Mississippi PSC, the Mississippi Development Authority, and Southern Company as additional defendants and add a cause of action against all defendants based on a dormant commerce clause theory under the U.S. Constitution. In July 2020, the plaintiffs filed a motion for leave to file a third amended complaint, which included the same federal claims as the proposed second amended complaint, as well as several additional state law claims based on the allegation that Mississippi Power failed to disclose the annual percentage rate of interest applicable to refunds. In November 2020, the district court denied each of the plaintiffs' pending motions and entered final judgment in favor of Mississippi Power. In January 2021, the district court denied further motions by the plaintiffs to vacate the judgment and to file a revised second amended complaint. In February 2021, the plaintiffs filed a notice of appeal with the U.S. Court of Appeals for the Fifth Circuit. On March 21, 2022, the U.S. Court of Appeals for the Fifth Circuit issued an opinion affirming the dismissal of the claims against the Mississippi PSC defendants but reversing the dismissal of the claims against Mississippi Power. On May 31, 2022, the U.S. Court of Appeals for the Fifth Circuit denied a petition by Mississippi Power for a rehearing en banc and remanded the case to the U.S. District Court for the Southern District of Mississippi for further proceedings. On June 17, 2022, Mississippi Power filed with the trial court a motion to dismiss the complaint. An adverse outcome in this proceeding could have a material impact on Mississippi Power's financial statements.

Environmental Remediation

The Southern Company system must comply with environmental laws and regulations governing the handling and disposal of waste and releases of hazardous substances. Under these various laws and regulations, the Southern Company system could incur substantial costs to clean up affected sites. The traditional electric operating companies and the natural gas distribution utilities conduct studies to determine the extent of any required cleanup and have recognized the estimated costs to clean up known impacted sites in the financial statements. A liability for environmental remediation costs is recognized only when a loss is determined to be probable and reasonably estimable and is reduced as expenditures are incurred. The traditional electric operating companies and the natural gas distribution utilities in Illinois and Georgia have each received authority from their respective state PSCs or other applicable state regulatory agencies to recover approved environmental remediation costs through regulatory mechanisms. Any difference between the liabilities accrued and costs recovered through rates is deferred as a regulatory asset or liability. These regulatory mechanisms are adjusted annually or as necessary within limits approved by the state PSCs or other applicable state regulatory agencies.

Notes to Financial Statements

Georgia Power has been designated or identified as a potentially responsible party at sites governed by the Georgia Hazardous Site Response Act and/or by the federal Comprehensive Environmental Response, Compensation, and Liability Act, and assessment and potential cleanup of such sites is expected. For all years presented, Georgia Power recovered approximately \$12 million annually through the ECCR tariff for environmental remediation under the 2019 ARP. Effective January 1, 2023, Georgia Power is recovering \$5 million annually through the ECCR tariff under the 2022 ARP.

Southern Company Gas is subject to environmental remediation liabilities associated with 40 former MGP sites in four different states. Southern Company Gas' accrued environmental remediation liability at December 31, 2022 and 2021 was based on the estimated cost of environmental investigation and remediation associated with these sites.

At December 31, 2022 and 2021, the environmental remediation liability and the balance of under recovered environmental remediation costs were reflected in the balance sheets of Southern Company, Georgia Power, and Southern Company Gas as shown in the table below. Alabama Power did not have environmental remediation liabilities at December 31, 2022 or 2021. Mississippi Power did not have environmental remediation liabilities at December 31, 2022 and had an immaterial balance at December 31, 2021.

	Southern Company	Georgia Power	Southern Company Gas
	<i>(in millions)</i>		
December 31, 2022:			
Environmental remediation liability:			
Other current liabilities	\$ 65	\$15	\$ 49
Accrued environmental remediation	207	—	207
Under recovered environmental remediation costs:			
Other regulatory assets, current	\$ 59	\$ 5	\$ 54
Other regulatory assets, deferred	235	20	215
December 31, 2021:			
Environmental remediation liability:			
Other current liabilities	\$ 69	\$17	\$ 52
Accrued environmental remediation	197	—	197
Under recovered environmental remediation costs:			
Other regulatory assets, current	\$ 71	\$12	\$ 59
Other regulatory assets, deferred	231	23	208

The ultimate outcome of these matters cannot be determined at this time; however, as a result of the regulatory treatment for environmental remediation expenses described above, the final disposition of these matters is not expected to have a material impact on the financial statements of the applicable Registrants.

Nuclear Fuel Disposal Costs

Acting through the DOE and pursuant to the Nuclear Waste Policy Act of 1982, the U.S. government entered into contracts with Alabama Power and Georgia Power that required the DOE to dispose of spent nuclear fuel generated at Plants Farley, Hatch, and Vogtle Units 1 and 2 beginning no later than January 31, 1998. The DOE has yet to commence the performance of its contractual and statutory obligation to dispose of spent nuclear fuel. Consequently, Alabama Power and Georgia Power pursued and continue to pursue legal remedies against the U.S. government for its partial breach of contract.

In 2014, Alabama Power and Georgia Power filed lawsuits against the U.S. government for the costs of continuing to store spent nuclear fuel at Plants Farley, Hatch, and Vogtle Units 1 and 2 for the period from January 1, 2011 through December 31, 2013. The damage period was subsequently extended to December 31, 2014. In 2019, the Court of Federal Claims granted Alabama Power's and Georgia Power's motion for summary judgment on damages not disputed by the U.S. government, awarding those undisputed damages to Alabama Power and Georgia Power. However, those undisputed damages are not collectible until the court enters final judgment on the remaining damages.

In 2017, Alabama Power and Georgia Power filed additional lawsuits against the U.S. government in the Court of Federal Claims for the costs of continuing to store spent nuclear fuel at Plants Farley, Hatch, and Vogtle Units 1 and 2 for the period from January 1, 2015 through December 31, 2017. In 2020, Alabama Power and Georgia Power filed amended complaints in each of the lawsuits adding damages from January 1, 2018 to December 31, 2019 to the claim period.

Notes to Financial Statements

The outstanding claims for the period January 1, 2011 through December 31, 2019 total \$110 million and \$132 million for Alabama Power and Georgia Power (based on its ownership interests), respectively. Damages will continue to accumulate until the issue is resolved, the U.S. government disposes of Alabama Power's and Georgia Power's spent nuclear fuel pursuant to its contractual obligations, or alternative storage is otherwise provided. No amounts have been recognized in the financial statements as of December 31, 2022 for any potential recoveries from the pending lawsuits.

The final outcome of these matters cannot be determined at this time. However, Alabama Power and Georgia Power expect to credit any recoveries for the benefit of customers in accordance with direction from their respective PSC; therefore, no material impact on Southern Company's, Alabama Power's, or Georgia Power's net income is expected.

On-site dry spent fuel storage facilities are operational at all three plants and can be expanded to accommodate spent fuel through the expected life of each plant.

Nuclear Insurance

Under the Price-Anderson Amendments Act (Act), Alabama Power and Georgia Power maintain agreements of indemnity with the NRC that, together with private insurance, cover third-party liability arising from any nuclear incident occurring at the companies' nuclear power plants. The Act provides funds up to \$13.7 billion for public liability claims that could arise from a single nuclear incident. Each nuclear plant is insured against this liability to a maximum of \$450 million by American Nuclear Insurers (ANI), with the remaining coverage provided by a mandatory program of deferred premiums that could be assessed, after a nuclear incident, against all owners of commercial nuclear reactors. A company could be assessed up to \$138 million per incident for each licensed reactor it operates but not more than an aggregate of \$20 million per incident to be paid in a calendar year for each reactor. Such maximum assessment, excluding any applicable state premium taxes, for Alabama Power and Georgia Power, based on its ownership and buyback interests in all licensed reactors, is \$275 million and \$330 million, respectively, per incident, but not more than an aggregate of \$41 million and \$49 million, respectively, to be paid for each incident in any one year. Both the maximum assessment per reactor and the maximum yearly assessment are adjusted for inflation at least every five years. The next scheduled adjustment is due no later than November 1, 2023. See Note 5 under "Joint Ownership Agreements" for additional information on joint ownership agreements.

Alabama Power and Georgia Power are members of Nuclear Electric Insurance Limited (NEIL), a mutual insurer established to provide property damage insurance in an amount up to \$1.5 billion for members' operating nuclear generating facilities. Additionally, both companies have NEIL policies that currently provide decontamination, excess property insurance, and premature decommissioning coverage up to \$1.25 billion for nuclear losses and policies providing coverage up to \$750 million for non-nuclear losses in excess of the \$1.5 billion primary coverage.

NEIL also covers the additional costs that would be incurred in obtaining replacement power during a prolonged accidental outage at a member's nuclear plant. Members can purchase this coverage, subject to a deductible waiting period of up to 26 weeks, with a maximum per occurrence per unit limit of \$490 million. After the deductible period, weekly indemnity payments would be received until either the unit is operational or until the limit is exhausted. Alabama Power and Georgia Power each purchase limits based on the projected full cost of replacement power, subject to ownership limitations, and have each elected a 12-week deductible waiting period for each nuclear plant.

A builders' risk property insurance policy has been purchased from NEIL for the construction of Plant Vogtle Units 3 and 4. This policy provides the Vogtle Owners up to \$2.75 billion for accidental property damage occurring during construction.

Under each of the NEIL policies, members are subject to assessments each year if losses exceed the accumulated funds available to the insurer. The maximum annual assessments for Alabama Power and Georgia Power as of December 31, 2022 under the NEIL policies would be \$51 million and \$85 million, respectively.

Claims resulting from terrorist acts and cyber events are covered under both the ANI and NEIL policies (subject to normal policy limits). The maximum aggregate that NEIL will pay for all claims resulting from terrorist acts and cyber events in any 12-month period is \$3.2 billion each, plus such additional amounts NEIL can recover through reinsurance, indemnity, or other sources.

For all on-site property damage insurance policies for commercial nuclear power plants, the NRC requires that the proceeds of such policies shall be dedicated first for the sole purpose of placing the reactor in a safe and stable condition after an accident. Any remaining proceeds are to be applied next toward the costs of decontamination and debris removal operations ordered by the NRC, and any further remaining proceeds are to be paid either to the applicable company or to its debt trustees as may be appropriate under the policies and applicable trust indentures. In the event of a loss, the amount of insurance available might not be adequate to cover property damage and other expenses incurred. Uninsured losses and other expenses, to the extent not recovered from customers, would be borne by Alabama Power or Georgia Power, as applicable, and could have a material effect on Southern Company's, Alabama Power's, and Georgia Power's financial condition and results of operations.

All retrospective assessments, whether generated for liability, property, or replacement power, may be subject to applicable state premium taxes.

Notes to Financial Statements

Other Matters

Traditional Electric Operating Companies

In April 2019, Bellsouth Telecommunications d/b/a AT&T Alabama (AT&T) filed a complaint against Alabama Power with the FCC alleging that the pole rental rate AT&T is required to pay pursuant to the parties' joint use agreement is unjust and unreasonable under federal law. The complaint sought a new rate and approximately \$87 million in refunds of alleged overpayments for the preceding six years. In August 2019, the FCC stayed the case in favor of arbitration, which AT&T has not pursued. The ultimate outcome of this matter cannot be determined at this time, but an adverse outcome could have a material impact on the financial statements of Southern Company and Alabama Power. Georgia Power and Mississippi Power have joint use agreements with other AT&T affiliates.

Mississippi Power

Kemper County Energy Facility

In 2020, 2021, and 2022, Mississippi Power recorded charges to income associated with abandonment and related closure costs and ongoing period costs, net of salvage proceeds, for the mine and gasifier-related assets at the Kemper County energy facility. These charges, including related tax impacts, totaled \$4 million pre-tax (\$3 million after tax) in 2020, \$11 million pre-tax (\$8 million after tax) in 2021, and \$15 million pre-tax (\$12 million after tax) in 2022. The pre-tax charges are included in other operations and maintenance expenses on the statements of income.

Dismantlement of the abandoned gasifier-related assets and site restoration activities are expected to be completed by 2026. Additional pre-tax period costs associated with dismantlement and site restoration activities, including related costs for compliance and safety, ARO accretion, and property taxes, net of salvage, are estimated to total approximately \$15 million annually through 2025.

Mississippi Power owns the lignite mine located around the Kemper County energy facility site. As a result of the abandonment of the Kemper IGCC, final mine reclamation began in 2018 and was substantially completed in 2020, with monitoring expected to continue through 2028.

As the mining permit holder, Liberty Fuels Company, LLC, a wholly-owned subsidiary of The North American Coal Corporation, has a legal obligation to perform mine reclamation and Mississippi Power has a contractual obligation to fund all reclamation activities. See Note 6 for additional information.

In 2010, the DOE, through a cooperative agreement with SCS, agreed to fund \$270 million of the Kemper County energy facility through the grants awarded to the project by the DOE under the Clean Coal Power Initiative Round 2. In 2016, additional DOE grants in the amount of \$137 million were awarded to the Kemper County energy facility. In 2018, Mississippi Power filed with the DOE its request for property closeout certification under the contract related to the \$387 million of total grants received. In 2020, Mississippi Power and Southern Company executed an agreement with the DOE completing Mississippi Power's request, which enabled Mississippi Power to proceed with full dismantlement of the abandoned gasifier-related assets and site restoration activities. In connection with the DOE closeout discussions, in 2019, the Civil Division of the Department of Justice informed Southern Company and Mississippi Power of an investigation related to the grants received. The ultimate outcome of this matter cannot be determined at this time; however, it could have a material impact on Southern Company's and Mississippi Power's financial statements.

Plant Daniel

In conjunction with Southern Company's 2019 sale of Gulf Power, NextEra Energy held back \$75 million of the purchase price pending Mississippi Power and NextEra Energy negotiating a mutually acceptable revised operating agreement for Plant Daniel. On July 12, 2022, the co-owners executed a revised operating agreement and Southern Company subsequently received the remaining \$75 million of the purchase price. The dispatch procedures in the revised operating agreement for the two jointly-owned coal units at Plant Daniel resulted in Mississippi Power designating one of the two units as primary and the other as secondary in lieu of each company separately owning 100% of a single generating unit. Mississippi Power has the option to purchase its co-owner's ownership interest for \$1 on January 15, 2024, provided that Mississippi Power exercises the option no later than 120 days prior to that date. The revised operating agreement did not have a material impact on Mississippi Power's financial statements. See Note 2 under "Mississippi Power – Integrated Resource Plan" for additional information on Plant Daniel.

Notes to Financial Statements

Department of Revenue Audit

On August 31, 2022, the Mississippi Department of Revenue (Mississippi DOR) completed an audit of sales and use taxes paid by Mississippi Power from 2016 to 2019 and entered a final assessment, indicating a total amount due of \$28 million, including associated penalties and interest. Mississippi Power does not agree with the audit findings and, on October 27, 2022, filed an administrative appeal with the Mississippi DOR.

On December 6, 2022, the Mississippi PSC approved an accounting order authorizing Mississippi Power to defer the additional taxes and related interest related to the audit to a regulatory asset, excluding amounts associated with the gasifier and other abandoned Kemper IGCC assets. The authority to defer these costs is not a guarantee of recovery. The review and final disposition of the costs recorded to the regulatory asset will be addressed in a future rate proceeding following completion of the tax audit proceedings.

The ultimate outcome of this matter cannot be determined at this time.

Commitments

To supply a portion of the fuel requirements of the Southern Company system's electric generating plants, the Southern Company system has entered into various long-term commitments not recognized on the balance sheets for the procurement and delivery of fossil fuel and, for Alabama Power and Georgia Power, nuclear fuel. The majority of the Registrants' fuel expense for the periods presented was purchased under long-term commitments. Each Registrant expects that a substantial amount of its future fuel needs will continue to be purchased under long-term commitments.

Georgia Power has commitments, in the form of capacity purchases, regarding a portion of a 5% interest in the original cost of Plant Vogtle Units 1 and 2 owned by MEAG Power that are in effect until the later of the retirement of the plant or the latest stated maturity date of MEAG Power's bonds issued to finance such ownership interest. The payments for capacity are required whether or not any capacity is available. Portions of the capacity payments made to MEAG Power for its Plant Vogtle Units 1 and 2 investment relate to costs in excess of Georgia Power's allowed investment for ratemaking purposes. The present value of these portions at the time of the disallowance was written off. Generally, the cost of such capacity is included in purchased power in Southern Company's statements of income and in purchased power, non-affiliates in Georgia Power's statements of income. Georgia Power's capacity payments related to this commitment totaled \$4 million, \$6 million, and \$5 million in 2022, 2021, and 2020, respectively. At December 31, 2022, Georgia Power's estimated long-term obligations related to this commitment totaled \$41 million, consisting of \$3 million for 2023, \$4 million annually for 2024 and 2025, \$2 million annually for 2026 and 2027, and \$26 million thereafter.

See Note 9 for information regarding PPAs accounted for as leases.

Southern Company Gas has commitments for pipeline charges, storage capacity, and gas supply, including charges recoverable through natural gas cost recovery mechanisms or, alternatively, billed to marketers selling retail natural gas. Gas supply commitments include amounts for gas commodity purchases associated with Nicor Gas and SouthStar of 34 million mmBtu at floating gas prices calculated using forward natural gas prices at December 31, 2022 and valued at \$157 million. Southern Company Gas provides guarantees to certain gas suppliers for certain of its subsidiaries in support of payment obligations. Southern Company Gas' expected future contractual obligations for pipeline charges, storage capacity, and gas supply that are not recognized on the balance sheets at December 31, 2022 were as follows:

	Pipeline Charges, Storage Capacity, and Gas Supply
	(in millions)
2023	\$ 637
2024	455
2025	390
2026	212
2027	134
Thereafter	871
Total	\$2,699

Guarantees

SCS may enter into various types of wholesale energy and natural gas contracts acting as an agent for the traditional electric operating companies and Southern Power. Under these agreements, each of the traditional electric operating companies and Southern Power may be jointly and severally liable. Accordingly, Southern Company has entered into keep-well agreements with each of the traditional electric operating companies to ensure they will not subsidize or be responsible for any costs, losses, liabilities, or damages resulting from the inclusion of Southern Power as a contracting party under these agreements.

Notes to Financial Statements

Alabama Power has guaranteed a \$100 million principal amount long-term bank loan SEGCO entered into in 2018 and subsequently extended and amended. Georgia Power has agreed to reimburse Alabama Power for the portion of such obligation corresponding to Georgia Power's proportionate ownership of SEGCO's stock if Alabama Power is called upon to make such payment under its guarantee. At December 31, 2022, the capitalization of SEGCO consisted of \$80 million of equity and \$100 million of long-term debt that matures in November 2024, on which the annual interest requirement is derived from a variable rate index. In addition, SEGCO had short-term debt outstanding of \$17 million. See Note 7 under "SEGCO" for additional information.

As discussed in Note 9, Alabama Power and Georgia Power have entered into certain residual value guarantees related to railcar leases.

4. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Registrants generate revenues from a variety of sources, some of which are not accounted for as revenue from contracts with customers, such as leases, derivatives, and certain cost recovery mechanisms. See Note 1 under "Revenues" for additional information on the revenue policies of the Registrants. See Notes 9 and 14 for additional information on revenue accounted for under lease and derivative accounting guidance, respectively.

The following table disaggregates revenue from contracts with customers for the periods presented:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
2022						
	<i>(in millions)</i>					
Operating revenues						
Retail electric revenues						
Residential	\$ 6,604	\$ 2,638	\$ 3,664	\$ 302	\$ —	\$ —
Commercial	5,369	1,685	3,385	299	—	—
Industrial	3,764	1,507	1,921	336	—	—
Other	102	14	79	9	—	—
Total retail electric revenues	15,839	5,844	9,049	946	—	—
Natural gas distribution revenues						
Residential	2,843	—	—	—	—	2,843
Commercial	763	—	—	—	—	763
Transportation	1,186	—	—	—	—	1,186
Industrial	84	—	—	—	—	84
Other	342	—	—	—	—	342
Total natural gas distribution revenues	5,218	—	—	—	—	5,218
Wholesale electric revenues						
PPA energy revenues	2,274	489	130	16	1,673	—
PPA capacity revenues	596	194	47	4	356	—
Non-PPA revenues	250	200	30	690	740	—
Total wholesale electric revenues	3,120	883	207	710	2,769	—
Other natural gas revenues						
Gas marketing services	636	—	—	—	—	636
Other natural gas revenues	51	—	—	—	—	51
Total natural gas revenues	687	—	—	—	—	687
Other revenues	1,077	194	446	47	36	—
Total revenue from contracts with customers	25,941	6,921	9,702	1,703	2,805	5,905
Other revenue sources ^(a)	3,338	896	1,882	(9)	564	57
Total operating revenues	\$29,279	\$7,817	\$11,584	\$1,694	\$3,369	\$ 5,962

Notes to Financial Statements

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
2021	<i>(in millions)</i>					
Operating revenues						
Retail electric revenues						
Residential	\$ 6,207	\$2,467	\$3,471	\$ 269	\$ —	\$ —
Commercial	4,877	1,600	3,010	267	—	—
Industrial	3,067	1,386	1,391	290	—	—
Other	93	17	68	8	—	—
Total retail electric revenues	14,244	5,470	7,940	834	—	—
Natural gas distribution revenues						
Residential	1,799	—	—	—	—	1,799
Commercial	470	—	—	—	—	470
Transportation	1,038	—	—	—	—	1,038
Industrial	49	—	—	—	—	49
Other	269	—	—	—	—	269
Total natural gas distribution revenues	3,625	—	—	—	—	3,625
Wholesale electric revenues						
PPA energy revenues	1,122	184	95	11	854	—
PPA capacity revenues	493	115	55	5	323	—
Non-PPA revenues	236	170	21	401	398	—
Total wholesale electric revenues	1,851	469	171	417	1,575	—
Other natural gas revenues						
Wholesale gas services	2,168	—	—	—	—	2,168
Gas marketing services	464	—	—	—	—	464
Other natural gas revenues	36	—	—	—	—	36
Total other natural gas revenues	2,668	—	—	—	—	2,668
Other revenues	1,075	202	452	31	30	—
Total revenue from contracts with customers	23,463	6,141	8,563	1,282	1,605	6,293
Other revenue sources ^(a)	3,349	272	697	40	611	1,786
Other adjustments ^(b)	(3,699)	—	—	—	—	(3,699)
Total operating revenues	\$23,113	\$6,413	\$9,260	\$1,322	\$2,216	\$ 4,380

Notes to Financial Statements

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
2020						
						(in millions)
Operating revenues						
Retail electric revenues						
Residential	\$ 6,113	\$2,377	\$3,476	\$ 260	\$ —	\$ —
Commercial	4,699	1,512	2,933	254	—	—
Industrial	2,775	1,293	1,197	285	—	—
Other	90	21	60	9	—	—
Total retail electric revenues	13,677	5,203	7,666	808	—	—
Natural gas distribution revenues						
Residential	1,338	—	—	—	—	1,338
Commercial	340	—	—	—	—	340
Transportation	971	—	—	—	—	971
Industrial	30	—	—	—	—	30
Other	209	—	—	—	—	209
Total natural gas distribution revenues	2,888	—	—	—	—	2,888
Wholesale electric revenues						
PPA energy revenues	735	133	42	9	570	—
PPA capacity revenues	454	108	50	3	296	—
Non-PPA revenues	210	43	10	311	239	—
Total wholesale electric revenues	1,399	284	102	323	1,105	—
Other natural gas revenues						
Wholesale gas services	1,727	—	—	—	—	1,727
Gas marketing services	391	—	—	—	—	391
Other natural gas revenues	33	—	—	—	—	33
Total other natural gas revenues	2,151	—	—	—	—	2,151
Other revenues	982	159	447	26	14	—
Total revenue from contracts with customers	21,097	5,646	8,215	1,157	1,119	5,039
Other revenue sources ^(a)	3,764	184	94	15	614	2,881
Other adjustments ^(b)	(4,486)	—	—	—	—	(4,486)
Total operating revenues	\$20,375	\$5,830	\$8,309	\$1,172	\$1,733	\$ 3,434

(a) Other revenue sources relate to revenues from customers accounted for as derivatives and leases, alternative revenue programs at Southern Company Gas, and cost recovery mechanisms and revenues that meet other scope exceptions for revenues from contracts with customers at the traditional electric operating companies.

(b) Other adjustments relate to the cost of Southern Company Gas' energy and risk management activities. Wholesale gas services revenues are presented net of the related costs of those activities on the statement of income. See Notes 15 and 16 under "Southern Company Gas" for information on the sale of Sequent and components of wholesale gas services' operating revenues, respectively.

Contract Balances

The following table reflects the closing balances of receivables, contract assets, and contract liabilities related to revenues from contracts with customers at December 31, 2022 and 2021:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
						(in millions)
Accounts Receivable						
At December 31, 2022	\$3,123	\$696	\$922	\$92	\$237	\$1,107
At December 31, 2021	2,504	589	736	73	149	753
Contract Assets						
At December 31, 2022	\$ 156	\$ 2	\$ 89	\$ —	\$ —	\$ —
At December 31, 2021	117	2	63	—	1	—
Contract Liabilities						
At December 31, 2022	\$ 45	\$ 4	\$ 9	\$ —	\$ 1	\$ —
At December 31, 2021	57	4	14	—	1	—

Notes to Financial Statements

At December 31, 2022 and 2021, Georgia Power had contract assets primarily related to retail customer fixed bill programs, where the payment is contingent upon Georgia Power's continued performance and the customer's continued participation in the program over a one-year contract term, and unregulated service agreements, where payment is contingent on project completion. Contract liabilities for Georgia Power relate to cash collections recognized in advance of revenue for unregulated service agreements. Southern Company's unregulated distributed generation business had contract assets of \$65 million and \$50 million at December 31, 2022 and 2021, respectively, and contract liabilities of \$32 million and \$39 million at December 31, 2022 and 2021, respectively, for outstanding performance obligations.

Revenues recognized in 2022 and 2021, which were included in contract liabilities at December 31, 2021 and December 31, 2020, respectively, were \$36 million and \$29 million, respectively, for Southern Company and immaterial for the other Registrants.

Remaining Performance Obligations

The Subsidiary Registrants have long-term contracts with customers in which revenues are recognized as performance obligations are satisfied over the contract term. For the traditional electric operating companies and Southern Power, these contracts primarily relate to PPAs whereby electricity and generation capacity are provided to a customer. The revenue recognized for the delivery of electricity is variable; however, certain PPAs include a fixed payment for fixed generation capacity over the term of the contract. For Southern Company Gas, these contracts involve energy infrastructure enhancement and upgrade projects for certain governmental customers. Southern Company's unregulated distributed generation business also has partially satisfied performance obligations related to certain fixed price contracts. Revenues from contracts with customers related to these performance obligations remaining at December 31, 2022 are expected to be recognized as follows:

	2023	2024	2025	2026	2027	Thereafter
	<i>(in millions)</i>					
Southern Company	\$640	\$483	\$332	\$311	\$315	\$2,076
Alabama Power	24	7	6	—	—	—
Georgia Power	74	39	22	11	10	10
Southern Power	355	345	302	303	310	2,077
Southern Company Gas	34	29	—	—	—	—

Revenue expected to be recognized for performance obligations remaining at December 31, 2022 was immaterial for Mississippi Power.

5. PROPERTY, PLANT, AND EQUIPMENT

Property, plant, and equipment is stated at original cost or fair value at acquisition, as appropriate, less any regulatory disallowances and impairments. Original cost may include: materials; labor; minor items of property; appropriate administrative and general costs; payroll-related costs such as taxes, pensions, and other benefits; and the interest capitalized and/or cost of equity funds used during construction.

The Registrants' property, plant, and equipment in service consisted of the following at December 31, 2022 and 2021:

At December 31, 2022:	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Electric utilities:						
Generation	\$ 51,756	\$15,920	\$17,755	\$2,826	\$14,619	\$ —
Transmission	14,201	5,658	7,576	927	—	—
Distribution	24,200	9,154	13,819	1,228	—	—
General/other	5,806	2,740	2,729	273	39	—
Electric utilities' plant in service	95,963	33,472	41,879	5,254	14,658	—
Southern Company Gas:						
Natural gas distribution utilities transportation and distribution	16,810	—	—	—	—	16,810
Storage facilities	1,553	—	—	—	—	1,553
Other	1,360	—	—	—	—	1,360
Southern Company Gas plant in service	19,723	—	—	—	—	19,723
Other plant in service	1,843	—	—	—	—	—
Total plant in service	\$117,529	\$33,472	\$41,879	\$5,254	\$14,658	\$19,723

Notes to Financial Statements

At December 31, 2021:	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Electric utilities:						
Generation	\$ 53,803	\$16,631	\$19,184	\$2,791	\$14,551	\$ —
Transmission	13,406	5,334	7,132	900	—	—
Distribution	22,236	8,643	12,437	1,156	—	—
General/other	5,423	2,527	2,579	259	34	—
Electric utilities' plant in service	94,868	33,135	41,332	5,106	14,585	—
Southern Company Gas:						
Natural gas distribution utilities transportation and distribution	15,714	—	—	—	—	15,714
Storage facilities	1,315	—	—	—	—	1,315
Other	1,851	—	—	—	—	1,851
Southern Company Gas plant in service	18,880	—	—	—	—	18,880
Other plant in service	1,844	—	—	—	—	—
Total plant in service	\$115,592	\$33,135	\$41,332	\$5,106	\$14,585	\$18,880

The cost of replacements of property, exclusive of minor items of property, is capitalized. The cost of maintenance, repairs, and replacement of minor items of property is charged to other operations and maintenance expenses as incurred or performed with the exception of nuclear refueling costs and certain maintenance costs including those described below.

In accordance with orders from their respective state PSCs, Alabama Power and Georgia Power defer nuclear refueling outage operations and maintenance expenses to a regulatory asset when the charges are incurred. Alabama Power amortizes the costs over a subsequent 18-month period with Plant Farley's fall outage cost amortization beginning in January of the following year and spring outage cost amortization beginning in July of the same year. Georgia Power amortizes its costs over each unit's operating cycle, or 18 months for Plant Vogtle Units 1 and 2 and 24 months for Plant Hatch Units 1 and 2. Georgia Power's amortization period begins the month the refueling outage starts.

A portion of Mississippi Power's railway track maintenance costs is charged to fuel stock and recovered through Mississippi Power's fuel clause.

The portion of Southern Company Gas' non-working gas used to maintain the structural integrity of natural gas storage facilities that is considered to be non-recoverable is depreciated, while the recoverable or retained portion is not depreciated.

See Note 9 for information on finance lease right-of-use (ROU) assets, net, which are included in property, plant, and equipment.

The Registrants have deferred certain implementation costs related to cloud hosting arrangements. At December 31, 2022 and 2021, deferred cloud implementation costs, net of amortization, which are generally included in other deferred charges and assets on the Registrants' balance sheets, are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Deferred cloud implementation costs, net:						
At December 31, 2022	\$345	\$81	\$108	\$14	\$18	\$54
At December 31, 2021	240	54	81	11	14	35

Once a hosted software is placed into service, the related deferred costs are amortized on a straight-line basis over the remaining expected hosting arrangement term, including any renewal options that are reasonably certain of exercise. The amortization is reflected with the associated cloud hosting fees, which are generally reflected in other operations and maintenance expenses on the Registrants' statements of income. In 2022, amortization of deferred cloud implementation costs recognized was \$29 million for Southern Company, \$8 million for Alabama Power, \$12 million for Georgia Power, and immaterial for the other Registrants. In 2021, amortization from deferred cloud implementation costs was immaterial for all Registrants.

See Note 2 under "Regulatory Assets and Liabilities," "Alabama Power – Software Accounting Order," and "Mississippi Power – Software Accounting Order" for information on deferrals of certain other operations and maintenance costs associated with software and cloud computing projects by the traditional electric operating companies and natural gas distribution utilities, as authorized by their respective state PSCs or applicable state regulatory agencies.

Notes to Financial Statements

Depreciation and Amortization

The traditional electric operating companies' and Southern Company Gas' depreciation of the original cost of utility plant in service is provided primarily by using composite straight-line rates. The approximate rates for 2022, 2021, and 2020 are as follows:

	2022	2021	2020
Alabama Power	2.7%	2.7%	2.6%
Georgia Power	3.3%	3.3%	3.0%
Mississippi Power	3.4%	3.6%	3.7%
Southern Company Gas	2.7%	2.8%	2.8%

Depreciation studies are conducted periodically to update the composite rates. These studies are filed with the respective state PSC and/or other applicable state and federal regulatory agencies for the traditional electric operating companies and the natural gas distribution utilities. Effective April 1, 2020, Mississippi Power's depreciation rates were revised. Effective January 1, 2023, Alabama Power's and Georgia Power's depreciation rates were revised. See Note 2 for additional information.

When property, plant, and equipment subject to composite depreciation is retired or otherwise disposed of in the normal course of business, its original cost, together with the cost of removal, less salvage, is charged to accumulated depreciation. For other property dispositions, the applicable cost and accumulated depreciation are removed from the balance sheet accounts, and a gain or loss is recognized. Minor items of property included in the original cost of the asset are retired when the related property unit is retired.

At December 31, 2022 and 2021, accumulated depreciation for Southern Company and Southern Company Gas consisted of utility plant in service totaling \$34.3 billion and \$33.1 billion, respectively, for Southern Company and \$5.1 billion and \$4.8 billion, respectively, for Southern Company Gas, as well as other plant in service totaling \$963 million and \$930 million, respectively, for Southern Company and \$184 million and \$219 million, respectively, for Southern Company Gas. Other plant in service includes the non-utility assets of Southern Company Gas, as well as, for Southern Company, certain other non-utility subsidiaries. Depreciation of the original cost of other plant in service is provided primarily on a straight-line basis over estimated useful lives. Useful lives for Southern Company Gas's non-utility assets range from five to 12 years for transportation equipment, 30 to 75 years for storage facilities, and up to 75 years for other assets. Useful lives for the assets of Southern Company's other non-utility subsidiaries range up to 30 years.

Southern Power

Southern Power applies component depreciation, where depreciation is computed principally by the straight-line method over the estimated useful life of the asset. Certain of Southern Power's generation assets related to natural gas-fired facilities are depreciated on a units-of-production basis, using hours or starts, to better match outage and maintenance costs to the usage of, and revenues from, these assets. The primary assets in Southern Power's property, plant, and equipment are generating facilities, which generally have estimated useful lives as follows:

Southern Power Generating Facility	Useful life
Natural gas	Up to 50 years
Solar	Up to 35 years
Wind	Up to 35 years ^(*)

(*) Effective January 1, 2022, Southern Power revised the depreciable lives of its wind generating facilities from up to 30 years to up to 35 years. This revision resulted in an immaterial decrease in depreciation for 2022.

When Southern Power's depreciable property, plant, and equipment is retired, or otherwise disposed of in the normal course of business, the applicable cost and accumulated depreciation is removed and a gain or loss is recognized in the statements of income. Southern Power reviews its estimated useful lives and salvage values on an ongoing basis. The results of these reviews could result in changes which could have a material impact on Southern Power's net income.

Notes to Financial Statements

Joint Ownership Agreements

At December 31, 2022, the Registrants' percentage ownership and investment (exclusive of nuclear fuel) in jointly-owned facilities in commercial operation were as follows:

Facility (Type)	Percent Ownership	Plant in Service	Accumulated Depreciation	CWIP
<i>(in millions)</i>				
Alabama Power				
Greene County (natural gas) Units 1 and 2	60.0% ^(a)	\$ 193	\$ 85	\$ —
Plant Miller (coal) Units 1 and 2	91.8 ^(b)	2,148	712	13
Georgia Power				
Plant Hatch (nuclear)	50.1% ^(c)	\$1,401	\$ 671	\$62
Plant Vogtle (nuclear) Units 1 and 2	45.7 ^(c)	3,628	2,298	94
Plant Scherer (coal) Units 1 and 2	8.4 ^(c)	276	106	1
Plant Scherer (coal) Unit 3	75.0 ^(c)	1,317	567	6
Rocky Mountain (pumped storage)	25.4 ^(d)	184	153	1
Mississippi Power				
Greene County (natural gas) Units 1 and 2	40.0% ^(a)	\$ 125	\$ 70	\$ —
Plant Daniel (coal) Units 1 and 2	50.0 ^(e)	765	257	30
Southern Company Gas				
Dalton Pipeline (natural gas pipeline)	50.0% ^(f)	\$ 271	\$ 23	\$ —

(a) Jointly owned by Alabama Power and Mississippi Power and operated and maintained by Alabama Power.

(b) Jointly owned with PowerSouth and operated and maintained by Alabama Power.

(c) Georgia Power owns undivided interests in Plants Hatch, Vogtle Units 1 and 2, and Scherer in varying amounts jointly with one or more of the following entities: OPC, MEAG Power, Dalton, FP&L, and JEA. Georgia Power has been contracted to operate and maintain the plants as agent for the co-owners and is jointly and severally liable for third party claims related to these plants.

(d) Jointly owned with OPC, which is the operator of the plant.

(e) Jointly owned by FP&L and Mississippi Power. In accordance with the operating agreement, Mississippi Power acts as FP&L's agent with respect to the operation and maintenance of these units. See Note 3 under "Other Matters – Mississippi Power – Plant Daniel" for additional information.

(f) Jointly owned with The Williams Companies, Inc., the Dalton Pipeline is a 115-mile natural gas pipeline that serves as an extension of the Transcontinental Gas Pipe Line Company, LLC pipeline system into northwest Georgia. Southern Company Gas leases its 50% undivided ownership for approximately \$26 million annually through 2042. The lessee is responsible for maintaining the pipeline during the lease term and for providing service to transportation customers under its FERC-regulated tariff.

Georgia Power currently holds a 45.7% ownership interest in Plant Vogtle Units 3 and 4, which are under construction and had a CWIP balance of \$9.7 billion at December 31, 2022, excluding charges recorded in 2018, 2020, 2021, and 2022 for the estimated probable loss associated with construction. See Note 2 under "Georgia Power – Nuclear Construction" for additional information.

The Registrants' proportionate share of their jointly-owned facility operating expenses is included in the corresponding operating expenses in the statements of income and each Registrant is responsible for providing its own financing.

Assets Subject to Lien

Mississippi Power provides retail service to its largest retail customer, Chevron Products Company (Chevron), at its refinery in Pascagoula, Mississippi through at least 2038 in accordance with agreements approved by the Mississippi PSC. The agreements grant Chevron a security interest in the co-generation assets located at the refinery and owned by Mississippi Power, with a lease receivable balance of \$157 million at December 31, 2022, that is exercisable upon the occurrence of (i) certain bankruptcy events or (ii) other events of default coupled with specific reductions in steam output at the facility and a downgrade of Mississippi Power's credit rating to below investment grade by two of the three rating agencies. See Note 9 under "Lessor" for additional information.

See Note 8 under "Long-term Debt" for information regarding debt secured by certain assets of Georgia Power and Southern Company Gas.

Notes to Financial Statements

6. ASSET RETIREMENT OBLIGATIONS

AROs are computed as the present value of the estimated costs for an asset's future retirement and are recorded in the period in which the liability is incurred. The estimated costs are capitalized as part of the related long-lived asset and depreciated over the asset's useful life. In the absence of quoted market prices, AROs are estimated using present value techniques in which estimates of future cash outlays associated with the asset retirements are discounted using a credit-adjusted risk-free rate. Estimates of the timing and amounts of future cash outlays are based on projections of when and how the assets will be retired and the cost of future removal activities. Each traditional electric operating company and natural gas distribution utility has received accounting guidance from its state PSC or applicable state regulatory agency allowing the continued accrual or recovery of other retirement costs for long-lived assets that it does not have a legal obligation to retire. Accordingly, the accumulated removal costs for these obligations are reflected in the balance sheets as regulatory liabilities and amounts to be recovered are reflected in the balance sheets as regulatory assets.

The ARO liabilities for the traditional electric operating companies primarily relate to facilities that are subject to the CCR Rule and the related state rules, principally ash ponds. In addition, Alabama Power and Georgia Power have retirement obligations related to the decommissioning of nuclear facilities (Alabama Power's Plant Farley and Georgia Power's ownership interests in Plant Hatch and Plant Vogtle Units 1 and 2). See "Nuclear Decommissioning" herein for additional information. Other significant AROs include various landfill sites and asbestos removal for Alabama Power, Georgia Power, and Mississippi Power and gypsum cells and mine reclamation for Mississippi Power. The ARO liability for Southern Power primarily relates to its solar and wind facilities, which are located on long-term land leases requiring the restoration of land at the end of the lease.

The traditional electric operating companies and Southern Company Gas also have identified other retirement obligations, such as obligations related to certain electric transmission and distribution facilities, certain asbestos-containing material within long-term assets not subject to ongoing repair and maintenance activities, certain wireless communication towers, the disposal of polychlorinated biphenyls in certain transformers, leasehold improvements, equipment on customer property, and property associated with the Southern Company system's rail lines and natural gas pipelines. However, liabilities for the removal of these assets have not been recorded because the settlement timing for certain retirement obligations related to these assets is indeterminable and, therefore, the fair value of the retirement obligations cannot be reasonably estimated. A liability for these retirement obligations will be recognized when sufficient information becomes available to support a reasonable estimation of the ARO.

Southern Company and the traditional electric operating companies will continue to recognize in their respective statements of income allowed removal costs in accordance with regulatory treatment. Any differences between costs recognized in accordance with accounting standards related to asset retirement and environmental obligations and those reflected in rates are recognized as either a regulatory asset or liability in the balance sheets as ordered by the various state PSCs.

Details of the AROs included in the balance sheets are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power ^(*)
	<i>(in millions)</i>				
Balance at December 31, 2020	\$ 10,684	\$ 3,974	\$ 6,265	\$ 176	\$ 95
Liabilities incurred	26	—	3	—	23
Liabilities settled	(456)	(202)	(210)	(24)	—
Accretion	407	156	236	7	5
Cash flow revisions	1,026	406	530	31	8
Balance at December 31, 2021	\$ 11,687	\$ 4,334	\$ 6,824	\$ 190	\$ 131
Liabilities incurred	36	—	35	—	—
Liabilities settled	(455)	(205)	(212)	(20)	—
Accretion	406	158	231	6	6
Cash flow revisions	(834)	—	(844)	3	7
Balance at December 31, 2022	\$ 10,840	\$ 4,287	\$ 6,034	\$ 179	\$ 144

(*) Included in other deferred credits and liabilities on Southern Power's consolidated balance sheets.

During 2021, Alabama Power recorded increases totaling approximately \$406 million to its AROs primarily related to the CCR Rule and the related state rule based on updated estimates for post-closure costs at its ash ponds and inflation rates.

Notes to Financial Statements

During 2021, Georgia Power refined the cost estimates related to its plans to close the ash ponds at all of its generating plants in compliance with the CCR Rule and the related state rule, including updates to estimates for inflation rates and the timing of closure activities, and recorded an increase of approximately \$435 million to its AROs related to the CCR Rule and the related state rule. In December 2022, Georgia Power recorded a net decrease of approximately \$780 million to its AROs related to the CCR Rule and the related state rule resulting from changes in estimates, including lower future inflation rates, higher discount rates, and timing of closure activities, as well as a change in closure methodology for one ash pond as approved in Georgia Power's 2022 IRP. See Note 2 under "Georgia Power – Integrated Resource Plans" for additional information.

During 2021, Mississippi Power recorded an increase of approximately \$31 million to its AROs related to the CCR Rule based on updated estimates for the timing of closure activities, post-closure costs at one of its ash ponds, and inflation rates.

The cost estimates for AROs related to the disposal of CCR are based on information at December 31, 2022 using various assumptions related to closure and post-closure costs, timing of future cash outlays, inflation and discount rates, and the potential methods for complying with the CCR Rule and the related state rules. The traditional electric operating companies have periodically updated, and expect to continue periodically updating, their related cost estimates and ARO liabilities for each CCR unit as additional information related to these assumptions becomes available. Some of these updates have been, and future updates may be, material. The cost estimates for Alabama Power and Mississippi Power are based on closure-in-place for all ash ponds. The cost estimates for Georgia Power are based on a combination of closure-in-place for some ash ponds and closure by removal for others. Additionally, the closure designs and plans in the States of Alabama and Georgia are subject to approval by environmental regulatory agencies. Absent continued recovery of ARO costs through regulated rates, results of operations, cash flows, and financial condition for Southern Company and the traditional electric operating companies could be materially impacted. The ultimate outcome of these matters cannot be determined at this time.

Nuclear Decommissioning

The NRC requires licensees of commercial nuclear power reactors to establish a plan for providing reasonable assurance of funds for future decommissioning. Alabama Power and Georgia Power have external trust funds (Funds) to comply with the NRC's regulations. Use of the Funds is restricted to nuclear decommissioning activities. The Funds are managed and invested in accordance with applicable requirements of various regulatory bodies, including the NRC, the FERC, and state PSCs, as well as the IRS. While Alabama Power and Georgia Power are allowed to prescribe an overall investment policy to the Funds' managers, neither Southern Company nor its subsidiaries or affiliates are allowed to engage in the day-to-day management of the Funds or to mandate individual investment decisions. Day-to-day management of the investments in the Funds is delegated to unrelated third-party managers with oversight by the management of Alabama Power and Georgia Power. The Funds' managers are authorized, within certain investment guidelines, to actively buy and sell securities at their own discretion in order to maximize the return on the Funds' investments. The Funds are invested in a tax-efficient manner in a diversified mix of equity and fixed income securities and are reported as trading securities.

Alabama Power and Georgia Power record the investment securities held in the Funds at fair value, as disclosed in Note 13, as management believes that fair value best represents the nature of the Funds. Gains and losses, whether realized or unrealized, are recorded in the regulatory liability for AROs in the balance sheets and are not included in net income or OCI. Fair value adjustments and realized gains and losses are determined on a specific identification basis.

The Funds at Georgia Power participate in a securities lending program through the managers of the Funds. Under this program, Georgia Power's Funds' investment securities are loaned to institutional investors for a fee. Securities loaned are fully collateralized by cash, letters of credit, and/or securities issued or guaranteed by the U.S. government or its agencies or instrumentalities. At December 31, 2022 and 2021, approximately \$35 million and \$42 million, respectively, of the fair market value of Georgia Power's Funds' securities were on loan and pledged to creditors under the Funds' managers' securities lending program. The fair value of the collateral received was approximately \$36 million and \$43 million at December 31, 2022 and 2021, respectively, and can only be sold by the borrower upon the return of the loaned securities. The collateral received is treated as a non-cash item in the statements of cash flows.

Notes to Financial Statements

Investment securities in the Funds for December 31, 2022 and 2021 were as follows:

	Southern Company	Alabama Power	Georgia Power
	<i>(in millions)</i>		
At December 31, 2022:			
Equity securities	\$ 1,095	\$ 690	\$ 405
Debt securities	838	267	571
Other securities	210	168	42
Total investment securities in the Funds	<u>\$ 2,143</u>	<u>\$ 1,125</u>	<u>\$ 1,018</u>
At December 31, 2021:			
Equity securities	\$ 1,358	\$ 849	\$ 509
Debt securities	986	316	670
Other securities	197	159	38
Total investment securities in the Funds	<u>\$ 2,541</u>	<u>\$ 1,324</u>	<u>\$ 1,217</u>

These amounts exclude receivables related to investment income and pending investment sales and payables related to pending investment purchases. For Southern Company and Georgia Power, these amounts include Georgia Power's investment securities pledged to creditors and collateral received and excludes payables related to Georgia Power's securities lending program.

The fair value increases (decreases) of the Funds, including unrealized gains (losses) and reinvested interest and dividends and excluding the Funds' expenses, for 2022, 2021, and 2020 are shown in the table below.

	Southern Company	Alabama Power	Georgia Power
	<i>(in millions)</i>		
Fair value increases (decreases)			
2022	\$(360)	\$(171)	\$(189)
2021	274	200	74
2020	280	142	138
Unrealized gains (losses)			
At December 31, 2022	\$(391)	\$(204)	\$(187)
At December 31, 2021	(27)	(30)	3
At December 31, 2020	220	121	99

The investment securities held in the Funds continue to be managed with a long-term focus. Accordingly, all purchases and sales within the Funds are presented separately in the statements of cash flows as investing cash flows, consistent with the nature of the securities and purpose for which the securities were acquired.

For Alabama Power, approximately \$14 million and \$15 million at December 31, 2022 and 2021, respectively, previously recorded in internal reserves is being transferred into the Funds through 2040 as approved by the Alabama PSC.

The NRC's minimum external funding requirements are based on a generic estimate of the cost to decommission only the radioactive portions of a nuclear unit based on the size and type of reactor. Alabama Power and Georgia Power have filed plans with the NRC designed to ensure that, over time, the deposits and earnings of the Funds will provide the minimum funding amounts prescribed by the NRC.

Notes to Financial Statements

At December 31, 2022 and 2021, the accumulated provisions for the external decommissioning trust funds were as follows:

	2022	2021
	<i>(in millions)</i>	
Alabama Power		
Plant Farley	\$1,125	\$1,324
Georgia Power		
Plant Hatch	\$ 628	\$ 757
Plant Vogtle Units 1 and 2	382	460
Plant Vogtle Unit 3	8	—
Total	\$1,018	\$1,217

Site study cost is the estimate to decommission a specific facility as of the site study year. The decommissioning cost estimates are based on prompt dismantlement and removal of the plant from service. The actual decommissioning costs may vary from these estimates because of changes in the assumed date of decommissioning, changes in NRC requirements, or changes in the assumptions used in making these estimates. The estimated costs of decommissioning at December 31, 2022 based on the most current studies, which were performed in 2018 for Alabama Power and in 2021 for Georgia Power, were as follows:

	Plant Farley	Plant Hatch ^(*)	Plant Vogtle Units 1 and 2 ^(*)
Decommissioning periods:			
Beginning year	2037	2034	2047
Completion year	2076	2075	2079
	<i>(in millions)</i>		
Site study costs:			
Radiated structures	\$1,234	\$ 771	\$628
Spent fuel management	387	186	170
Non-radiated structures	99	61	85
Total site study costs	\$1,720	\$ 1,018	\$883

(*) Based on Georgia Power's ownership interests.

For ratemaking purposes, Alabama Power's decommissioning costs are based on the site study and Georgia Power's decommissioning costs are based on the NRC generic estimate to decommission the radioactive portion of the facilities and the site study estimate for spent fuel management as of 2021. Significant assumptions used to determine these costs for ratemaking were an estimated inflation rate of 4.5% and 2.5% for Alabama Power and Georgia Power, respectively, and an estimated trust earnings rate of 7.0% and 4.5% for Alabama Power and Georgia Power, respectively. The next site study for Alabama Power is expected to be completed later in 2023.

Alabama Power's site-specific estimates of decommissioning costs for Plant Farley are updated every five years. Projections of funds are reviewed with the Alabama PSC to ensure that, over time, the deposits and earnings of the Funds will provide adequate funding to cover the site-specific costs. If necessary, Alabama Power would seek the Alabama PSC's approval to address any changes in a manner consistent with NRC and other applicable requirements.

Under the 2019 ARP, Georgia Power's annual decommissioning cost for ratemaking was a total of \$4 million for Plant Hatch and Plant Vogtle Units 1 and 2. Effective January 1, 2023, as approved in the 2022 ARP, there is no annual decommissioning cost for ratemaking. Any funding amount required by the NRC during the period covered by the 2022 ARP will be deferred to a regulatory asset and recovery is expected to be determined in Georgia Power's next base rate case. See Note 2 under "Georgia Power – Rate Plans – 2022 ARP" for additional information.

7. CONSOLIDATED ENTITIES AND EQUITY METHOD INVESTMENTS

The Registrants may hold ownership interests in a number of business ventures with varying ownership structures. Partnership interests and other variable interests are evaluated to determine if each entity is a VIE. If a venture is a VIE for which a Registrant is the primary beneficiary, the assets, liabilities, and results of operations of the entity are consolidated. The Registrants reassess the conclusion as to whether an entity is a VIE upon certain occurrences, which are deemed reconsideration events.

Notes to Financial Statements

For entities that are not determined to be VIEs, the Registrants evaluate whether they have control or significant influence over the investee to determine the appropriate consolidation and presentation. Generally, entities under the control of a Registrant are consolidated, and entities over which a Registrant can exert significant influence, but which a Registrant does not control, are accounted for under the equity method of accounting.

Investments accounted for under the equity method are recorded within equity investments in unconsolidated subsidiaries in the balance sheets and, for Southern Company and Southern Company Gas, the equity income is recorded within earnings from equity method investments in the statements of income. See "SEGCO" and "Southern Company Gas" herein for additional information.

Southern Company

At December 31, 2022 and 2021, Southern Holdings had equity method investments totaling \$112 million and \$101 million, respectively, primarily related to investments in venture capital funds focused on energy and utility investments. Earnings from these investments were immaterial for all periods presented.

SEGCO

Alabama Power and Georgia Power own equally all of the outstanding capital stock of SEGCO, which owns electric generating units with a total rated capacity of 1,020 MWs, as well as associated transmission facilities. Retirement of SEGCO's generating units is expected to occur by December 31, 2028. Alabama Power and Georgia Power account for SEGCO using the equity method; Southern Company consolidates SEGCO. The capacity of these units is sold equally to Alabama Power and Georgia Power. Alabama Power and Georgia Power make payments sufficient to provide for the operating expenses, taxes, interest expense, and a ROE. The share of purchased power included in purchased power, affiliates in the statements of income totaled \$124 million in 2022, \$75 million in 2021, and \$67 million in 2020 for Alabama Power and \$127 million in 2022, \$77 million in 2021, and \$69 million in 2020 for Georgia Power.

SEGCO paid dividends of \$14 million in 2022, \$14 million in 2021, and \$12 million in 2020, one half of which were paid to each of Alabama Power and Georgia Power. In addition, Alabama Power and Georgia Power each recognize 50% of SEGCO's net income.

Alabama Power, which owns and operates a generating unit adjacent to the SEGCO generating units, has a joint ownership agreement with SEGCO for the ownership of an associated gas pipeline. Alabama Power owns 14% of the pipeline with the remaining 86% owned by SEGCO.

See Note 3 under "Guarantees" for additional information regarding guarantees of Alabama Power and Georgia Power related to SEGCO.

Southern Power

Variable Interest Entities

Southern Power has certain subsidiaries that are determined to be VIEs. Southern Power is considered the primary beneficiary of these VIEs because it controls the most significant activities of the VIEs, including operating and maintaining the respective assets, and has the obligation to absorb expected losses of these VIEs to the extent of its equity interests.

SP Solar and SP Wind

SP Solar is owned by Southern Power and Global Atlantic Financial Group Limited (Global Atlantic). A wholly-owned subsidiary of Southern Power is the general partner and holds a 1% ownership interest, and another wholly-owned subsidiary of Southern Power owns a 66% ownership interest. Global Atlantic is the limited partner and holds the remaining 33% noncontrolling interest. SP Solar qualifies as a VIE since the arrangement is structured as a limited partnership and the 33% limited partner does not have substantive kick-out rights against the general partner.

At December 31, 2022 and 2021, SP Solar had total assets of \$5.9 billion and \$6.1 billion, respectively, total liabilities of \$0.4 billion, and noncontrolling interests of \$1.1 billion. Cash distributions from SP Solar are allocated 67% to Southern Power and 33% to Global Atlantic in accordance with their partnership interest percentage. Under the terms of the limited partnership agreement, distributions without limited partner consent are limited to available cash and SP Solar is obligated to distribute all such available cash to its partners each quarter. Available cash includes all cash generated in the quarter subject to the maintenance of appropriate operating reserves.

SP Wind is owned by Southern Power and three financial investors. A wholly-owned subsidiary of Southern Power owns 100% of the Class B membership interests and the three financial investors own 100% of the Class A membership interests. SP Wind qualifies as a VIE since the structure of the arrangement is similar to a limited partnership and the Class A members do not have substantive kick-out rights against Southern Power.

Notes to Financial Statements

At December 31, 2022 and 2021, SP Wind had total assets of \$2.2 billion and \$2.3 billion, respectively, total liabilities of \$169 million and \$130 million, respectively, and noncontrolling interests of \$39 million and \$41 million, respectively. Under the terms of the limited liability agreement, distributions without Class A member consent are limited to available cash and SP Wind is obligated to distribute all such available cash to its members each quarter. Available cash includes all cash generated in the quarter subject to the maintenance of appropriate operating reserves. Cash distributions from SP Wind are generally allocated 60% to Southern Power and 40% to the three financial investors in accordance with the limited liability agreement.

Southern Power consolidates both SP Solar and SP Wind, as the primary beneficiary, since it controls the most significant activities of each entity, including operating and maintaining their assets. Certain transfers and sales of the assets in the VIEs are subject to partner consent and the liabilities are non-recourse to the general credit of Southern Power. Liabilities consist of customary working capital items and do not include any long-term debt.

Other Variable Interest Entities

Southern Power has other consolidated VIEs that relate to certain subsidiaries that have either sold noncontrolling interests to tax equity investors or acquired less than a 100% interest from facility developers. These entities are considered VIEs because the arrangements are structured similar to a limited partnership and the noncontrolling members do not have substantive kick-out rights.

At December 31, 2022 and 2021, the other VIEs had total assets of \$1.8 billion and \$1.9 billion, respectively, total liabilities of \$0.2 billion and \$0.3 billion, respectively, and noncontrolling interests of \$0.8 billion and \$0.9 billion, respectively. Under the terms of the partnership agreements, distributions of all available cash are required each month or quarter and additional distributions require partner consent.

Equity Method Investments

At December 31, 2022 and 2021, Southern Power had equity method investments in wind and battery energy storage projects totaling \$49 million and \$86 million, respectively. Earnings (loss) from these investments were immaterial for all periods presented. During 2022, Southern Power sold equity method investments in wind projects and received proceeds totaling \$38 million. The gains associated with the sales were immaterial. Subsequent to December 31, 2022, Southern Power sold its remaining equity method investments in wind and battery energy storage projects and received proceeds of \$50 million. The gains associated with the transactions were immaterial.

Southern Company Gas

Equity Method Investments

The carrying amounts of Southern Company Gas' equity method investments at December 31, 2022 and 2021 and related earnings (loss) from those investments for the years ended December 31, 2022, 2021, and 2020 were as follows:

Investment Balance	December 31, 2022	December 31, 2021
	<i>(in millions)</i>	
SNG	\$1,243	\$ 1,129
Other ^(*)	33	44
Total	\$1,276	\$ 1,173

(*) Balance at December 31, 2022 reflects an \$11 million distribution received in 2022 from PennEast Pipeline.

Earnings (Loss) from Equity Method Investments	2022	2021	2020
	<i>(in millions)</i>		
SNG	\$146	\$127	\$129
PennEast Pipeline ^(*)	—	(81)	7
Other	2	4	5
Total	\$148	\$ 50	\$141

(*) For 2021, includes pre-tax impairment charges totaling \$84 million. See "PennEast Pipeline Project" herein for additional information, including the September 2021 cancellation of the project. For 2020, earnings primarily result from AFUDC equity recorded by the project entity.

Notes to Financial Statements

PennEast Pipeline Project

In 2014, Southern Company Gas entered into a partnership in which it holds a 20% ownership interest in the PennEast Pipeline, an interstate pipeline company formed to develop and operate an approximate 118-mile natural gas pipeline between New Jersey and Pennsylvania. In 2019, an appellate court ruled that the PennEast Pipeline does not have federal eminent domain authority over lands in which a state has property rights interests. In June 2021, the U.S. Supreme Court ruled in favor of PennEast Pipeline following a review of the appellate court decision. Southern Company Gas assesses its equity method investments for impairment whenever events or changes in circumstances indicate that the investment may be impaired. Following the U.S. Supreme Court ruling, during the second quarter 2021, Southern Company Gas management reassessed the project construction timing, including the anticipated timing for receipt of a FERC certificate and all remaining state and local permits, as well as potential challenges thereto, and performed an impairment analysis. The outcome of the analysis resulted in a pre-tax impairment charge of \$82 million (\$58 million after tax). In September 2021, PennEast Pipeline announced that further development of the project was no longer supported, and, as a result, all further development of the project ceased. During the third quarter 2021, Southern Company Gas recorded an additional pre-tax charge of \$2 million (\$2 million after tax) related to its share of the project level impairment, as well as \$7 million of additional tax expense, resulting in total pre-tax charges of \$84 million (\$67 million after tax) during 2021 related to the project.

Notes to Financial Statements

8. FINANCING

Long-term Debt

Details of long-term debt at December 31, 2022 and 2021 are provided in the following table:

	At December 31, 2022		Balance Outstanding at December 31,	
	Maturity	Weighted Average Interest Rate	2022	2021
<i>(in millions)</i>				
Southern Company				
Senior notes ^(a)	2023–2052	3.87%	\$35,683	\$33,120
Junior subordinated notes	2024–2081	4.58%	8,836	8,918
FFB loans ^(b)	2023–2044	2.88%	4,874	4,962
Revenue bonds ^(c)	2024–2062	3.25%	2,844	2,662
First mortgage bonds ^(d)	2023–2062	3.46%	2,275	2,100
Medium-term notes	2026–2027	7.03%	84	130
Other long-term debt	2024–2045	4.96%	167	270
Finance lease obligations ^(e)			314	215
Unamortized fair value adjustment			330	359
Unamortized debt premium (discount), net			(193)	(216)
Unamortized debt issuance expenses			(273)	(243)
Total long-term debt			54,941	52,277
Less: Amount due within one year			4,285	2,157
Total long-term debt excluding amount due within one year			\$50,656	\$50,120
Alabama Power				
Senior notes	2023–2052	3.86%	\$ 9,675	\$ 8,725
Revenue bonds ^(c)	2024–2038	3.44%	995	995
Other long-term debt	2026	5.62%	45	45
Finance lease obligations ^(e)			5	4
Unamortized debt premium (discount), net			(18)	(18)
Unamortized debt issuance expenses			(72)	(64)
Total long-term debt			10,630	9,687
Less: Amount due within one year			301	751
Total long-term debt excluding amount due within one year			\$10,329	\$ 8,936
Georgia Power				
Senior notes	2023–2052	3.90%	\$ 7,925	\$ 6,825
Junior subordinated notes	2077	5.00%	270	270
FFB loans ^(b)	2023–2044	2.88%	4,874	4,962
Revenue bonds ^(c)	2025–2062	3.13%	1,738	1,591
Other long-term debt			—	125
Finance lease obligations ^(e)			238	136
Unamortized debt premium (discount), net			(18)	(11)
Unamortized debt issuance expenses			(117)	(114)
Total long-term debt			14,910	13,784
Less: Amount due within one year			901	675
Total long-term debt excluding amount due within one year			\$14,009	\$13,109

Notes to Financial Statements

	At December 31, 2022		Balance Outstanding at December 31,	
	Maturity	Weighted Average Interest Rate	2022	2021
<i>(in millions)</i>				
Mississippi Power				
Senior notes	2024–2051	3.93%	\$ 1,425	\$ 1,425
Revenue bonds ^(c)	2025–2052	3.55%	111	76
Finance lease obligations ^(e)			17	18
Unamortized debt premium (discount), net			2	2
Unamortized debt issuance expenses			(10)	(10)
Total long-term debt			1,545	1,511
Less: Amount due within one year			1	1
Total long-term debt excluding amount due within one year			\$ 1,544	\$ 1,510
Southern Power				
Senior notes ^(a)	2023–2046	3.92%	\$ 2,998	\$ 3,711
Unamortized debt premium (discount), net			(5)	(6)
Unamortized debt issuance expenses			(14)	(17)
Total long-term debt			2,979	3,688
Less: Amount due within one year			290	679
Total long-term debt excluding amount due within one year			\$ 2,689	\$ 3,009
Southern Company Gas				
Senior notes	2023–2051	4.08%	\$ 4,769	\$ 4,348
First mortgage bonds ^(d)	2023–2062	3.46%	2,275	2,100
Medium-term notes	2026–2027	7.03%	84	130
Other long-term debt	2024–2045	3.81%	22	—
Unamortized fair value adjustment			330	359
Unamortized debt premium (discount), net			(8)	(35)
Unamortized debt issuance expenses			(30)	—
Total long-term debt			7,442	6,902
Less: Amount due within one year			400	47
Total long-term debt excluding amount due within one year			\$ 7,042	\$ 6,855

(a) Includes a fair value gain (loss) of \$(31) million and \$5 million at December 31, 2022 and 2021, respectively, related to Southern Power's foreign currency hedge on its euro-denominated senior notes.

(b) Secured by a first priority lien on (i) Georgia Power's undivided ownership interest in Plant Vogtle Units 3 and 4 (primarily the units under construction, the related real property, and any nuclear fuel loaded in the reactor core) and (ii) Georgia Power's rights and obligations under the principal contracts relating to Plant Vogtle Units 3 and 4. See "DOE Loan Guarantee Borrowings" herein for additional information.

(c) Revenue bond obligations represent loans to the traditional electric operating companies from public authorities of funds derived from sales by such authorities of revenue bonds issued to finance pollution control and solid waste disposal and wastewater facilities. In some cases, the revenue bond obligations represent obligations under installment sales agreements with respect to facilities constructed with the proceeds of revenue bonds issued by public authorities. The traditional electric operating companies are required to make payments sufficient for the authorities to meet principal and interest requirements of such bonds. Proceeds from certain issuances are restricted until qualifying expenditures are incurred.

(d) Secured by substantially all of Nicor Gas' properties.

(e) Secured by the underlying lease ROU asset. See Note 9 for additional information.

Notes to Financial Statements

Maturities of long-term debt for the next five years are as follows:

	Southern Company ^(a)	Alabama Power	Georgia Power ^(b)	Mississippi Power	Southern Power ^(c)	Southern Company Gas
			<i>(in millions)</i>			
2023	\$4,293	\$301	\$901	\$ 1	\$290	\$400
2024	2,280	23	499	201	—	—
2025	1,699	251	145	12	500	300
2026	3,726	46	445	1	964	530
2027	2,074	550	510	11	—	154

(a) See notes (b) and (c) below.

(b) Amounts include principal amortization related to the FFB borrowings; however, the final maturity date is February 20, 2044. See "DOE Loan Guarantee Borrowings" herein for additional information.

(c) Southern Power's 2026 maturities include \$564 million of euro-denominated debt at the U.S. dollar denominated hedge settlement amount.

DOE Loan Guarantee Borrowings

Pursuant to the loan guarantee program established under Title XVII of the Energy Policy Act of 2005 (Title XVII Loan Guarantee Program), Georgia Power and the DOE entered into a loan guarantee agreement in 2014 and the Amended and Restated Loan Guarantee Agreement in 2019. Under the Amended and Restated Loan Guarantee Agreement, the DOE agreed to guarantee the obligations of Georgia Power under the FFB Credit Facilities. Under the FFB Credit Facilities, Georgia Power was authorized to make term loan borrowings through the FFB in an amount up to approximately \$5.130 billion, provided that total aggregate borrowings under the FFB Credit Facilities could not exceed 70% of (i) Eligible Project Costs minus (ii) approximately \$1.492 billion (reflecting the amounts received by Georgia Power under the Guarantee Settlement Agreement less the related customer refunds).

In 2021, Georgia Power made the final borrowings under the FFB Credit Facilities and no further borrowings are permitted. During 2022, Georgia Power made principal amortization payments of \$88 million under the FFB Credit Facilities. At December 31, 2022 and 2021, Georgia Power had \$4.9 billion and \$5.0 billion of borrowings outstanding under the FFB Credit Facilities, respectively.

All borrowings under the FFB Credit Facilities are full recourse to Georgia Power, and Georgia Power is obligated to reimburse the DOE for any payments the DOE is required to make to the FFB under its guarantee. Georgia Power's reimbursement obligations to the DOE are full recourse and secured by a first priority lien on (i) Georgia Power's undivided ownership interest in Plant Vogtle Units 3 and 4 (primarily the units under construction, the related real property, and any nuclear fuel loaded in the reactor core) and (ii) Georgia Power's rights and obligations under the principal contracts relating to Plant Vogtle Units 3 and 4. There are no restrictions on Georgia Power's ability to grant liens on other property.

The final maturity date for each advance under the FFB Credit Facilities is February 20, 2044. Interest is payable quarterly and principal payments began in February 2020. Each borrowing under the FFB Credit Facilities bears interest at a fixed rate equal to the applicable U.S. Treasury rate at the time of the borrowing plus a spread equal to 0.375%.

Under the Amended and Restated Loan Guarantee Agreement, Georgia Power is subject to customary borrower affirmative and negative covenants and events of default. In addition, Georgia Power is subject to project-related reporting requirements and other project-specific covenants and events of default.

In the event certain mandatory prepayment events occur, Georgia Power will be required to prepay the outstanding principal amount of all borrowings under the FFB Credit Facilities over a period of five years (with level principal amortization). Among other things, these mandatory prepayment events include (i) the termination of the Vogtle Services Agreement or rejection of the Vogtle Services Agreement in any Westinghouse bankruptcy if Georgia Power does not maintain access to intellectual property rights under the related intellectual property licenses; (ii) termination of the Bechtel Agreement, unless the Vogtle Owners enter into a replacement agreement; (iii) cancellation of Plant Vogtle Units 3 and 4 by the Georgia PSC or by Georgia Power; (iv) failure of the holders of 90% of the ownership interests in Plant Vogtle Units 3 and 4 to vote to continue construction following certain schedule extensions; (v) cost disallowances by the Georgia PSC that could have a material adverse effect on completion of Plant Vogtle Units 3 and 4 or Georgia Power's ability to repay the outstanding borrowings under the FFB Credit Facilities; or (vi) loss of or failure to receive necessary regulatory approvals. Under certain circumstances, insurance proceeds and any proceeds from an event of taking must be applied to immediately prepay outstanding borrowings under the FFB Credit Facilities. Georgia Power also may voluntarily prepay outstanding borrowings under the FFB Credit Facilities. Under the FFB Credit Facilities, any prepayment (whether mandatory or optional) will be made with a make-whole premium or discount, as applicable.

Notes to Financial Statements

In connection with any cancellation of Plant Vogtle Units 3 and 4, the DOE may elect to continue construction of Plant Vogtle Units 3 and 4. In such an event, the DOE will have the right to assume Georgia Power's rights and obligations under the principal agreements relating to Plant Vogtle Units 3 and 4 and to acquire all or a portion of Georgia Power's ownership interest in Plant Vogtle Units 3 and 4.

See Note 2 under "Georgia Power – Nuclear Construction" for additional information.

Secured Debt

Each of Southern Company's subsidiaries is organized as a legal entity, separate and apart from Southern Company and its other subsidiaries. There are no agreements or other arrangements among the Southern Company system companies under which the assets of one company have been pledged or otherwise made available to satisfy obligations of Southern Company or any of its other subsidiaries.

As discussed under "Long-term Debt" herein, the Registrants had secured debt outstanding at December 31, 2022 and 2021. Each Registrant's senior notes, junior subordinated notes, revenue bond obligations, bank term loans, credit facility borrowings, and notes payable are effectively subordinated to all secured debt of each respective Registrant.

Equity Units

In May 2022, Southern Company remarketed \$862.5 million aggregate principal amount of its Series 2019A Remarketable Junior Subordinated Notes due August 1, 2024 (2019A RSNs) and \$862.5 million aggregate principal amount of its Series 2019B Remarketable Junior Subordinated Notes due August 1, 2027 (2019B RSNs), pursuant to the terms of its 2019 Series A Equity Units (Equity Units). In connection with the remarketing, the interest rates on the 2019A RSNs and the 2019B RSNs were reset to 4.475% and 5.113%, respectively, payable on a semi-annual basis. On August 1, 2022, the proceeds were ultimately used to settle the purchase contracts entered into as part of the Equity Units and Southern Company issued approximately 25.2 million shares of common stock and received proceeds of \$1.725 billion. At December 30, 2022 and 2021, the 2019A RSNs and the 2019B RSNs are included in long-term debt on Southern Company's consolidated balance sheets.

Bank Credit Arrangements

At December 31, 2022, committed credit arrangements with banks were as follows:

Company	Expires				Total	Unused	Due within One Year
	2023	2024	2025	2026			
	<i>(in millions)</i>						
Southern Company parent	\$ —	\$ —	\$ —	\$2,000	\$2,000	\$1,998	\$ —
Alabama Power	—	550	—	700	1,250	1,250	—
Georgia Power	—	—	—	1,750	1,750	1,726	—
Mississippi Power	—	150	125	—	275	275	—
Southern Power ^(a)	—	—	—	600	600	569	—
Southern Company Gas ^(b)	250	—	—	1,500	1,750	1,748	250
SEGCO	30	—	—	—	30	30	30
Southern Company	\$280	\$700	\$125	\$6,550	\$7,655	\$7,596	\$280

(a) Does not include Southern Power Company's two \$75 million continuing letter of credit facilities for standby letters of credit, of which \$9 million and \$5 million, respectively, was unused at December 31, 2022. In December 2022, Southern Power amended one of the \$75 million letter of credit facilities, which extended the expiration date from 2023 to 2025. The second \$75 million letter of credit facility also expires in 2025. Southern Power's subsidiaries are not parties to its bank credit arrangements or letter of credit facilities.

(b) Southern Company Gas, as the parent entity, guarantees the obligations of Southern Company Gas Capital, which is the borrower of \$800 million of the credit arrangement expiring in 2026. Southern Company Gas' committed credit arrangement expiring in 2026 also includes \$700 million for which Nicor Gas is the borrower and which is restricted for working capital needs of Nicor Gas. Pursuant to the multi-year credit arrangement expiring in 2026, the allocations between Southern Company Gas Capital and Nicor Gas may be adjusted. Nicor Gas is also the borrower under a \$250 million credit arrangement expiring in 2023. See "Structural Considerations" herein for additional information.

The bank credit arrangements require payment of commitment fees based on the unused portion of the commitments. Commitment fees average less than 1/4 of 1% for the Registrants and Nicor Gas. Subject to applicable market conditions, Southern Company and its subsidiaries expect to renew or replace their bank credit arrangements as needed, prior to expiration. In connection therewith, Southern Company and its subsidiaries may extend the maturity dates and/or increase or decrease the lending commitments thereunder.

These bank credit arrangements, as well as the term loan arrangements of the Registrants, Nicor Gas, and SEGCO, contain covenants that limit debt levels and contain cross-acceleration or, in the case of Southern Power, cross-default provisions to other indebtedness (including guarantee obligations) that are restricted only to the indebtedness of the individual company. Such cross-default provisions to other indebtedness would trigger an event of default if Southern Power defaulted on indebtedness or guarantee obligations over a specified threshold. Such cross-acceleration provisions to other indebtedness would trigger an event of default if the applicable borrower

Notes to Financial Statements

defaulted on indebtedness, the payment of which was then accelerated. Southern Company's, Southern Company Gas', and Nicor Gas' credit arrangements contain covenants that limit debt levels to 70% of total capitalization, as defined in the agreements, and the other subsidiaries' bank credit arrangements contain covenants that limit debt levels to 65% of total capitalization, as defined in the agreements. For purposes of these definitions, debt excludes junior subordinated notes and, in certain arrangements, other hybrid securities. Additionally, for Southern Company and Southern Power, for purposes of these definitions, debt excludes any project debt incurred by certain subsidiaries of Southern Power to the extent such debt is non-recourse to Southern Power and capitalization excludes the capital stock or other equity attributable to such subsidiaries. At December 31, 2022, the Registrants, Nicor Gas, and SEGCO were in compliance with all such covenants. None of the bank credit arrangements contain material adverse change clauses at the time of borrowings.

A portion of the unused credit with banks is allocated to provide liquidity support to the revenue bonds of the traditional electric operating companies and the commercial paper programs of the Registrants, Nicor Gas, and SEGCO. The amount of variable rate revenue bonds of the traditional electric operating companies outstanding requiring liquidity support at December 31, 2022 was approximately \$1.7 billion (comprised of approximately \$789 million at Alabama Power, \$819 million at Georgia Power, and \$69 million at Mississippi Power). In addition, at December 31, 2022, Alabama Power and Georgia Power had approximately \$120 million and \$288 million, respectively, of fixed rate revenue bonds outstanding that are required to be remarketed within the next 12 months.

At both December 31, 2022 and 2021, Southern Power had \$106 million of cash collateral posted related to PPA requirements, which is included in other deferred charges and assets on Southern Power's consolidated balance sheets.

Notes Payable

The Registrants, Nicor Gas, and SEGCO make short-term borrowings primarily through commercial paper programs that have the liquidity support of the committed bank credit arrangements described above under "Bank Credit Arrangements." Southern Power's subsidiaries are not parties or obligors to its commercial paper program. Southern Company Gas maintains commercial paper programs at Southern Company Gas Capital and at Nicor Gas. Nicor Gas' commercial paper program supports working capital needs at Nicor Gas as Nicor Gas is not permitted to make money pool loans to affiliates. All of Southern Company Gas' other subsidiaries benefit from Southern Company Gas Capital's commercial paper program. See "Structural Considerations" herein for additional information.

In addition, Southern Company and certain of its subsidiaries have entered into various bank term loan agreements. Unless otherwise stated, the proceeds of these loans were used to repay existing indebtedness and for general corporate purposes, including working capital and, for the subsidiaries, their continuous construction programs.

Commercial paper and short-term bank term loans are included in notes payable in the balance sheets. Details of short-term borrowings for the applicable Registrants were as follows:

	Notes Payable at December 31, 2022		Notes Payable at December 31, 2021	
	Amount Outstanding	Weighted Average Interest Rate	Amount Outstanding	Weighted Average Interest Rate
	<i>(in millions)</i>		<i>(in millions)</i>	
Southern Company				
Commercial paper	\$ 809	4.7%	\$ 1,140	0.3%
Short-term bank debt	1,800	5.0%	300	0.7%
Total	\$ 2,609	4.9%	\$ 1,440	0.4%
Georgia Power				
Short-term bank debt	\$ 1,600	5.0%	\$ —	—%
Southern Power				
Commercial paper	\$ 225	4.7%	\$ 211	0.3%
Southern Company Gas				
Commercial paper:				
Southern Company Gas Capital	\$ 285	4.8%	\$ 379	0.3%
Nicor Gas	283	4.6%	530	0.3%
Short-term bank debt:				
Nicor Gas	200	4.9%	300	0.7%
Total	\$ 768	4.7%	\$ 1,209	0.4%

See "Bank Credit Arrangements" herein for information on bank term loan covenants that limit debt levels and cross-acceleration or cross-default provisions.

Notes to Financial Statements

Outstanding Classes of Capital Stock

Southern Company

Common Stock

Stock Issued

During 2022, Southern Company issued approximately 3.6 million shares of common stock primarily through equity compensation plans and received proceeds of approximately \$83 million.

See "Equity Units" herein for additional information regarding Southern Company's issuance of approximately 25.2 million shares of common stock in August 2022.

Shares Reserved

At December 31, 2022, a total of 113 million shares were reserved for issuance pursuant to the Southern Investment Plan, employee savings plans, the Outside Directors Stock Plan, the Equity and Incentive Compensation Plan (which includes stock options and performance share units as discussed in Note 12), and an at-the-market program. Of the shares reserved, 28.9 million shares are available for awards under the Equity and Incentive Compensation Plan at December 31, 2022.

Diluted Earnings Per Share

For Southern Company, the only difference in computing basic and diluted earnings per share (EPS) is attributable to awards outstanding under stock-based compensation plans. Earnings per share dilution resulting from stock-based compensation plans is determined using the treasury stock method. Shares used to compute diluted EPS were as follows:

	Average Common Stock Shares		
	2022	2021	2020
As reported shares	1,075	1,061	1,058
Effect of stock-based compensation	6	7	7
Diluted shares	1,081	1,068	1,065

In all years presented, an immaterial number of stock-based compensation awards was excluded from the diluted EPS calculation because the awards were anti-dilutive.

Redeemable Preferred Stock of Subsidiaries

As discussed further under "Alabama Power" herein, the preferred stock and Class A preferred stock of Alabama Power at December 31, 2021 is presented as "Redeemable Preferred Stock of Subsidiaries" on Southern Company's balance sheet in a manner consistent with temporary equity under applicable accounting standards. During 2022, Alabama Power redeemed all of its preferred stock and Class A preferred stock.

Alabama Power

Alabama Power has preferred stock, Class A preferred stock, preference stock, and common stock authorized, but only common stock outstanding at December 31, 2022.

During 2022, Alabama Power redeemed all of its preferred stock and Class A preferred stock at the redemption prices per share provided in the table below, plus accrued and unpaid dividends to the redemption date.

Preferred Stock Redeemed During 2022	Par Value/Stated Capital Per Share	Shares	Redemption Price Per Share
4.92% Preferred Stock	\$100	80,000	\$103.23
4.72% Preferred Stock	\$100	50,000	\$102.18
4.64% Preferred Stock	\$100	60,000	\$103.14
4.60% Preferred Stock	\$100	100,000	\$104.20
4.52% Preferred Stock	\$100	50,000	\$102.93
4.20% Preferred Stock	\$100	135,115	\$105.00
5.00% Class A Preferred Stock	\$ 25	10,000,000	\$ 25.00

Notes to Financial Statements

Prior to being redeemed, Alabama Power's preferred stock and Class A preferred stock, without preference between classes, ranked senior to Alabama Power's common stock with respect to payment of dividends and voluntary and involuntary dissolution. The preferred stock and Class A preferred stock of Alabama Power contained a feature that allowed the holders to elect a majority of Alabama Power's board of directors if preferred dividends were not paid for four consecutive quarters. Because such a potential redemption-triggering event was not solely within the control of Alabama Power, the preferred stock and Class A preferred stock at December 31, 2021 is presented as "Redeemable Preferred Stock" on Alabama Power's balance sheet in a manner consistent with temporary equity under applicable accounting standards.

Georgia Power

Georgia Power has preferred stock, Class A preferred stock, preference stock, and common stock authorized, but only common stock outstanding.

Mississippi Power

Mississippi Power has preferred stock and common stock authorized, but only common stock outstanding.

Dividend Restrictions

The income of Southern Company is derived primarily from equity in earnings of its subsidiaries. At December 31, 2022, consolidated retained earnings included \$4.9 billion of undistributed retained earnings of the subsidiaries.

The traditional electric operating companies and Southern Power can only pay dividends to Southern Company out of retained earnings or paid-in-capital.

See Note 7 under "Southern Power" for information regarding the distribution requirements for certain Southern Power subsidiaries.

By regulation, Nicor Gas is restricted, to the extent of its retained earnings balance, in the amount it can dividend or loan to affiliates and is not permitted to make money pool loans to affiliates. At December 31, 2022, the amount of Southern Company Gas' subsidiary retained earnings restricted for dividend payment totaled \$1.5 billion.

Structural Considerations

Since Southern Company and Southern Company Gas are holding companies, the right of Southern Company and Southern Company Gas and, hence, the right of creditors of Southern Company or Southern Company Gas to participate in any distribution of the assets of any respective subsidiary of Southern Company or Southern Company Gas, whether upon liquidation, reorganization or otherwise, is subject to prior claims of creditors and preferred stockholders of such subsidiary.

Southern Company Gas' 100%-owned subsidiary, Southern Company Gas Capital, was established to provide for certain of Southern Company Gas' ongoing financing needs through a commercial paper program, the issuance of various debt, hybrid securities, and other financing arrangements. Southern Company Gas fully and unconditionally guarantees all debt issued by Southern Company Gas Capital. Nicor Gas is not permitted by regulation to make loans to affiliates or utilize Southern Company Gas Capital for its financing needs.

Southern Power Company's senior notes, bank term loan, commercial paper, and bank credit arrangement are unsecured senior indebtedness, which rank equally with all other unsecured and unsubordinated debt of Southern Power Company. Southern Power's subsidiaries are not issuers, borrowers, or obligors, as applicable, under any of these unsecured senior debt arrangements, which are effectively subordinated to any future secured debt of Southern Power Company and any potential claims of creditors of Southern Power's subsidiaries.

9. LEASES

Lessee

The Registrants recognize leases with a term of greater than 12 months on the balance sheet as lease obligations, representing the discounted future fixed payments due, along with ROU assets that will be amortized over the term of each lease.

Notes to Financial Statements

As lessee, the Registrants lease certain electric generating units (including renewable energy facilities), real estate/land, communication towers, railcars, and other equipment and vehicles. The major categories of lease obligations are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
At December 31, 2022						
Electric generating units ^(*)	\$ 760	\$ 59	\$1,163	\$—	\$ —	\$—
Real estate/land	885	4	54	2	542	36
Communication towers	141	2	4	—	—	23
Railcars	34	12	18	3	—	—
Other	79	4	1	21	—	1
Total	\$1,899	\$ 81	\$1,240	\$26	\$542	\$60
At December 31, 2021						
Electric generating units ^(*)	\$ 802	\$104	\$1,217	\$—	\$ —	\$—
Real estate/land	876	3	49	2	526	45
Communication towers	156	2	4	—	—	24
Railcars	32	10	20	2	—	—
Other	103	5	1	24	—	1
Total	\$1,969	\$124	\$1,291	\$28	\$526	\$70

(*) Amounts related to affiliate leases are eliminated in consolidation for Southern Company. See "Contracts that Contain a Lease" herein for additional information.

Real estate/land leases primarily consist of commercial real estate leases at Southern Company, Georgia Power, and Southern Company Gas and various land leases primarily associated with renewable energy facilities at Southern Power. The commercial real estate leases have remaining terms of up to 23 years while the land leases have remaining terms of up to 44 years, including renewal periods.

Communication towers are leased for the installation of equipment to provide cellular phone service to customers and to support the automated meter infrastructure programs at the traditional electric operating companies and Nicor Gas. Communication tower leases have remaining terms of up to 10 years with options to renew that could extend the terms for an additional 20 years.

Renewal options exist in many of the leases. Except as otherwise noted, the expected term used in calculating the lease obligation generally reflects only the noncancelable period of the lease as it is not considered reasonably certain that the lease will be extended. Land leases associated with renewable energy facilities at Southern Power and communication tower leases for automated meter infrastructure at Nicor Gas include renewal periods reasonably certain of exercise resulting in an expected lease term at least equal to the expected life of the renewable energy facilities and the automated meter infrastructure, respectively.

Contracts that Contain a Lease

While not specifically structured as a lease, some of the PPAs at Alabama Power and Georgia Power are deemed to represent a lease of the underlying electric generating units when the terms of the PPA convey the right to control the use of the underlying assets. Amounts recorded for leases of electric generating units are generally based on the amount of scheduled capacity payments due over the remaining term of the PPA, which varies between one and 17 years. Georgia Power has several PPAs with Southern Power that Georgia Power accounts for as leases with a lease obligation of \$461 million and \$521 million at December 31, 2022 and 2021, respectively. The amount paid for energy under these affiliate PPAs reflects a price that would be paid in an arm's-length transaction as reviewed and approved by the Georgia PSC. Amounts related to the affiliate PPAs are eliminated in consolidation for Southern Company.

Short-term Leases

Leases with an initial term of 12 months or less are not recorded on the balance sheet; the Registrants generally recognize lease expense for these leases on a straight-line basis over the lease term.

Residual Value Guarantees

Residual value guarantees exist primarily in railcar leases at Alabama Power and Georgia Power and the amounts probable of being paid under those guarantees are included in the lease payments. All such amounts are immaterial at December 31, 2022 and 2021.

Notes to Financial Statements

Lease and Nonlease Components

For all asset categories, with the exception of electric generating units, gas pipelines, and real estate leases, the Registrants combine lease payments and any nonlease components, such as asset maintenance, for purposes of calculating the lease obligation and the right-of-use asset.

Balance sheet amounts recorded for operating and finance leases are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
At December 31, 2022						
Operating Leases						
Operating lease ROU assets, net	\$1,531	\$ 71	\$1,007	\$ 9	\$489	\$57
Operating lease obligations – current	\$ 197	\$ 9	\$ 151	\$ 4	\$ 28	\$ 9
Operating lease obligations – non-current	1,388	67	851	5	514	51
Total operating lease obligations ^(*)	\$1,585	\$ 76	\$1,002	\$ 9	\$542	\$60
Finance Leases						
Finance lease ROU assets, net	\$ 292	\$ 5	\$ 205	\$16	\$ —	\$ —
Finance lease obligations – current	\$ 18	\$ 2	\$ 16	\$ 1	\$ —	\$ —
Finance lease obligations – non-current	296	3	222	16	—	—
Total finance lease obligations	\$ 314	\$ 5	\$ 238	\$17	\$ —	\$ —
At December 31, 2021						
Operating Leases						
Operating lease ROU assets, net	\$1,701	\$108	\$1,157	\$10	\$479	\$70
Operating lease obligations – current	\$ 250	\$ 54	\$ 156	\$ 4	\$ 28	\$11
Operating lease obligations – non-current	1,503	66	999	6	497	59
Total operating lease obligations ^(*)	\$1,754	\$121	\$1,155	\$10	\$525	\$70
Finance Leases						
Finance lease ROU assets, net	\$ 197	\$ 4	\$ 104	\$17	\$ —	\$ —
Finance lease obligations – current	\$ 16	\$ 1	\$ 10	\$ 1	\$ —	\$ —
Finance lease obligations – non-current	199	3	126	17	—	—
Total finance lease obligations	\$ 215	\$ 4	\$ 136	\$18	\$ —	\$ —

(*) Includes operating lease obligations related to PPAs at Southern Company, Alabama Power, and Georgia Power totaling \$652 million, \$59 million, and \$952 million, respectively, at December 31, 2022 and \$802 million, \$104 million, and \$1.11 billion, respectively, at December 31, 2021.

If not presented separately on the Registrants' balance sheets, amounts related to leases are presented as follows: operating lease ROU assets, net are included in "other deferred charges and assets"; operating lease obligations are included in "other current liabilities" and "other deferred credits and liabilities," as applicable; finance lease ROU assets, net are included in "plant in service"; and finance lease obligations are included in "securities due within one year" and "long-term debt," as applicable.

Notes to Financial Statements

Lease costs for 2022, 2021, and 2020, which includes both amounts recognized as operations and maintenance expense and amounts capitalized as part of the cost of another asset, are as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2022						
Lease cost						
Operating lease cost ^(*)	\$297	\$ 59	\$198	\$ 5	\$32	\$15
Finance lease cost:						
Amortization of ROU assets	23	1	15	1	—	—
Interest on lease obligations	13	—	17	1	—	—
Total finance lease cost	36	1	32	2	—	—
Short-term lease costs	64	44	13	—	—	—
Variable lease cost	125	13	105	—	5	—
Sublease income	(1)	—	—	—	—	—
Total lease cost	\$521	\$117	\$348	\$ 7	\$37	\$15
2021						
Lease cost						
Operating lease cost ^(*)	\$313	\$ 58	\$208	\$ 2	\$33	\$19
Finance lease cost:						
Amortization of ROU assets	21	1	11	1	—	—
Interest on lease obligations	11	—	16	1	—	—
Total finance lease cost	32	1	27	2	—	—
Short-term lease costs	48	15	24	—	—	—
Variable lease cost	96	4	83	—	5	—
Sublease income	1	—	—	—	—	—
Total lease cost	\$490	\$ 78	\$342	\$ 4	\$38	\$19
2020						
Lease cost						
Operating lease cost ^(*)	\$309	\$ 55	\$212	\$ 3	\$29	\$19
Finance lease cost:						
Amortization of ROU assets	26	1	15	—	—	—
Interest on lease obligations	11	—	16	—	—	—
Total finance lease cost	37	1	31	—	—	—
Short-term lease costs	39	11	26	—	—	—
Variable lease cost	91	4	76	—	7	—
Sublease income	—	(1)	—	—	—	—
Total lease cost	\$476	\$ 70	\$345	\$ 3	\$36	\$19

(*) Includes operating lease costs related to PPAs at Southern Company, Alabama Power, and Georgia Power totaling \$162 million, \$48 million, and \$180 million, respectively, in 2022, \$165 million, \$47 million, and \$184 million, respectively, in 2021, and \$161 million, \$43 million, and \$184 million, respectively, in 2020.

Georgia Power has variable lease payments that are based on the amount of energy produced by certain renewable generating facilities subject to PPAs, including \$45 million, \$41 million, and \$39 million in 2022, 2021, and 2020, respectively, from finance leases which are included in purchased power on Georgia Power's statements of income, of which \$21 million, \$20 million, and \$20 million was included in purchased power, affiliates in 2022, 2021, and 2020, respectively.

Notes to Financial Statements

Other information with respect to cash and noncash activities related to leases, as well as weighted-average lease terms and discount rates, is as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2022						
Other information						
Cash paid for amounts included in the measurements of lease obligations:						
Operating cash flows from operating leases	\$303	\$58	\$206	\$ 5	\$30	\$14
Operating cash flows from finance leases	11	—	20	1	—	—
Financing cash flows from finance leases	16	1	10	1	—	—
ROU assets obtained under operating leases	56	10	17	9	—	3
Reassessment of ROU assets under operating leases	16	—	—	—	16	—
ROU assets obtained under finance leases	118	2	116	—	—	—

2021

Other information

Cash paid for amounts included in the measurements of lease obligations:

Operating cash flows from operating leases	\$308	\$58	\$211	\$ 2	\$28	\$19
Operating cash flows from finance leases	9	—	17	1	—	—
Financing cash flows from finance leases	17	1	9	1	—	—
ROU assets obtained under operating leases	64	3	9	—	72	7
ROU assets obtained under finance leases	3	—	—	—	—	—

2020

Other information

Cash paid for amounts included in the measurements of lease obligations:

Operating cash flows from operating leases	\$310	\$55	\$215	\$ 3	\$28	\$18
Operating cash flows from finance leases	9	—	18	—	—	—
Financing cash flows from finance leases	22	1	11	—	—	—
ROU assets obtained under operating leases	227	63	32	—	51	4
ROU assets obtained under finance leases	10	2	—	—	—	—

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
At December 31, 2022						
Weighted-average remaining lease term in years:						
Operating leases	17.3	13.0	8.1	4.7	34.0	11.0
Finance leases	17.4	6.4	11.8	12.9	N/A	N/A
Weighted-average discount rate:						
Operating leases	4.51%	4.87%	4.52%	3.49%	4.86%	3.79%
Finance leases	4.87%	3.00%	8.06%	2.74%	N/A	N/A

At December 31, 2021

Weighted-average remaining lease term in years:

Operating leases	15.9	9.1	8.7	6.1	32.8	10.5
Finance leases	18.0	8.7	8.5	13.9	N/A	N/A
Weighted-average discount rate:						
Operating leases	4.41%	4.37%	4.45%	2.74%	5.20%	3.61%
Finance leases	4.82%	3.09%	10.81%	2.74%	N/A	N/A

Notes to Financial Statements

Maturities of lease liabilities are as follows:

	At December 31, 2022					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Maturity Analysis						
Operating leases:						
2023	\$ 248	\$ 12	\$ 191	\$ 4	\$ 36	\$11
2024	201	10	165	2	28	11
2025	181	9	138	2	28	11
2026	159	6	135	1	28	8
2027	143	5	135	—	29	3
Thereafter	1,497	64	440	1	1,009	31
Total	2,429	106	1,204	10	1,158	75
Less: Present value discount	844	30	202	1	616	15
Operating lease obligations	\$1,585	\$ 76	\$1,002	\$ 9	\$ 542	\$60
Finance leases:						
2023	\$ 33	\$ 2	\$ 35	\$ 2	\$ —	\$ —
2024	22	1	27	2	—	—
2025	26	1	35	2	—	—
2026	26	1	36	2	—	—
2027	26	—	36	2	—	—
Thereafter	345	—	187	10	—	—
Total	478	5	356	20	—	—
Less: Present value discount	164	—	118	3	—	—
Finance lease obligations	\$ 314	\$ 5	\$ 238	\$17	\$ —	\$ —

Payments made under PPAs at Georgia Power for energy generated from certain renewable energy facilities accounted for as operating and finance leases are considered variable lease costs and are therefore not reflected in the above maturity analysis.

Lessor

The Registrants are each considered lessors in various arrangements that have been determined to contain a lease due to the customer's ability to control the use of the underlying asset owned by the applicable Registrant. For the traditional electric operating companies, these arrangements consist of outdoor lighting contracts accounted for as operating leases with initial terms of up to seven years, after which the contracts renew on a month-to-month basis at the customer's option. For Mississippi Power, these arrangements also include a tolling arrangement related to an electric generating unit accounted for as a sales-type lease with a remaining term of 16 years. For Southern Power, these arrangements consist of PPAs related to electric generating units, including solar and wind facilities, accounted for as operating leases with remaining terms of up to 24 years and PPAs related to battery energy storage facilities accounted for as sales-type leases with remaining terms of up to 19 years. Southern Company Gas is the lessor in operating leases related to gas pipelines with remaining terms of up to 20 years. For Southern Company, these arrangements also include PPAs related to fuel cells accounted for as operating leases with remaining terms of up to 11 years.

Notes to Financial Statements

Lease income for 2022, 2021, and 2020, is as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
2022						
Lease income – interest income on sales-type leases	\$ 25	\$ —	\$ —	\$15	\$ 10	\$ —
Lease income – operating leases	208	77	32	2	85	36
Variable lease income	417	1	—	—	448	—
Total lease income	\$650	\$78	\$32	\$17	\$543	\$36
2021						
Lease income – interest income on sales-type leases	\$ 15	\$ —	\$ —	\$14	\$ 1	\$ —
Lease income – operating leases	223	82	42	2	85	35
Variable lease income	429	—	—	—	456	—
Total lease income	\$667	\$82	\$42	\$16	\$542	\$35
2020						
Lease income – interest income on sales-type leases	\$ 16	\$ —	\$ —	\$12	\$ —	\$ —
Lease income – operating leases	208	45	58	2	87	35
Variable lease income	419	—	—	—	449	—
Total lease income	\$643	\$45	\$58	\$14	\$536	\$35

Lease payments received under tolling arrangements and PPAs consist of either scheduled payments or variable payments based on the amount of energy produced by the underlying electric generating units. Lease income for Alabama Power and Southern Power is included in wholesale revenues. Scheduled payments to be received under outdoor lighting contracts, tolling arrangements, and PPAs accounted for as leases are presented in the following maturity analyses.

Mississippi Power has a tolling arrangement accounted for as a sales-type lease. During 2020 and 2021, Mississippi Power completed construction of additional leased assets under the lease and, upon completion, the book values of \$26 million and \$39 million, respectively, were transferred from CWIP to lease receivables. Each transfer represented a non-cash investing transaction for purposes of the statements of cash flows.

During 2021, Southern Power completed construction of a portion of the Garland and Tranquillity battery energy storage facilities' assets and recorded losses totaling \$40 million upon commencement of the related PPAs, which Southern Power accounts for as sales-type leases. The losses were due to ITCs retained and expected to be realized by Southern Power and its partners in these projects, and no estimated residual asset value was assumed in calculating the losses. Each lease had an initial term of 20 years. Upon commencement of the leases, the book values of the related assets totaling \$210 million were derecognized from CWIP and lease receivables were recorded. The transfers represented noncash investing transactions for purposes of the statement of cash flows. See Note 15 under "Southern Power" for additional information.

The undiscounted cash flows expected to be received for in-service leased assets under the leases are as follows:

	At December 31, 2022		
	Southern Company	Mississippi Power	Southern Power
<i>(in millions)</i>			
2023	\$ 39	\$ 24	\$ 15
2024	38	23	15
2025	37	22	15
2026	36	21	15
2027	35	20	15
Thereafter	364	164	200
Total undiscounted cash flows	\$549	\$274	\$275
Net investment in sales-type lease ^(*)	326	157	169
Difference between undiscounted cash flows and discounted cash flows	\$223	\$117	\$106

(*) For Mississippi Power, included in other current assets and other property and investments on the balance sheets. For Southern Power, included in other current assets (\$15 million and \$12 million at December 31, 2022 and 2021, respectively) and net investment in sales-type leases (\$154 million and \$161 million at December 31, 2022 and 2021, respectively) on the balance sheet.

Notes to Financial Statements

The undiscounted cash flows to be received under operating leases and contracts accounted for as operating leases are as follows:

	At December 31, 2022			Southern Company Gas
	Southern Company	Alabama Power	Southern Power	
	<i>(in millions)</i>			
2023	\$ 145	\$34	\$ 88	\$ 36
2024	114	6	90	34
2025	105	5	74	29
2026	104	3	73	29
2027	104	3	74	28
Thereafter	796	23	166	382
Total	\$1,368	\$74	\$565	\$538

Southern Power receives payments for renewable energy under PPAs accounted for as operating leases that are considered contingent rents and are therefore not reflected in the table above. Alabama Power and Southern Power allocate revenue to the nonlease components of PPAs based on the stand-alone selling price of capacity and energy. The undiscounted cash flows to be received under outdoor lighting contracts accounted for as operating leases at Georgia Power and Mississippi Power are immaterial.

Southern Company Leveraged Lease

At December 31, 2020, a subsidiary of Southern Holdings had four leveraged lease agreements related to energy generation, distribution, and transportation assets, including two domestic and two international projects. During 2021, one of the domestic projects was sold and the agreements for both international projects were terminated. At December 31, 2022, the one remaining leveraged lease agreement, which relates to energy generation, had an expected remaining term of nine years. Southern Company continues to receive federal income tax deductions for depreciation and amortization, as well as interest on long-term debt related to this investment. Southern Company wrote off the related investment balance in 2020, as discussed below.

During the second quarter 2020, following an evaluation of the recoverability of the lease receivable and the expected residual value of the generation assets at the end of the lease, Southern Company management concluded it was no longer probable that any of the associated rental payments scheduled after 2032 would be received, because it was no longer probable the generation assets would be successfully remarketed and continue to operate after that date. Revising the estimated cash flows to be received under the leveraged lease to reflect this conclusion resulted in a full impairment of the lease investment and a pre-tax charge to earnings of \$154 million (\$74 million after tax).

The following table provides a summary of the components of income related to leveraged lease investments. Income was impacted in 2021 and 2020 by the impairment charges discussed below and in Note 15 under "Southern Company." Income in 2021 does not include the impacts of the sale and terminations of leveraged lease projects discussed in Note 15 under "Southern Company."

	2021	2020
	<i>(in millions)</i>	
Pretax leveraged lease income (loss)	\$17	\$ (180)
Income tax benefit (expense)	(5)	98
Net leveraged lease income (loss)	\$12	\$ (82)

On June 30, 2022, the Southern Holdings subsidiary operating the generating plant for the lessee provided notice to the lessee to terminate the related operating and maintenance agreement effective June 30, 2023. The parties to the lease agreement are currently negotiating a potential restructuring, which could result in rescission of the termination notice. The ultimate outcome of this matter cannot be determined at this time but is not expected to have a material impact on Southern Company's financial statements.

The lessee failed to make the semi-annual lease payment due December 15, 2022. As a result, the Southern Holdings subsidiary was unable to make its corresponding payment to the holders of the underlying non-recourse debt related to the generation assets. The parties to the lease have entered into a forbearance agreement which suspends the related contractual rights of the parties while they continue restructuring negotiations. As the remaining amount of Southern Company's lease investment was charged against earnings in the second quarter 2020, termination would not be expected to result in additional charges. Southern Company will continue to monitor the operational performance of the underlying assets and evaluate the ability of the lessee to continue to make the required lease payments and meet its obligations associated with a future closure or retirement of the generation assets and associated properties, including the dry ash landfill.

Notes to Financial Statements

10. INCOME TAXES

Southern Company files a consolidated federal income tax return and the Registrants file various state income tax returns, some of which are combined or unitary. Under a joint consolidated income tax allocation agreement, each Southern Company subsidiary's current and deferred tax expense is computed on a stand-alone basis, and each subsidiary is allocated an amount of tax similar to that which would be paid if it filed a separate income tax return. In accordance with IRS regulations, each company is jointly and severally liable for the federal tax liability.

Current and Deferred Income Taxes

Details of income tax provisions are as follows:

	2022					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Federal —						
Current	\$ 10	\$ 54	\$ 38	\$ 42	\$(43)	\$122
Deferred	455	259	152	(16)	56	(3)
	465	313	190	26	13	119
State —						
Current	27	14	(21)	—	2	42
Deferred	303	96	201	11	5	19
	330	110	180	11	7	61
Total	\$795	\$423	\$ 370	\$ 37	\$ 20	\$180
	2021					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Federal —						
Current	\$ 50	\$104	\$ 311	\$ 25	\$(340)	\$ 85
Deferred	36	172	(449)	(15)	343	35
	86	276	(138)	10	3	120
State —						
Current	(25)	23	71	—	(16)	(68)
Deferred	206	73	(101)	11	—	223
	181	96	(30)	11	(16)	155
Total	\$267	\$372	\$(168)	\$ 21	\$ (13)	\$275
	2020					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Federal —						
Current	\$199	\$198	\$ 365	\$ 18	\$(303)	\$ 82
Deferred	70	44	(224)	(14)	299	53
	269	242	141	4	(4)	135
State —						
Current	100	61	60	—	(4)	35
Deferred	24	34	(49)	10	11	3
	124	95	11	10	7	38
Total	\$393	\$337	\$ 152	\$ 14	\$ 3	\$173

Southern Company's and Southern Power's ITCs and PTCs generated in the current tax year and carried forward from prior tax years that cannot be utilized in the current tax year are reclassified from current to deferred taxes in federal income tax expense in the tables above. Southern Power's ITCs and PTCs reclassified in this manner include \$17 million for 2022, \$6 million for 2021, and \$5 million for 2020. Southern Power received \$49 million, \$289 million, and \$340 million of cash related to federal ITCs under renewable energy initiatives in 2022, 2021, and 2020, respectively. See "Deferred Tax Assets and Liabilities" herein for additional information.

Notes to Financial Statements

In accordance with regulatory requirements, deferred federal ITCs for the traditional electric operating companies are amortized over the average life of the related property, with such amortization normally applied as a credit to reduce depreciation and amortization in the statements of income. Southern Power's and the natural gas distribution utilities' deferred federal ITCs, as well as certain state ITCs for Nicor Gas, are amortized to income tax expense over the life of the respective asset. ITCs amortized in 2022, 2021, and 2020 were immaterial for the traditional electric operating companies and Southern Company Gas and were as follows for Southern Company and Southern Power:

	Southern Company	Southern Power
	<i>(in millions)</i>	
2022	\$83	\$58
2021	84	58
2020	84	59

When Southern Power recognizes tax credits, the tax basis of the asset is reduced by 50% of the ITCs received, resulting in a net deferred tax asset. Southern Power has elected to recognize the tax benefit of this basis difference as a reduction to income tax expense in the year in which the plant reaches commercial operation.

State ITCs and other state credits, which are recognized in the period in which the credits are generated, reduced Georgia Power's income tax expense by \$53 million in 2022, \$66 million in 2021, and \$67 million in 2020.

Southern Power's federal and state PTCs, which are recognized in the period in which the credits are generated, reduced Southern Power's income tax expense by \$27 million in 2022, \$16 million in 2021, and \$15 million in 2020.

Effective Tax Rate

Southern Company's effective tax rate is typically lower than the statutory rate due to employee stock plans' dividend deduction, non-taxable AFUDC equity at the traditional electric operating companies, flowback of excess deferred income taxes at the regulated utilities, and federal income tax benefits from ITCs and PTCs primarily at Southern Power.

In July 2021, Southern Company Gas affiliates completed the sale of Sequent. As a result of the sale, changes in state apportionment rates resulted in \$85 million of additional net state tax expense. See Note 15 under "Southern Company Gas" for additional information.

A reconciliation of the federal statutory income tax rate to the effective income tax rate is as follows:

	2022					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Federal statutory rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
State income tax, net of federal deduction	6.2	4.8	6.5	4.4	1.9	6.4
Employee stock plans' dividend deduction	(0.5)	—	—	—	—	—
Non-deductible book depreciation	0.6	0.5	0.6	0.3	—	—
Flowback of excess deferred income taxes	(6.6)	(1.9)	(9.6)	(7.8)	—	(2.5)
AFUDC-Equity	(1.1)	(0.8)	(1.5)	—	—	—
Federal PTCs	—	—	—	—	(6.6)	—
ITC amortization	(1.3)	(0.1)	(0.1)	—	(17.2)	(0.1)
Noncontrolling interests	0.5	—	—	—	8.4	—
Other	—	0.3	—	0.3	(0.1)	(0.9)
Effective income tax (benefit) rate	18.8%	23.8%	16.9%	18.2%	7.4%	23.9%

Notes to Financial Statements

2021

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Federal statutory rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
State income tax, net of federal deduction	5.5	4.6	(5.7)	4.9	(8.0)	15.1
Employee stock plans' dividend deduction	(0.9)	—	—	—	—	—
Non-deductible book depreciation	0.9	0.5	3.1	0.4	—	—
Flowback of excess deferred income taxes	(11.7)	(2.6)	(49.9)	(15.2)	—	(2.8)
AFUDC-Equity	(1.5)	(0.7)	(6.4)	—	—	—
Federal PTCs	—	—	—	—	(4.6)	—
ITC amortization	(2.2)	(0.1)	(0.4)	—	(29.7)	(0.1)
Noncontrolling interests	0.8	—	—	—	13.4	—
Leveraged lease impairments and dispositions	(1.4)	—	—	—	—	—
Other	(0.1)	0.2	(1.9)	0.6	(0.4)	0.6
Effective income tax (benefit) rate	10.4%	22.9%	(40.2)%	11.7%	(8.3)%	33.8%

2020

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Federal statutory rate	21.0%	21.0%	21.0%	21.0%	21.0%	21.0%
State income tax, net of federal deduction	2.8	5.0	0.5	4.8	2.7	4.0
Employee stock plans' dividend deduction	(0.7)	—	—	—	—	—
Non-deductible book depreciation	0.7	0.6	0.8	0.5	—	—
Flowback of excess deferred income taxes	(8.8)	(3.1)	(12.0)	(18.5)	—	(2.7)
AFUDC-Equity	(0.8)	(0.6)	(1.1)	(0.1)	—	—
Federal PTCs	—	—	—	—	(2.5)	—
ITC amortization	(1.6)	(0.1)	(0.1)	(0.1)	(22.1)	(0.1)
Noncontrolling interests	—	—	—	—	3.1	—
Leveraged lease impairments	(1.6)	—	—	—	—	—
Other	0.2	(0.3)	(0.3)	0.9	(0.9)	0.5
Effective income tax (benefit) rate	11.2%	22.5%	8.8%	8.5%	1.3%	22.7%

Notes to Financial Statements

Deferred Tax Assets and Liabilities

The tax effects of temporary differences between the carrying amounts of assets and liabilities in the financial statements of the Registrants and their respective tax bases, which give rise to deferred tax assets and liabilities, are as follows:

	December 31, 2022					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Deferred tax liabilities —						
Accelerated depreciation	\$ 9,443	\$2,564	\$3,447	\$ 338	\$1,351	\$1,505
Property basis differences	2,350	1,303	693	179	—	150
Employee benefit obligations	888	284	412	43	11	68
AROs	876	499	324	—	—	—
Under recovered fuel and natural gas costs	805	185	548	40	—	32
Regulatory assets —						
AROs	2,006	679	1,285	42	—	—
Employee benefit obligations	677	180	226	30	—	15
Remaining book value of retired assets	400	142	253	5	—	—
Premium on reacquired debt	66	9	57	—	—	—
Other	555	179	181	40	14	82
Total deferred income tax liabilities	18,066	6,024	7,426	717	1,376	1,852
Deferred tax assets —						
AROs	2,882	1,178	1,609	42	—	—
ITC and PTC carryforwards	1,685	12	673	—	794	—
Employee benefit obligations	890	198	304	47	9	89
Estimated loss on plants under construction	888	—	888	—	—	—
Other state deferred tax attributes	388	—	12	239	51	7
Federal effect of net state deferred tax liabilities	365	175	88	—	28	92
Other property basis differences	207	—	79	—	109	—
State effect of federal deferred taxes	136	136	—	—	—	—
Other partnership basis differences	111	—	—	—	111	—
Regulatory liability associated with the Tax Reform Legislation (not subject to normalization)	137	127	—	9	—	—
Long-term debt fair value adjustment	85	—	—	—	—	85
Other comprehensive losses	72	4	5	—	5	—
Other	552	213	186	62	17	28
Total deferred income tax assets	8,398	2,043	3,844	399	1,124	301
Valuation allowance	(257)	—	(125)	(41)	(27)	(9)
Net deferred income tax assets	8,141	2,043	3,719	358	1,097	292
Net deferred income taxes (assets)/liabilities	\$ 9,925	\$3,981	\$3,707	\$ 359	\$ 279	\$1,560
Recognized in the balance sheets:						
Accumulated deferred income taxes — assets	\$ (111)	\$ —	\$ —	\$ (107)	\$ —	\$ —
Accumulated deferred income taxes — liabilities	\$10,036	\$3,981	\$3,707	\$ 466	\$ 279	\$1,560

Notes to Financial Statements

	December 31, 2021					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Deferred tax liabilities —						
Accelerated depreciation	\$ 9,300	\$2,541	\$3,340	\$ 330	\$1,421	\$1,428
Property basis differences	2,301	1,182	781	169	—	148
Federal effect of net state deferred tax assets	—	—	—	22	—	—
Leveraged lease basis differences	61	—	—	—	—	—
Employee benefit obligations	820	268	382	41	11	57
AROs	868	329	494	—	—	—
Under recovered fuel and natural gas costs	315	47	109	15	—	144
Regulatory assets —						
AROs	2,232	863	1,325	44	—	—
Storm damage reserves	18	—	18	—	—	—
Employee benefit obligations	825	205	256	38	—	15
Remaining book value of retired assets	271	145	121	5	—	—
Premium on reacquired debt	72	10	62	—	—	—
Other	368	147	77	34	14	82
Total deferred income tax liabilities	17,451	5,737	6,965	698	1,446	1,874
Deferred tax assets —						
AROs	3,100	1,192	1,819	44	—	—
ITC and PTC carryforwards	1,750	12	704	—	827	—
Employee benefit obligations	1,035	225	342	57	7	77
Estimated loss on plants under construction	825	—	825	—	—	—
Other state deferred tax attributes	361	—	11	246	52	5
Federal effect of net state deferred tax liabilities	305	165	41	—	27	93
Other property basis differences	231	—	90	—	121	—
State effect of federal deferred taxes	135	135	—	—	—	—
Other partnership basis differences	160	—	—	—	160	—
Regulatory liability associated with the Tax Reform Legislation (not subject to normalization)	268	237	19	12	—	—
Long-term debt fair value adjustment	91	—	—	—	—	91
Other comprehensive losses	92	5	15	—	11	—
Other	561	193	153	34	53	62
Total deferred income tax assets	8,914	2,164	4,019	393	1,258	328
Valuation allowance	(207)	—	(73)	(41)	(27)	(9)
Net deferred income tax assets	8,707	2,164	3,946	352	1,231	319
Net deferred income taxes (assets)/liabilities	\$ 8,744	\$3,573	\$3,019	\$ 346	\$ 215	\$1,555
Recognized in the balance sheets:						
Accumulated deferred income taxes — assets	\$ (118)	\$ —	\$ —	\$(118)	\$ —	\$ —
Accumulated deferred income taxes — liabilities	\$ 8,862	\$3,573	\$3,019	\$ 464	\$ 215	\$1,555

The traditional electric operating companies and the natural gas distribution utilities have tax-related regulatory assets (deferred income tax charges) and regulatory liabilities (deferred income tax credits). The regulatory assets are primarily attributable to tax benefits flowed through to customers in prior years, deferred taxes previously recognized at rates lower than the current enacted tax law, and taxes applicable to capitalized interest. The regulatory liabilities are primarily attributable to deferred taxes previously recognized at rates higher than the current enacted tax law and to unamortized ITCs. See Note 2 for each Registrant's related balances at December 31, 2022 and 2021.

Notes to Financial Statements

Tax Credit Carryforwards

Federal ITC/PTC carryforwards at December 31, 2022 were as follows:

	Southern Company	Alabama Power	Georgia Power	Southern Power
	<i>(in millions)</i>			
Federal ITC/PTC carryforwards	\$1,148	\$ 12	\$ 135	\$ 794
Tax year in which federal ITC/PTC carryforwards begin expiring	2031	2032	2031	2035
Year by which federal ITC/PTC carryforwards are expected to be utilized	2026	2025	2025	2026

The estimated tax credit utilization reflects the various sale transactions described in Note 15 and could be further delayed by numerous factors, including the acquisition of additional renewable projects, the purchase of rights to additional PTCs of Plant Vogtle Units 3 and 4 pursuant to certain joint ownership agreements, an increase in Georgia Power's ownership interest percentage in Plant Vogtle Units 3 and 4, changes in taxable income projections, and potential income tax rate changes. See Note 2 under "Georgia Power – Nuclear Construction" for additional information on Plant Vogtle Units 3 and 4.

At December 31, 2022, Georgia Power also had approximately \$434 million in net state investment and other net state tax credit carryforwards for the State of Georgia that will expire between tax years 2022 and 2031 and are not expected to be fully utilized. Georgia Power has a net state valuation allowance of \$98 million associated with these carryforwards.

The ultimate outcome of these matters cannot be determined at this time.

Net Operating Loss Carryforwards

At December 31, 2022, the net state income tax benefit of state and local NOL carryforwards for Southern Company's subsidiaries were as follows:

Company/Jurisdiction	Approximate Net State Income Tax Benefit of NOL Carryforwards	Tax Year NOL Begins Expiring
	<i>(in millions)</i>	
Mississippi Power		
Mississippi	\$189	2031
Southern Power		
Oklahoma	27	2035
Florida	10	2034
Other states	3	Various
Southern Power Total	\$ 40	
Other^(*)		
Georgia	23	2042
New York	11	2036
New York City	14	2036
Other states	21	Various
Southern Company Total	\$298	

(*) Represents other non-registrant Southern Company subsidiaries. Alabama Power, Georgia Power, and Southern Company Gas did not have material state or local NOL carryforwards at December 31, 2022.

State NOLs for Mississippi, Oklahoma, and Florida are not expected to be fully utilized prior to expiration. At December 31, 2022, Mississippi Power had a net state valuation allowance of \$32 million for the Mississippi NOL, Southern Power had net state valuation allowances of \$11 million for the Oklahoma NOL and \$10 million for the Florida NOL, and Southern Company had a net valuation allowance of \$25 million for the New York and New York City NOLs.

The ultimate outcome of these matters cannot be determined at this time.

Notes to Financial Statements

Unrecognized Tax Benefits

Changes in unrecognized tax benefits for the periods presented were as follows:

	Southern Company	Southern Company Gas
		<i>(in millions)</i>
Unrecognized tax benefits at December 31, 2019	\$ —	\$ —
Tax positions changes – increase from prior periods	44	—
Unrecognized tax benefits at December 31, 2020	\$44	\$ —
Tax positions changes – increase from prior periods	3	—
Unrecognized tax benefits at December 31, 2021	\$47	\$ —
Tax positions changes – increase from prior periods	33	32
Unrecognized tax benefits at December 31, 2022	\$80	\$32

The unrecognized tax positions increase from prior periods for 2020 primarily relates to a 2019 state tax filing position to exclude certain gains from 2019 dispositions from taxation in a certain unitary state. It is possible that this position will be resolved in the next 12 months, and if accepted by the state, this position would decrease Southern Company's annual effective tax rate.

The unrecognized tax positions increase from prior periods for 2022 is primarily related to the amendment of certain 2018 state tax filing positions related to Southern Company Gas dispositions. If accepted by the states, these positions would decrease Southern Company's and Southern Company Gas' annual effective tax rates. The ultimate outcome of these unrecognized tax benefits is dependent on acceptance by each state and is not expected to be resolved within the next 12 months.

All of the Registrants classify interest on tax uncertainties as interest expense. Accrued interest for all tax positions was immaterial for all years presented. None of the Registrants accrued any penalties on uncertain tax positions.

The IRS has finalized its audits of Southern Company's consolidated federal income tax returns through 2021. Southern Company is a participant in the Compliance Assurance Process of the IRS. The audits for the Registrants' state income tax returns have either been concluded, or the statute of limitations has expired, for years prior to 2015.

11. RETIREMENT BENEFITS

The Southern Company system has a qualified defined benefit, trustee pension plan covering substantially all employees, with the exception of PowerSecure employees. The qualified pension plan is funded in accordance with requirements of the Employee Retirement Income Security Act of 1974, as amended (ERISA). No contributions to the qualified pension plan were made for the year ended December 31, 2022 and no mandatory contributions to the qualified pension plan are anticipated for the year ending December 31, 2023. The Southern Company system also provides certain non-qualified defined benefits for a select group of management and highly compensated employees, which are funded on a cash basis. In addition, the Southern Company system provides certain medical care and life insurance benefits for retired employees through other postretirement benefit plans. The traditional electric operating companies fund other postretirement trusts to the extent required by their respective regulatory commissions. Southern Company Gas has a separate unfunded supplemental retirement health care plan that provides medical care and life insurance benefits to employees of discontinued businesses. For the year ending December 31, 2023, no contributions to any other postretirement trusts are expected.

Notes to Financial Statements

Actuarial Assumptions

The weighted average rates assumed in the actuarial calculations used to determine both the net periodic costs for the pension and other postretirement benefit plans for the following year and the benefit obligations as of the measurement date are presented below.

Assumptions used to determine net periodic costs:	2022					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate – benefit obligations	3.09%	3.12%	3.07%	3.07%	3.21%	3.04%
Discount rate – interest costs	2.55	2.58	2.51	2.54	2.79	2.53
Discount rate – service costs	3.34	3.36	3.37	3.35	3.36	3.21
Expected long-term return on plan assets	8.25	8.25	8.25	8.25	8.25	8.25
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80
Other postretirement benefit plans						
Discount rate – benefit obligations	2.90%	2.95%	2.87%	2.88%	3.07%	2.82%
Discount rate – interest costs	2.32	2.38	2.30	2.27	2.55	2.17
Discount rate – service costs	3.26	3.30	3.27	3.26	3.25	3.22
Expected long-term return on plan assets	7.21	7.54	6.88	7.22	—	6.08
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80

Assumptions used to determine net periodic costs:	2021					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate – benefit obligations	2.81%	2.85%	2.79%	2.80%	2.99%	2.75%
Discount rate – interest costs	2.13	2.17	2.09	2.12	2.46	2.10
Discount rate – service costs	3.18	3.23	3.21	3.20	3.22	2.97
Expected long-term return on plan assets	8.25	8.25	8.25	8.25	8.25	8.25
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80
Other postretirement benefit plans						
Discount rate – benefit obligations	2.56%	2.63%	2.52%	2.53%	2.78%	2.46%
Discount rate – interest costs	1.84	1.91	1.82	1.78	2.12	1.64
Discount rate – service costs	3.07	3.13	3.08	3.06	3.05	3.01
Expected long-term return on plan assets	7.09	7.18	6.84	6.98	—	6.54
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80

Assumptions used to determine net periodic costs:	2020					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate – benefit obligations	3.41%	3.44%	3.40%	3.41%	3.52%	3.39%
Discount rate – interest costs	2.99	3.01	2.96	2.99	3.18	2.99
Discount rate – service costs	3.66	3.69	3.67	3.67	3.70	3.53
Expected long-term return on plan assets	8.25	8.25	8.25	8.25	8.25	8.25
Annual salary increase	4.73	4.73	4.73	4.73	4.73	4.73
Other postretirement benefit plans						
Discount rate – benefit obligations	3.24%	3.28%	3.22%	3.22%	3.39%	3.19%
Discount rate – interest costs	2.80	2.84	2.79	2.76	2.97	2.71
Discount rate – service costs	3.57	3.61	3.57	3.57	3.57	3.52
Expected long-term return on plan assets	7.25	7.36	7.05	7.07	—	6.69
Annual salary increase	4.73	4.73	4.73	4.73	4.73	4.73

Notes to Financial Statements

Assumptions used to determine benefit obligations:	2022					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate	5.25%	5.26%	5.25%	5.25%	5.31%	5.24%
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80
Other postretirement benefit plans						
Discount rate	5.18%	5.20%	5.17%	5.17%	5.24%	5.16%
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80

Assumptions used to determine benefit obligations:	2021					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Pension plans						
Discount rate	3.09%	3.12%	3.07%	3.07%	3.21%	3.04%
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80
Other postretirement benefit plans						
Discount rate	2.90%	2.95%	2.87%	2.88%	3.07%	2.82%
Annual salary increase	4.80	4.80	4.80	4.80	4.80	4.80

The Registrants estimate the expected rate of return on pension plan and other postretirement benefit plan assets using a financial model to project the expected return on each current investment portfolio. The analysis projects an expected rate of return on each of the different asset classes in order to arrive at the expected return on the entire portfolio relying on each trust's target asset allocation and reasonable capital market assumptions. The financial model is based on four key inputs: anticipated returns by asset class (based in part on historical returns), each trust's target asset allocation, an anticipated inflation rate, and the projected impact of a periodic rebalancing of each trust's portfolio. The Registrants set the expected rate of return assumption using an arithmetic mean which represents the expected simple average return to be earned by the pension plan assets over any one year. The Registrants believe the use of the arithmetic mean is more compatible with the expected rate of return's function of estimating a single year's investment return.

An additional assumption used in measuring the accumulated other postretirement benefit obligations (APBO) was a weighted average medical care cost trend rate. The weighted average medical care cost trend rates used in measuring the APBO for the Registrants at December 31, 2022 were as follows:

	Initial Cost Trend Rate	Ultimate Cost Trend Rate	Year That Ultimate Rate is Reached
Pre-65	6.60%	4.50%	2030
Post-65 medical	5.50	4.50	2030
Post-65 prescription	7.50	4.50	2031

Pension Plans

The total accumulated benefit obligation for the pension plans at December 31, 2022 and 2021 was as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	(in millions)					
December 31, 2022	\$11,422	\$2,601	\$3,534	\$520	\$135	\$ 801
December 31, 2021	14,687	3,362	4,562	672	178	1,030

Actuarial gains of \$3.9 billion and \$393 million were recorded for the annual remeasurement of the Southern Company system pension plans at December 31, 2022 and 2021, respectively, primarily due to increases of 216 basis points and 28 basis points, respectively, in the overall discount rate used to calculate the benefit obligation as a result of higher market interest rates.

Notes to Financial Statements

Changes in the projected benefit obligations and the fair value of plan assets during the plan years ended December 31, 2022 and 2021 were as follows:

	2022					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
	<i>(in millions)</i>					
Change in benefit obligation						
Benefit obligation at beginning of year	\$16,382	\$3,806	\$ 5,012	\$ 743	\$222	\$1,134
Service cost	412	99	103	17	9	34
Interest cost	408	96	123	18	6	28
Benefits paid	(692)	(144)	(226)	(30)	(5)	(75)
Actuarial gain	(3,908)	(951)	(1,161)	(179)	(69)	(253)
Balance at end of year	12,602	2,906	3,851	569	163	868
Change in plan assets						
Fair value of plan assets at beginning of year	17,225	4,141	5,415	786	213	1,241
Actual loss on plan assets	(2,376)	(579)	(753)	(110)	(31)	(167)
Employer contributions	61	9	20	3	1	3
Benefits paid	(692)	(144)	(226)	(30)	(5)	(75)
Fair value of plan assets at end of year	14,218	3,427	4,456	649	178	1,002
Accrued asset	\$ 1,616	\$ 521	\$ 605	\$ 80	\$ 15	\$ 134

	2021					Southern Company Gas
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	
	<i>(in millions)</i>					
Change in benefit obligation						
Benefit obligation at beginning of year	\$16,646	\$3,854	\$ 5,127	\$754	\$217	\$ 1,189
Service cost	434	102	112	18	10	37
Interest cost	346	82	104	16	5	24
Benefits paid	(651)	(137)	(210)	(28)	(4)	(73)
Actuarial gain	(393)	(95)	(121)	(17)	(6)	(43)
Balance at end of year	16,382	3,806	5,012	743	222	1,134
Change in plan assets						
Fair value of plan assets at beginning of year	15,367	3,684	4,844	701	186	1,123
Actual return on plan assets	2,449	586	781	111	30	181
Employer contributions	60	8	—	2	1	10
Benefits paid	(651)	(137)	(210)	(28)	(4)	(73)
Fair value of plan assets at end of year	17,225	4,141	5,415	786	213	1,241
Accrued asset (liability)	\$ 843	\$ 335	\$ 403	\$ 43	\$ (9)	\$ 107

The projected benefit obligations for the qualified and non-qualified pension plans at December 31, 2022 are shown in the following table. All pension plan assets are related to the qualified pension plan.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Projected benefit obligations:						
Qualified pension plan	\$11,928	\$2,799	\$3,717	\$540	\$140	\$819
Non-qualified pension plan	674	107	134	28	23	49

Notes to Financial Statements

Amounts recognized in the balance sheets at December 31, 2022 and 2021 related to the Registrants' pension plans consist of the following:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
<i>(in millions)</i>						
December 31, 2022:						
Prepaid pension costs ^(a)	\$ 2,290	\$ 629	\$ 738	\$ 108	\$ 37	\$ 183
Other regulatory assets, deferred ^(b)	2,455	679	887	123	—	111
Other current liabilities	(56)	(10)	(12)	(2)	(2)	(3)
Employee benefit obligations ^(c)	(618)	(98)	(121)	(26)	(20)	(42)
Other regulatory liabilities, deferred	(85)	—	—	—	—	—
AOCI	24	—	—	—	11	(75)
December 31, 2021:						
Prepaid pension costs ^(a)	\$ 1,657	\$ 464	\$ 563	\$ 78	\$ 20	\$ 175
Other regulatory assets, deferred ^(b)	2,920	809	971	146	—	91
Other current liabilities	(55)	(9)	(12)	(2)	(2)	(2)
Employee benefit obligations ^(c)	(759)	(120)	(148)	(33)	(27)	(66)
Other regulatory liabilities, deferred	(119)	—	—	—	—	—
AOCI	100	—	—	—	35	(45)

(a) Included in prepaid pension and other postretirement benefit costs on Alabama Power's balance sheet and other deferred charges and assets on Southern Power's consolidated balance sheet.

(b) Amounts for Southern Company exclude regulatory assets of \$190 million and \$210 million at December 31, 2022 and 2021, respectively, associated with unamortized amounts in Southern Company Gas' pension plans prior to its acquisition by Southern Company.

(c) Included in other deferred credits and liabilities on Southern Power's consolidated balance sheets.

Presented below are the amounts included in regulatory assets at December 31, 2022 and 2021 related to the portion of the defined benefit pension plan attributable to Southern Company, the traditional electric operating companies, and Southern Company Gas that had not yet been recognized in net periodic pension cost.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
<i>(in millions)</i>					
Balance at December 31, 2022					
Regulatory assets:					
Prior service cost	\$ 10	\$ 4	\$ 7	\$ 1	\$ (9)
Net loss	2,361	675	880	122	66
Regulatory amortization	—	—	—	—	54
Total regulatory assets ^(*)	\$ 2,371	\$ 679	\$ 887	\$ 123	\$ 111
Balance at December 31, 2021					
Regulatory assets:					
Prior service cost	\$ 11	\$ 5	\$ 8	\$ 1	\$ (11)
Net loss	2,790	804	963	145	38
Regulatory amortization	—	—	—	—	64
Total regulatory assets ^(*)	\$ 2,801	\$ 809	\$ 971	\$ 146	\$ 91

(*) Amounts for Southern Company exclude regulatory assets of \$190 million and \$210 million at December 31, 2022 and 2021, respectively, associated with unamortized amounts in Southern Company Gas' pension plans prior to its acquisition by Southern Company.

Notes to Financial Statements

The changes in the balance of regulatory assets related to the portion of the defined benefit pension plan attributable to Southern Company, the traditional electric operating companies, and Southern Company Gas for the years ended December 31, 2022 and 2021 are presented in the following table:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Regulatory assets (liabilities):^(*)					
Balance at December 31, 2020	\$ 4,621	\$ 1,286	\$ 1,598	\$ 235	\$ 205
Net gain	(1,523)	(394)	(527)	(74)	(97)
Reclassification adjustments:					
Amortization of prior service costs	(1)	(1)	(1)	—	2
Amortization of net loss	(296)	(82)	(99)	(15)	(9)
Amortization of regulatory assets ^(*)	—	—	—	—	(10)
Total reclassification adjustments	(297)	(83)	(100)	(15)	(17)
Total change	(1,820)	(477)	(627)	(89)	(114)
Balance at December 31, 2021	\$ 2,801	\$ 809	\$ 971	\$ 146	\$ 91
Net (gain) loss	(183)	(67)	(9)	(12)	27
Reclassification adjustments:					
Amortization of prior service costs	(1)	(1)	(1)	—	2
Amortization of net gain (loss)	(246)	(62)	(74)	(11)	1
Amortization of regulatory assets ^(*)	—	—	—	—	(10)
Total reclassification adjustments	(247)	(63)	(75)	(11)	(7)
Total change	(430)	(130)	(84)	(23)	20
Balance at December 31, 2022	\$ 2,371	\$ 679	\$ 887	\$ 123	\$ 111

(*) Amounts for Southern Company exclude regulatory assets of \$190 million and \$210 million at December 31, 2022 and 2021, respectively, associated with unamortized amounts in Southern Company Gas' pension plans prior to its acquisition by Southern Company.

Presented below are the amounts included in AOCI at December 31, 2022 and 2021 related to the portion of the defined benefit pension plan attributable to Southern Company, Southern Power, and Southern Company Gas that had not yet been recognized in net periodic pension cost.

	Southern Company	Southern Power	Southern Company Gas
	<i>(in millions)</i>		
Balance at December 31, 2022			
AOCI:			
Prior service cost	\$ (2)	\$ —	\$ (3)
Net (gain) loss	26	11	(72)
Total AOCI	\$ 24	\$11	\$(75)
Balance at December 31, 2021			
AOCI:			
Prior service cost	\$ (2)	\$ —	\$ (3)
Net (gain) loss	102	35	(42)
Total AOCI	\$100	\$35	\$(45)

Notes to Financial Statements

The components of OCI related to the portion of the defined benefit pension plan attributable to Southern Company, Southern Power, and Southern Company Gas for the years ended December 31, 2022 and 2021 are presented in the following table:

	Southern Company	Southern Power	Southern Company Gas
	<i>(in millions)</i>		
AOCI:			
Balance at December 31, 2020	\$ 245	\$ 60	\$ 1
Net gain	(128)	(22)	(47)
Reclassification adjustments:			
Amortization of net gain (loss)	(17)	(3)	1
Total change	(145)	(25)	(46)
Balance at December 31, 2021	\$ 100	\$ 35	\$(45)
Net gain	(82)	(22)	(30)
Reclassification adjustments:			
Amortization of net gain (loss)	6	(2)	—
Total reclassification adjustments	6	(2)	—
Total change	(76)	(24)	(30)
Balance at December 31, 2022	\$ 24	\$ 11	\$(75)

Notes to Financial Statements

Components of net periodic pension cost for the Registrants were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2022						
Service cost	\$ 412	\$ 99	\$ 103	\$ 17	\$ 9	\$ 34
Interest cost	408	96	123	18	6	28
Expected return on plan assets	(1,265)	(306)	(399)	(57)	(15)	(91)
Recognized net loss	240	62	75	11	2	8
Net amortization	—	1	1	—	—	15
Prior service cost	—	—	—	—	—	(3)
Net periodic pension cost (income)	\$ (205)	\$ (48)	\$ (97)	\$(11)	\$ 2	\$ (9)
2021						
Service cost	\$ 434	\$ 102	\$ 112	\$ 18	\$ 10	\$ 37
Interest cost	346	82	104	16	5	24
Expected return on plan assets	(1,191)	(287)	(375)	(55)	(14)	(86)
Recognized net loss	314	82	100	15	3	13
Net amortization	1	1	1	—	—	15
Prior service cost	—	—	—	—	—	(3)
Net periodic pension cost (income)	\$ (96)	\$ (20)	\$ (58)	\$ (6)	\$ 4	\$ —
2020						
Service cost	\$ 376	\$ 89	\$ 96	\$ 15	\$ 8	\$ 33
Interest cost	432	100	133	20	6	31
Expected return on plan assets	(1,100)	(264)	(347)	(51)	(13)	(75)
Recognized net loss	269	71	86	13	2	6
Net amortization	1	1	1	—	—	15
Prior service cost	—	—	—	—	—	(3)
Net periodic pension cost (income)	\$ (22)	\$ (3)	\$ (31)	\$ (3)	\$ 3	\$ 7

The service cost component of net periodic pension cost is included in operations and maintenance expenses and all other components of net periodic pension cost are included in other income (expense), net in the Registrants' statements of income.

Net periodic pension cost is the sum of service cost, interest cost, and other costs netted against the expected return on plan assets. The expected return on plan assets is determined by multiplying the expected rate of return on plan assets and the market-related value of plan assets. In determining the market-related value of plan assets, the Registrants have elected to amortize changes in the market value of return-seeking plan assets over five years and to recognize the changes in the market value of liability-hedging plan assets immediately. Given the significant concentration in return-seeking plan assets, the accounting value of plan assets that is used to calculate the expected return on plan assets differs from the current fair value of the plan assets.

Notes to Financial Statements

Future benefit payments reflect expected future service and are estimated based on assumptions used to measure the projected benefit obligation for the pension plans. At December 31, 2022, estimated benefit payments were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Benefit Payments:						
2023	\$ 734	\$155	\$ 230	\$ 32	\$ 6	\$ 83
2024	735	160	236	33	7	57
2025	760	167	243	34	7	58
2026	784	173	248	35	7	60
2027	806	178	252	36	8	61
2028 to 2032	4,262	952	1,304	192	43	323

Other Postretirement Benefits

Changes in the APBO and the fair value of the Registrants' plan assets during the plan years ended December 31, 2022 and 2021 were as follows:

	2022					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Change in benefit obligation						
Benefit obligation at beginning of year	\$1,849	\$440	\$ 656	\$ 76	\$11	\$237
Service cost	23	6	6	1	—	1
Interest cost	42	10	15	2	—	5
Benefits paid	(109)	(23)	(38)	(4)	(1)	(18)
Actuarial gain	(365)	(89)	(125)	(16)	(1)	(46)
Retiree drug subsidy	1	—	—	—	—	—
Balance at end of year	1,441	344	514	59	9	179
Change in plan assets						
Fair value of plan assets at beginning of year	1,251	489	450	29	—	143
Actual loss on plan assets	(218)	(98)	(71)	(4)	—	(25)
Employer contributions	73	4	27	3	1	13
Benefits paid	(108)	(23)	(38)	(4)	(1)	(18)
Fair value of plan assets at end of year	998	372	368	24	—	113
Accrued asset (liability)	\$ (443)	\$ 28	\$ (146)	\$(35)	\$ (9)	\$ (66)

	2021					
	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Change in benefit obligation						
Benefit obligation at beginning of year	\$1,948	\$463	\$ 699	\$ 81	\$ 12	\$248
Service cost	24	6	7	1	—	2
Interest cost	35	9	12	1	—	4
Benefits paid	(105)	(22)	(36)	(5)	—	(18)
Actuarial (gain) loss	(54)	(16)	(26)	(2)	(1)	1
Retiree drug subsidy	1	—	—	—	—	—
Balance at end of year	1,849	440	656	76	11	237
Change in plan assets						
Fair value of plan assets at beginning of year	1,158	458	427	27	—	128
Actual return on plan assets	154	55	55	4	—	18
Employer contributions	43	(2)	4	3	—	15
Benefits paid	(104)	(22)	(36)	(5)	—	(18)
Fair value of plan assets at end of year	1,251	489	450	29	—	143
Accrued asset (liability)	\$ (598)	\$ 49	\$ (206)	\$(47)	\$(11)	\$ (94)

Notes to Financial Statements

Amounts recognized in the balance sheets at December 31, 2022 and 2021 related to the Registrants' other postretirement benefit plans consist of the following:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
December 31, 2022:						
Prepaid other postretirement benefit costs ^(a)	\$ —	\$ 28	\$ —	\$ —	\$ —	\$ —
Other regulatory assets, deferred ^(b)	34	—	19	—	—	—
Other current liabilities	(6)	—	—	—	(1)	—
Employee benefit obligations ^(c)	(437)	—	(146)	(35)	(8)	(66)
Other regulatory liabilities, deferred	(170)	(21)	(58)	(9)	—	(58)
AOCI	(4)	—	—	—	—	(2)
December 31, 2021:						
Prepaid other postretirement benefit costs ^(a)	\$ —	\$ 49	\$ —	\$ —	\$ —	\$ —
Other regulatory assets, deferred ^(b)	97	—	30	2	—	—
Other current liabilities	(5)	—	—	—	—	—
Employee benefit obligations ^(c)	(593)	—	(206)	(47)	(11)	(94)
Other regulatory liabilities, deferred	(171)	(62)	(40)	(1)	—	(34)
AOCI	—	—	—	—	2	(5)

(a) Included in prepaid pension and other postretirement benefit costs on Alabama Power's balance sheet.

(b) Amounts for Southern Company exclude regulatory assets of \$32 million and \$40 million at December 31, 2022 and 2021, respectively, associated with unamortized amounts in Southern Company Gas' other postretirement benefit plans prior to its acquisition by Southern Company.

(c) Included in other deferred credits and liabilities on Southern Power's consolidated balance sheets.

Presented below are the amounts included in net regulatory assets (liabilities) at December 31, 2022 and 2021 related to the other postretirement benefit plans of Southern Company, the traditional electric operating companies, and Southern Company Gas that had not yet been recognized in net periodic other postretirement benefit cost.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Balance at December 31, 2022:					
Regulatory assets (liabilities):					
Prior service cost	\$ 14	\$ 4	\$ 6	\$ 1	\$ 1
Net gain	(150)	(25)	(45)	(10)	(64)
Regulatory amortization	—	—	—	—	5
Total regulatory assets (liabilities) ^(*)	\$(136)	\$(21)	\$(39)	\$(9)	\$(58)
Balance at December 31, 2021:					
Regulatory assets (liabilities):					
Prior service cost	\$ 13	\$ 3	\$ 5	\$ 1	\$ 1
Net gain	(87)	(65)	(15)	—	(51)
Regulatory amortization	—	—	—	—	16
Total regulatory assets (liabilities) ^(*)	\$(74)	\$(62)	\$(10)	\$ 1	\$(34)

(*) Amounts for Southern Company exclude regulatory assets of \$32 million and \$40 million at December 31, 2022 and 2021, respectively, associated with unamortized amounts in Southern Company Gas' other postretirement benefit plans prior to its acquisition by Southern Company.

Notes to Financial Statements

The changes in the balance of net regulatory assets (liabilities) related to the other postretirement benefit plans for the plan years ended December 31, 2022 and 2021 are presented in the following table:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
	<i>(in millions)</i>				
Net regulatory assets (liabilities):^(*)					
Balance at December 31, 2020	\$ 51	\$(21)	\$ 47	\$ 5	\$(23)
Net gain	(120)	(41)	(55)	(4)	(2)
Reclassification adjustments:					
Amortization of prior service costs	1	—	1	—	—
Amortization of net loss	(6)	—	(3)	—	—
Amortization of regulatory assets ^(*)	—	—	—	—	(9)
Total reclassification adjustments	(5)	—	(2)	—	(9)
Total change	(125)	(41)	(57)	(4)	(11)
Balance at December 31, 2021	\$ (74)	\$(62)	\$(10)	\$ 1	\$(34)
Net (gain) loss	(64)	41	(27)	(10)	(13)
Reclassification adjustments:					
Amortization of prior service costs	1	—	—	—	—
Amortization of net gain (loss)	1	—	(2)	—	—
Amortization of regulatory assets ^(*)	—	—	—	—	(11)
Total reclassification adjustments	2	—	(2)	—	(11)
Total change	(62)	41	(29)	(10)	(24)
Balance at December 31, 2022	\$ (136)	\$(21)	\$(39)	\$ (9)	\$(58)

(*) Amounts for Southern Company exclude regulatory assets of \$32 million and \$40 million at December 31, 2022 and 2021, respectively, associated with unamortized amounts in Southern Company Gas' other postretirement benefit plans prior to its acquisition by Southern Company.

Presented below are the amounts included in AOCI at December 31, 2022 and 2021 related to the other postretirement benefit plans of Southern Company, Southern Power, and Southern Company Gas that had not yet been recognized in net periodic other postretirement benefit cost.

	Southern Company	Southern Power	Southern Company Gas
	<i>(in millions)</i>		
Balance at December 31, 2022			
AOCI:			
Prior service cost	\$ 1	\$—	\$—
Net (gain) loss	(5)	—	(2)
Total AOCI	\$ (4)	\$—	\$ (2)
Balance at December 31, 2021			
AOCI:			
Prior service cost	\$ 1	\$—	\$ 1
Net (gain) loss	(1)	2	(6)
Total AOCI	\$—	\$ 2	\$ (5)

Notes to Financial Statements

The components of OCI related to the other postretirement benefit plans for the plan years ended December 31, 2022 and 2021 are presented in the following table:

	Southern Company	Southern Power	Southern Company Gas
	<i>(in millions)</i>		
AOCI:			
Balance at December 31, 2020	\$ 8	\$ 3	\$ —
Net gain	(11)	(1)	—
Reclassification adjustments:			
Amortization of net gain (loss)	3	—	(5)
Total change	(8)	(1)	(5)
Balance at December 31, 2021	\$ —	\$ 2	\$ (5)
Net gain	(3)	(2)	—
Reclassification adjustments:			
Amortization of net gain (loss)	(1)	—	3
Total change	(4)	(2)	3
Balance at December 31, 2022	\$ (4)	\$ —	\$ (2)

Components of the other postretirement benefit plans' net periodic cost for the Registrants were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2022						
Service cost	\$ 23	\$ 6	\$ 6	\$ 1	\$ —	\$ 1
Interest cost	42	10	15	2	—	5
Expected return on plan assets	(80)	(32)	(28)	(2)	1	(9)
Net amortization	(1)	—	2	—	—	6
Net periodic postretirement benefit cost (income)	\$(16)	\$(16)	\$ (5)	\$ 1	\$ 1	\$ 3
2021						
Service cost	\$ 24	\$ 6	\$ 7	\$ 1	\$ —	\$ 2
Interest cost	35	9	12	1	—	4
Expected return on plan assets	(76)	(30)	(26)	(1)	1	(10)
Net amortization	2	—	2	—	—	6
Net periodic postretirement benefit cost (income)	\$(15)	\$(15)	\$ (5)	\$ 1	\$ 1	\$ 2
2020						
Service cost	\$ 22	\$ 6	\$ 6	\$ 1	\$ 1	\$ 2
Interest cost	54	13	20	2	—	7
Expected return on plan assets	(72)	(29)	(26)	(1)	—	(10)
Net amortization	1	—	2	—	—	6
Net periodic postretirement benefit cost (income)	\$ 5	\$(10)	\$ 2	\$ 2	\$ 1	\$ 5

Notes to Financial Statements

The service cost component of net periodic postretirement benefit cost is included in operations and maintenance expenses and all other components of net periodic postretirement benefit cost are included in other income (expense), net in the Registrants' statements of income.

The Registrants' future benefit payments, including prescription drug benefits, are provided in the table below. These amounts reflect expected future service and are estimated based on assumptions used to measure the APBO for the other postretirement benefit plans.

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
Benefit payments:						
2023	\$115	\$ 25	\$ 41	\$ 5	\$1	\$18
2024	110	24	39	5	1	17
2025	114	26	41	5	1	17
2026	113	26	41	5	1	16
2027	113	26	41	5	1	16
2028 to 2032	551	130	199	22	1	68

Benefit Plan Assets

Pension plan and other postretirement benefit plan assets are managed and invested in accordance with all applicable requirements, including ERISA and the Internal Revenue Code. The Registrants' investment policies for both the pension plans and the other postretirement benefit plans cover a diversified mix of assets as described below. Derivative instruments may be used to gain efficient exposure to the various asset classes and as hedging tools. Additionally, the Registrants minimize the risk of large losses primarily through diversification but also monitor and manage other aspects of risk.

The investment strategy for plan assets related to the Southern Company system's qualified pension plan is to be broadly diversified across major asset classes. The asset allocation is established after consideration of various factors that affect the assets and liabilities of the pension plan including, but not limited to, historical and expected returns and interest rates, volatility, correlations of asset classes, the current level of assets and liabilities, and the assumed growth in assets and liabilities. Because a significant portion of the liability of the pension plan is long-term in nature, the assets are invested consistent with long-term investment expectations for return and risk. To manage the actual asset class exposures relative to the target asset allocation, the Southern Company system employs a formal rebalancing program. As additional risk management, external investment managers and service providers are subject to written guidelines to ensure appropriate and prudent investment practices. Management believes the portfolio is well-diversified with no significant concentrations of risk.

Southern Company's investment strategy also includes adjusting the established asset allocation to invest a larger portion of the portfolio in fixed rate debt securities should the qualified pension plan achieve a predetermined funding threshold, which occurred during 2022.

Notes to Financial Statements

Investment Strategies and Benefit Plan Asset Fair Values

A description of the major asset classes that the pension and other postretirement benefit plans are comprised of, along with the valuation methods used for fair value measurement, is provided below:

Description	Valuation Methodology
Domestic equity: A mix of large and small capitalization stocks with generally an equal distribution of value and growth attributes, managed both actively and through passive index approaches.	Domestic and international equities such as common stocks, American depositary receipts, and real estate investment trusts that trade on public exchanges are classified as Level 1 investments and are valued at the closing price in the active market. Equity funds with unpublished prices that are comprised of publicly traded securities (such as commingled/pooled funds) are also valued at the closing price in the active market, but are classified as Level 2.
International equity: A mix of large and small capitalization growth and value stocks with developed and emerging markets exposure, managed both actively and through fundamental indexing approaches.	
Fixed income: A mix of domestic and international bonds.	Investments in fixed income securities, including fixed income pooled funds, are generally classified as Level 2 investments and are valued based on prices reported in the market place. Additionally, the value of fixed income securities takes into consideration certain items such as broker quotes, spreads, yield curves, interest rates, and discount rates that apply to the term of a specific instrument.
Trust-owned life insurance (TOLI): Investments of taxable trusts aimed at minimizing the impact of taxes on the portfolio.	Investments in TOLI policies are classified as Level 2 investments and are valued based on the underlying investments held in the policy's separate accounts. The underlying assets are equity and fixed income pooled funds that are comprised of Level 1 and Level 2 securities.
Real estate: Investments in traditional private market, equity-oriented investments in real properties (indirectly through pooled funds or partnerships) and in publicly traded real estate securities.	Investments in real estate, special situations, and private equity are generally classified as Net Asset Value as a Practical Expedient, since the underlying assets typically do not have publicly available observable inputs. The fund manager values the assets using various inputs and techniques depending on the nature of the underlying investments. Techniques may include purchase multiples for comparable transactions, comparable public company trading multiples, discounted cash flow analysis, prevailing market capitalization rates, recent sales of comparable investments, and independent third-party appraisals. The fair value of partnerships is determined by aggregating the value of the underlying assets less liabilities.
Special situations: Investments in opportunistic strategies with the objective of diversifying and enhancing returns and exploiting short-term inefficiencies, as well as investments in promising new strategies of a longer-term nature.	
Private equity: Investments in private partnerships that invest in private or public securities typically through privately-negotiated and/or structured transactions, including leveraged buyouts, venture capital, and distressed debt.	

For purposes of determining the fair value of the pension plan and other postretirement benefit plan assets and the appropriate level designation, management relies on information provided by the plan's trustee. This information is reviewed and evaluated by management with changes made to the trustee information as appropriate. The fair values presented herein exclude cash, receivables related to investment income and pending investment sales, and payables related to pending investment purchases.

Notes to Financial Statements

The fair values, and actual allocations relative to the target allocations, of the Southern Company system's pension plans at December 31, 2022 and 2021 are presented below.

At December 31, 2022:	Fair Value Measurements Using				Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>							
Southern Company							
Assets:							
Equity:							
Domestic equity	\$ 2,078	\$ 691	\$ —	\$ —	\$ 2,769	45%	43%
International equity	2,166	1,090	—	—	3,256		
Fixed income:							
U.S. Treasury, government, and agency bonds	—	1,469	—	—	1,469	30	28
Mortgage- and asset-backed securities	—	29	—	—	29		
Corporate bonds	—	1,494	—	—	1,494		
Pooled funds	—	607	—	—	607		
Cash equivalents and other	399	7	—	—	406		
Real estate investments	376	—	—	1,887	2,263	13	15
Special situations	—	—	—	187	187	3	2
Private equity	—	—	—	1,717	1,717	9	12
Total	\$ 5,019	\$ 5,387	\$ —	\$ 3,791	\$ 14,197	100%	100%
Liabilities:							
Derivatives	(4)	—	—	—	(4)		
Total	\$ 5,015	\$ 5,387	\$ —	\$ 3,791	\$ 14,193	100%	100%
Alabama Power							
Assets:							
Equity:							
Domestic equity	\$ 500	\$ 167	\$ —	\$ —	\$ 667	45%	43%
International equity	522	263	—	—	785		
Fixed income:							
U.S. Treasury, government, and agency bonds	—	354	—	—	354	30	28
Mortgage- and asset-backed securities	—	7	—	—	7		
Corporate bonds	—	360	—	—	360		
Pooled funds	—	146	—	—	146		
Cash equivalents and other	96	2	—	—	98		
Real estate investments	91	—	—	455	546	13	15
Special situations	—	—	—	45	45	3	2
Private equity	—	—	—	414	414	9	12
Total	\$ 1,209	\$ 1,299	\$ —	\$ 914	\$ 3,422	100%	100%
Liabilities:							
Derivatives	(1)	—	—	—	(1)		
Total	\$ 1,208	\$ 1,299	\$ —	\$ 914	\$ 3,421	100%	100%

Notes to Financial Statements

At December 31, 2022:	Fair Value Measurements Using				Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>							
Georgia Power							
Assets:							
Equity:						45%	43%
Domestic equity	\$ 651	\$ 217	\$ —	\$ —	\$ 868		
International equity	678	342	—	—	1,020		
Fixed income:						30	28
U.S. Treasury, government, and agency bonds	—	460	—	—	460		
Mortgage- and asset-backed securities	—	9	—	—	9		
Corporate bonds	—	468	—	—	468		
Pooled funds	—	190	—	—	190		
Cash equivalents and other	125	2	—	—	127		
Real estate investments	118	—	—	591	709	13	15
Special situations	—	—	—	59	59	3	2
Private equity	—	—	—	538	538	9	12
Total	\$1,572	\$1,688	\$—	\$1,188	\$4,448	100%	100%
Liabilities:							
Derivatives	(1)	—	—	—	(1)		
Total	\$1,571	\$1,688	\$—	\$1,188	\$4,447	100%	100%
Mississippi Power							
Assets:							
Equity:						45%	43%
Domestic equity	\$ 95	\$ 32	\$ —	\$ —	\$ 127		
International equity	99	50	—	—	149		
Fixed income:						30	28
U.S. Treasury, government, and agency bonds	—	67	—	—	67		
Mortgage- and asset-backed securities	—	1	—	—	1		
Corporate bonds	—	68	—	—	68		
Pooled funds	—	28	—	—	28		
Cash equivalents and other	18	—	—	—	18		
Real estate investments	17	—	—	86	103	13	15
Special situations	—	—	—	9	9	3	2
Private equity	—	—	—	78	78	9	12
Total	\$ 229	\$ 246	\$—	\$ 173	\$ 648	100%	100%
Southern Power							
Assets:							
Equity:						45%	43%
Domestic equity	\$ 25	\$ 9	\$ —	\$ —	\$ 34		
International equity	27	14	—	—	41		
Fixed income:						30	28
U.S. Treasury, government, and agency bonds	—	18	—	—	18		
Corporate bonds	—	19	—	—	19		
Pooled funds	—	8	—	—	8		
Cash equivalents and other	5	—	—	—	5		
Real estate investments	5	—	—	24	29	13	15
Special situations	—	—	—	2	2	3	2
Private equity	—	—	—	21	21	9	12
Total	\$ 62	\$ 68	\$—	\$ 47	\$ 177	100%	100%

Notes to Financial Statements

At December 31, 2022:	Fair Value Measurements Using				Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>							
Southern Company Gas							
Assets:							
Equity:						45%	43%
Domestic equity	\$ 146	\$ 49	\$ —	\$ —	\$ 195		
International equity	152	77	—	—	229		
Fixed income:						30	28
U.S. Treasury, government, and agency bonds	—	104	—	—	104		
Mortgage- and asset-backed securities	—	2	—	—	2		
Corporate bonds	—	105	—	—	105		
Pooled funds	—	43	—	—	43		
Cash equivalents and other	28	1	—	—	29		
Real estate investments	27	—	—	133	160	13	15
Special situations	—	—	—	13	13	3	2
Private equity	—	—	—	121	121	9	12
Total	\$ 353	\$ 381	\$ —	\$ 267	\$ 1,001	100%	100%

At December 31, 2021:

<i>(in millions)</i>							
Southern Company							
Assets:							
Equity:						51%	53%
Domestic equity	\$ 3,095	\$ 1,326	\$ —	\$ —	\$ 4,421		
International equity	2,740	1,402	3	—	4,145		
Fixed income:						23	22
U.S. Treasury, government, and agency bonds	—	1,209	—	—	1,209		
Mortgage- and asset-backed securities	—	10	—	—	10		
Corporate bonds	—	1,752	—	—	1,752		
Pooled funds	—	771	—	—	771		
Cash equivalents and other	405	7	—	—	412		
Real estate investments	706	—	—	2,038	2,744	14	15
Special situations	—	—	—	171	171	3	1
Private equity	—	—	—	1,590	1,590	9	9
Total	\$ 6,946	\$ 6,477	\$ 3	\$ 3,799	\$ 17,225	100%	100%

Alabama Power

Assets:							
Equity:						51%	53%
Domestic equity	\$ 743	\$ 319	\$ —	\$ —	\$ 1,062		
International equity	659	337	1	—	997		
Fixed income:						23	22
U.S. Treasury, government, and agency bonds	—	291	—	—	291		
Mortgage- and asset-backed securities	—	2	—	—	2		
Corporate bonds	—	421	—	—	421		
Pooled funds	—	186	—	—	186		
Cash equivalents and other	97	2	—	—	99		
Real estate investments	170	—	—	490	660	14	15
Special situations	—	—	—	41	41	3	1
Private equity	—	—	—	382	382	9	9
Total	\$ 1,669	\$ 1,558	\$ 1	\$ 913	\$ 4,141	100%	100%

Notes to Financial Statements

At December 31, 2021:	Fair Value Measurements Using				Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>							
Georgia Power							
Assets:							
Equity:						51%	53%
Domestic equity	\$ 972	\$ 417	\$ —	\$ —	\$ 1,389		
International equity	861	441	1	—	1,303		
Fixed income:						23	22
U.S. Treasury, government, and agency bonds	—	380	—	—	380		
Mortgage- and asset-backed securities	—	3	—	—	3		
Corporate bonds	—	551	—	—	551		
Pooled funds	—	243	—	—	243		
Cash equivalents and other	127	2	—	—	129		
Real estate investments	222	—	—	641	863	14	15
Special situations	—	—	—	54	54	3	1
Private equity	—	—	—	500	500	9	9
Total	\$ 2,182	\$ 2,037	\$ 1	\$ 1,195	\$ 5,415	100%	100%
Mississippi Power							
Assets:							
Equity:						51%	53%
Domestic equity	\$ 142	\$ 61	\$ —	\$ —	\$ 203		
International equity	126	64	—	—	190		
Fixed income:						23	22
U.S. Treasury, government, and agency bonds	—	55	—	—	55		
Corporate bonds	—	80	—	—	80		
Pooled funds	—	35	—	—	35		
Cash equivalents and other	18	—	—	—	18		
Real estate investments	32	—	—	93	125	14	15
Special situations	—	—	—	8	8	3	1
Private equity	—	—	—	73	73	9	9
Total	\$ 318	\$ 295	\$ —	\$ 174	\$ 787	100%	100%
Southern Power							
Assets:							
Equity:						51%	53%
Domestic equity	\$ 38	\$ 16	\$ —	\$ —	\$ 54		
International equity	34	17	—	—	51		
Fixed income:						23	22
U.S. Treasury, government, and agency bonds	—	15	—	—	15		
Corporate bonds	—	22	—	—	22		
Pooled funds	—	10	—	—	10		
Cash equivalents and other	5	—	—	—	5		
Real estate investments	9	—	—	25	34	14	15
Special situations	—	—	—	2	2	3	1
Private equity	—	—	—	20	20	9	9
Total	\$ 86	\$ 80	\$ —	\$ 47	\$ 213	100%	100%

Notes to Financial Statements

At December 31, 2021:	Fair Value Measurements Using				Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>							
Southern Company Gas							
Assets:							
Equity:						51%	53%
Domestic equity	\$223	\$ 96	\$ —	\$ —	\$ 319		
International equity	197	101	—	—	298		
Fixed income:						23	22
U.S. Treasury, government, and agency bonds	—	87	—	—	87		
Mortgage- and asset-backed securities	—	1	—	—	1		
Corporate bonds	—	126	—	—	126		
Pooled funds	—	56	—	—	56		
Cash equivalents and other	29	—	—	—	29		
Real estate investments	51	—	—	147	198	14	15
Special situations	—	—	—	12	12	3	1
Private equity	—	—	—	115	115	9	9
Total	\$500	\$467	\$—	\$274	\$1,241	100%	100%

Notes to Financial Statements

The fair values, and actual allocations relative to the target allocations, of the applicable Registrants' other postretirement benefit plan assets at December 31, 2022 and 2021 are presented below.

At December 31, 2022:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
<i>(in millions)</i>						
Southern Company						
Assets:						
Equity:					61%	59%
Domestic equity	\$ 85	\$ 74	\$ —	\$ 159		
International equity	58	79	—	137		
Fixed income:					30	28
U.S. Treasury, government, and agency bonds	—	43	—	43		
Mortgage- and asset-backed securities	—	1	—	1		
Corporate bonds	—	40	—	40		
Pooled funds	—	79	—	79		
Cash equivalents and other	19	—	—	19		
Trust-owned life insurance	—	406	—	406		
Real estate investments	11	—	51	62	5	7
Special situations	—	—	6	6	1	1
Private equity	—	—	46	46	3	5
Total	\$173	\$722	\$103	\$998	100%	100%
Alabama Power						
Assets:						
Equity:					69%	65%
Domestic equity	\$ 17	\$ 6	\$ —	\$ 23		
International equity	18	9	—	27		
Fixed income:					23	23
U.S. Treasury, government, and agency bonds	—	12	—	12		
Corporate bonds	—	12	—	12		
Pooled funds	—	7	—	7		
Cash equivalents and other	3	—	—	3		
Trust-owned life insurance	—	252	—	252		
Real estate investments	3	—	16	19	4	7
Special situations	—	—	2	2	1	1
Private equity	—	—	14	14	3	4
Total	\$ 41	\$298	\$ 32	\$371	100%	100%
Georgia Power						
Assets:						
Equity:					58%	56%
Domestic equity	\$ 46	\$ 6	\$ —	\$ 52		
International equity	17	39	—	56		
Fixed income:					35	34
U.S. Treasury, government, and agency bonds	—	10	—	10		
Corporate bonds	—	12	—	12		
Pooled funds	—	40	—	40		
Cash equivalents and other	9	—	—	9		
Trust-owned life insurance	—	154	—	154		
Real estate investments	4	—	15	19	4	5
Special situations	—	—	2	2	1	1
Private equity	—	—	14	14	2	4
Total	\$ 76	\$261	\$ 31	\$368	100%	100%

Notes to Financial Statements

At December 31, 2022:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
	<i>(in millions)</i>					
Mississippi Power						
Assets:						
Equity:					37%	35%
Domestic equity	\$ 3	\$ 1	\$—	\$ 4		
International equity	3	2	—	5		
Fixed income:					43	41
U.S. Treasury, government, and agency bonds	—	4	—	4		
Corporate bonds	—	2	—	2		
Pooled funds	—	1	—	1		
Cash equivalents and other	2	—	—	2		
Real estate investments	1	—	3	4	11	12
Special situations	—	—	—	—	2	2
Private equity	—	—	2	2	7	10
Total	\$ 9	\$ 10	\$ 5	\$ 24	100%	100%

Southern Company Gas

Assets:						
Equity:					72%	70%
Domestic equity	\$ 2	\$ 56	\$—	\$ 58		
International equity	2	20	—	22		
Fixed income:					26	27
U.S. Treasury, government, and agency bonds	—	1	—	1		
Corporate bonds	—	1	—	1		
Pooled funds	—	27	—	27		
Cash equivalents and other	1	—	—	1		
Real estate investments	—	—	2	2	1	2
Private equity	—	—	1	1	1	1
Total	\$ 5	\$105	\$ 3	\$113	100%	100%

Notes to Financial Statements

At December 31, 2021:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
	<i>(in millions)</i>					
Southern Company						
Assets:						
Equity:					64%	66%
Domestic equity	\$ 123	\$ 112	\$ —	\$ 235		
International equity	73	99	—	172		
Fixed income:					27	25
U.S. Treasury, government, and agency bonds	—	37	—	37		
Corporate bonds	—	50	—	50		
Pooled funds	—	90	—	90		
Cash equivalents and other	14	—	—	14		
Trust-owned life insurance	—	530	—	530		
Real estate investments	20	—	54	74	5	6
Special situations	—	—	5	5	1	—
Private equity	—	—	42	42	3	3
Total	\$ 230	\$ 918	\$ 101	\$ 1,249	100%	100%
Alabama Power						
Assets:						
Equity:					71%	69%
Domestic equity	\$ 26	\$ 11	\$ —	\$ 37		
International equity	23	12	—	35		
Fixed income:					21	21
U.S. Treasury, government, and agency bonds	—	10	—	10		
Corporate bonds	—	18	—	18		
Pooled funds	—	6	—	6		
Cash equivalents and other	3	—	—	3		
Trust-owned life insurance	—	341	—	341		
Real estate investments	6	—	17	23	4	7
Special situations	—	—	2	2	1	—
Private equity	—	—	13	13	3	3
Total	\$ 58	\$ 398	\$ 32	\$ 488	100%	100%
Georgia Power						
Assets:						
Equity:					60%	62%
Domestic equity	\$ 65	\$ 13	\$ —	\$ 78		
International equity	22	50	—	72		
Fixed income:					33	30
U.S. Treasury, government, and agency bonds	—	9	—	9		
Corporate bonds	—	14	—	14		
Pooled funds	—	46	—	46		
Cash equivalents and other	5	—	—	5		
Trust-owned life insurance	—	189	—	189		
Real estate investments	7	—	16	23	4	5
Special situations	—	—	1	1	1	—
Private equity	—	—	13	13	2	3
Total	\$ 99	\$ 321	\$ 30	\$ 450	100%	100%

Notes to Financial Statements

At December 31, 2021:	Fair Value Measurements Using			Total	Target Allocation	Actual Allocation
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Net Asset Value as a Practical Expedient (NAV)			
	<i>(in millions)</i>					
Mississippi Power						
Assets:						
Equity:					43%	44%
Domestic equity	\$ 4	\$ 2	\$ —	\$ 6		
International equity	4	2	—	6		
Fixed income:					36	34
U.S. Treasury, government, and agency bonds	—	5	—	5		
Corporate bonds	—	2	—	2		
Pooled funds	—	1	—	1		
Cash equivalents and other	1	—	—	1		
Real estate investments	1	—	3	4	11	13
Special situations	—	—	—	—	2	1
Private equity	—	—	2	2	8	8
Total	\$10	\$ 12	\$ 5	\$ 27	100%	100%

Southern Company Gas

Assets:						
Equity:					72%	73%
Domestic equity	\$ 3	\$ 76	\$ —	\$ 79		
International equity	2	24	—	26		
Fixed income:					26	24
U.S. Treasury, government, and agency bonds	—	1	—	1		
Corporate bonds	—	1	—	1		
Pooled funds	—	30	—	30		
Cash equivalents and other	2	—	—	2		
Real estate investments	1	—	2	3	1	2
Private equity	—	—	1	1	1	1
Total	\$ 8	\$132	\$ 3	\$143	100%	100%

Employee Savings Plan

Southern Company and its subsidiaries also sponsor 401(k) defined contribution plans covering substantially all employees and provide matching contributions up to specified percentages of an employee's eligible pay. Total matching contributions made to the plans for 2022, 2021, and 2020 were as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
	<i>(in millions)</i>					
2022	\$ 124	\$26	\$29	\$5	\$3	\$17
2021	119	26	28	5	2	16
2020	120	26	29	5	2	16

Notes to Financial Statements

12. STOCK COMPENSATION

Stock-based compensation primarily in the form of Southern Company performance share units (PSU) and restricted stock units (RSU) may be granted through the Equity and Incentive Compensation Plan to Southern Company system employees ranging from line management to executives.

At December 31, 2022, the number of current and former employees participating in stock-based compensation programs for the Registrants was as follows:

	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas
Number of employees	1,586	221	236	64	45	186

The majority of PSUs and RSUs awarded contain terms where employees become immediately vested in PSUs and RSUs upon retirement. As a result, compensation expense for employees that are retirement eligible at the grant date is recognized immediately, while compensation expense for employees that become retirement eligible during the vesting period is recognized over the period from grant date to the date of retirement eligibility. In addition, the Registrants recognize forfeitures as they occur.

All unvested PSUs and RSUs vest immediately upon a change in control where Southern Company is not the surviving corporation.

Performance Share Units

PSUs granted to employees vest at the end of a three-year performance period. Shares of Southern Company common stock are delivered to employees at the end of the performance period with the number of shares issued ranging from 0% to 200% of the target number of PSUs granted, based on achievement of the performance goals established by the Compensation Committee of the Southern Company Board of Directors.

Southern Company has issued three types of PSUs, each with a unique performance goal. These types of PSUs include total shareholder return (TSR) awards based on the TSR for Southern Company common stock during the three-year performance period as compared to a group of industry peers; ROE awards based on Southern Company's equity-weighted return over the performance period; and EPS awards based on Southern Company's cumulative EPS over the performance period. EPS awards were last granted in 2017.

The fair value of TSR awards is determined as of the grant date using a Monte Carlo simulation model. In determining the fair value of the TSR awards issued to employees, the expected volatility is based on the historical volatility of Southern Company's stock over a period equal to the performance period. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant that covers the performance period of the awards. The following table shows the assumptions used in the pricing model and the weighted average grant-date fair value of TSR awards granted:

Year Ended December 31	2022	2021	2020
Expected volatility	29.6%	30.0%	15.4%
Expected term (in years)	3	3	3
Interest rate	1.7%	0.2%	1.4%
Weighted average grant-date fair value	\$79.69	\$69.06	\$77.65

The Registrants recognize TSR award compensation expense on a straight-line basis over the three-year performance period without remeasurement.

The fair values of EPS awards and ROE awards are based on the closing stock price of Southern Company common stock on the date of the grant. The weighted average grant-date fair value of the ROE awards granted during 2022, 2021, and 2020 was \$66.87, \$59.49, and \$68.42, respectively. Compensation expense for EPS and ROE awards is generally recognized ratably over the three-year performance period adjusted for expected changes in EPS and ROE performance. Total compensation cost recognized for vested EPS awards and ROE awards reflects final performance metrics.

Southern Company had 2.2 million unvested PSUs outstanding at December 31, 2021. In February 2022, the PSUs that vested for the three-year performance period ended December 31, 2021 were converted into 2.5 million shares outstanding at a share price of \$66.57. During 2022, Southern Company granted 1.3 million PSUs and 1.1 million PSUs were vested or forfeited, resulting in 2.4 million unvested PSUs outstanding at December 31, 2022. In February 2023, the PSUs that vested for the three-year performance period ended December 31, 2022 were converted into 1.8 million shares outstanding at a weighted average share price of \$67.13.

Notes to Financial Statements

Total PSU compensation cost, and the related tax benefit recognized in income, for the years ended December 31, 2022, 2021, and 2020 are as follows:

	2022	2021	2020
		<i>(in millions)</i>	
Southern Company			
Compensation cost recognized in income	\$101	\$112	\$84
Tax benefit of compensation cost recognized in income	26	29	22
Southern Company Gas			
Compensation cost recognized in income	\$ 12	\$ 17	\$13
Tax benefit of compensation cost recognized in income	4	4	4

Total PSU compensation cost and the related tax benefit recognized in income were immaterial for all periods presented for all other Registrants. The compensation cost related to the grant of Southern Company PSUs to the employees of each Subsidiary Registrant is recognized in each Subsidiary Registrant's financial statements with a corresponding credit to equity representing a capital contribution from Southern Company.

At December 31, 2022, Southern Company's total unrecognized compensation cost related to PSUs was \$31 million and is expected to be recognized over a weighted-average period of approximately 19 months. The total unrecognized compensation cost related to PSUs at December 31, 2022 was immaterial for all other Registrants.

Restricted Stock Units

The fair value of RSUs is based on the closing stock price of Southern Company common stock on the date of the grant. The weighted average grant-date fair values of RSUs granted during 2022, 2021, and 2020 were \$67.20, \$59.56, and \$67.60, respectively. For most RSU awards, one-third of the RSUs vest each year throughout a three-year service period and compensation cost for RSUs is generally recognized over the corresponding one-, two-, or three-year vesting period. Shares of Southern Company common stock are delivered to employees at the end of each vesting period.

Southern Company had 1.1 million RSUs outstanding at December 31, 2021. During 2022, Southern Company granted 0.4 million RSUs and 0.6 million RSUs were vested or forfeited, resulting in 0.9 million unvested RSUs outstanding at December 31, 2022, including RSUs related to employee retention agreements.

For the years ended December 31, 2022, 2021, and 2020, Southern Company's total compensation cost for RSUs recognized in income was \$26 million, \$32 million, and \$29 million, respectively. The related tax benefit also recognized in income was \$7 million, \$8 million, and \$8 million for the years ended December 31, 2022, 2021, and 2020, respectively. Total unrecognized compensation cost related to RSUs at December 31, 2022, which is being recognized over a weighted-average period of approximately 18 months, is immaterial for Southern Company.

Total RSUs outstanding and total compensation cost and related tax benefit for the RSUs recognized in income for the years ended December 31, 2022, 2021, and 2020, as well as the total unrecognized compensation cost at December 31, 2022, were immaterial for all other Registrants. The compensation cost related to the grant of Southern Company RSUs to the employees of each Subsidiary Registrant is recognized in such Subsidiary Registrant's financial statements with a corresponding credit to equity representing a capital contribution from Southern Company.

Stock Options

In 2015, Southern Company discontinued granting stock options. As of December 31, 2017, all stock option awards were vested and compensation cost fully recognized. Stock options expire no later than 10 years after the grant date and the latest possible exercise will occur by November 2024. At December 31, 2022, the weighted average remaining contractual term for the options outstanding and exercisable was approximately 10 months.

Southern Company's activity in the stock option program for 2022 is summarized below:

	Shares Subject to Option	Weighted Average Exercise Price
	<i>(in millions)</i>	
Outstanding at December 31, 2021	2.8	\$42.95
Exercised	1.8	43.37
Outstanding and Exercisable at December 31, 2022	1.0	\$42.22

Notes to Financial Statements

Southern Company's cash receipts from issuances related to stock options exercised under the share-based payment arrangements for the years ended December 31, 2022, 2021, and 2020 were \$75 million, \$66 million, and \$66 million, respectively.

At December 31, 2022, the aggregate intrinsic value for options outstanding and exercisable was \$29 million for Southern Company and immaterial for all other Registrants.

Total intrinsic value of options exercised, and the related tax benefit, for the years ended December 31, 2022, 2021, and 2020 are presented below for Southern Company and Georgia Power and were immaterial for all other Registrants:

Year Ended December 31	2022	2021	2020
		<i>(in millions)</i>	
Southern Company			
Intrinsic value of options exercised	\$49	\$34	\$38
Tax benefit of options exercised	12	7	9
Georgia Power			
Intrinsic value of options exercised	\$15	\$14	\$ 9
Tax benefit of options exercised	4	3	2

13. FAIR VALUE MEASUREMENTS

Fair value measurements are based on inputs of observable and unobservable market data that a market participant would use in pricing the asset or liability. The use of observable inputs is maximized where available and the use of unobservable inputs is minimized for fair value measurement and reflects a three-tier fair value hierarchy that prioritizes inputs to valuation techniques used for fair value measurement.

- Level 1 consists of observable market data in an active market for identical assets or liabilities.
- Level 2 consists of observable market data, other than that included in Level 1, that is either directly or indirectly observable.
- Level 3 consists of unobservable market data. The input may reflect the assumptions of each Registrant of what a market participant would use in pricing an asset or liability. If there is little available market data, then each Registrant's own assumptions are the best available information.

In the case of multiple inputs being used in a fair value measurement, the lowest level input that is significant to the fair value measurement represents the level in the fair value hierarchy in which the fair value measurement is reported.

Net asset value as a practical expedient is the classification used for assets that do not have readily determined fair values. Fund managers value the assets using various inputs and techniques depending on the nature of the underlying investments.

Notes to Financial Statements

At December 31, 2022, assets and liabilities measured at fair value on a recurring basis during the period, together with their associated level of the fair value hierarchy, were as follows:

At December 31, 2022:	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
	<i>(in millions)</i>				
Southern Company					
Assets:					
Energy-related derivatives ^(a)	\$ 18	\$ 181	\$ —	\$ —	\$ 199
Interest rate derivatives	—	12	—	—	12
Investments in trusts: ^{(b)(c)}					
Domestic equity	651	178	—	—	829
Foreign equity	125	150	—	—	275
U.S. Treasury and government agency securities	—	285	—	—	285
Municipal bonds	—	51	—	—	51
Pooled funds – fixed income	—	7	—	—	7
Corporate bonds	—	412	—	—	412
Mortgage and asset backed securities	—	90	—	—	90
Private equity	—	—	—	161	161
Cash and cash equivalents	4	—	—	—	4
Other	37	12	—	—	49
Cash equivalents	1,427	20	—	—	1,447
Other investments	9	26	—	—	35
Total	\$2,271	\$1,424	\$ —	\$161	\$3,856
Liabilities:					
Energy-related derivatives ^(a)	\$ 32	\$ 178	\$ —	\$ —	\$ 210
Interest rate derivatives	—	302	—	—	302
Foreign currency derivatives	—	216	—	—	216
Contingent consideration	—	—	12	—	12
Other	—	13	—	—	13
Total	\$ 32	\$ 709	\$ 12	\$ —	\$ 753
Alabama Power					
Assets:					
Energy-related derivatives	\$ —	\$ 62	\$ —	\$ —	\$ 62
Nuclear decommissioning trusts: ^(b)					
Domestic equity	396	169	—	—	565
Foreign equity	125	—	—	—	125
U.S. Treasury and government agency securities	—	19	—	—	19
Municipal bonds	—	1	—	—	1
Corporate bonds	—	225	—	—	225
Mortgage and asset backed securities	—	22	—	—	22
Private equity	—	—	—	161	161
Other	7	—	—	—	7
Cash equivalents	438	20	—	—	458
Other investments	—	26	—	—	26
Total	\$ 966	\$ 544	\$ —	\$161	\$1,671
Liabilities:					
Energy-related derivatives	\$ —	\$ 39	\$ —	\$ —	\$ 39

Notes to Financial Statements

At December 31, 2022:	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
	<i>(in millions)</i>				
Georgia Power					
Assets:					
Energy-related derivatives	\$ —	\$ 42	\$ —	\$ —	\$ 42
Nuclear decommissioning trusts: ^{(b)(c)}					
Domestic equity	255	1	—	—	256
Foreign equity	—	149	—	—	149
U.S. Treasury and government agency securities	—	266	—	—	266
Municipal bonds	—	50	—	—	50
Corporate bonds	—	187	—	—	187
Mortgage and asset backed securities	—	68	—	—	68
Other	30	12	—	—	42
Cash equivalents	355	—	—	—	355
Total	\$640	\$775	\$ —	\$ —	\$1,415
Liabilities:					
Energy-related derivatives	\$ —	\$ 62	\$ —	\$ —	\$ 62
Mississippi Power					
Assets:					
Energy-related derivatives	\$ —	\$ 59	\$ —	\$ —	\$ 59
Cash equivalents	47	—	—	—	47
Total	\$ 47	\$ 59	\$ —	\$ —	\$ 106
Liabilities:					
Energy-related derivatives	\$ —	\$ 32	\$ —	\$ —	\$ 32
Southern Power					
Assets:					
Energy-related derivatives	\$ —	\$ 8	\$ —	\$ —	\$ 8
Liabilities:					
Energy-related derivatives	\$ —	\$ 12	\$ —	\$ —	\$ 12
Foreign currency derivatives	—	47	—	—	47
Contingent consideration	—	—	12	—	12
Other	—	13	—	—	13
Total	\$ —	\$ 72	\$ 12	\$ —	\$ 84
Southern Company Gas					
Assets:					
Energy-related derivatives ^(a)	\$ 18	\$ 10	\$ —	\$ —	\$ 28
Non-qualified deferred compensation trusts:					
Domestic equity	—	8	—	—	8
Foreign equity	—	1	—	—	1
Pooled funds – fixed income	—	7	—	—	7
Cash and cash equivalents	4	—	—	—	4
Cash equivalents	50	—	—	—	50
Total	\$ 72	\$ 26	\$ —	\$ —	\$ 98
Liabilities:					
Energy-related derivatives ^{(a)(b)}	\$ 32	\$ 33	\$ —	\$ —	\$ 65
Interest rate derivatives	—	86	—	—	86
Total	\$ 32	\$ 119	\$ —	\$ —	\$ 151

(a) Excludes cash collateral of \$41 million.

(b) Excludes receivables related to investment income, pending investment sales, payables related to pending investment purchases, and currencies. See Note 6 under "Nuclear Decommissioning" for additional information.

(c) Includes investment securities pledged to creditors and collateral received and excludes payables related to the securities lending program. See Note 6 under "Nuclear Decommissioning" for additional information.

Notes to Financial Statements

At December 31, 2021, assets and liabilities measured at fair value on a recurring basis during the period, together with their associated level of the fair value hierarchy, were as follows:

At December 31, 2021:	Fair Value Measurements Using				Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Net Asset Value as a Practical Expedient (NAV)	
	<i>(in millions)</i>				
Southern Company					
Assets:					
Energy-related derivatives ^(a)	\$ 24	\$ 195	\$ —	\$ —	\$ 219
Interest rate derivatives	—	19	—	—	19
Investments in trusts: ^{(b)(c)}					
Domestic equity	791	225	—	—	1,016
Foreign equity	165	188	—	—	353
U.S. Treasury and government agency securities	—	314	—	—	314
Municipal bonds	—	56	—	—	56
Pooled funds – fixed income	—	13	—	—	13
Corporate bonds	1	522	—	—	523
Mortgage and asset backed securities	—	93	—	—	93
Private equity	—	—	—	150	150
Cash and cash equivalents	2	—	—	—	2
Other	22	25	—	—	47
Cash equivalents	1,160	14	—	—	1,174
Other investments	9	35	—	—	44
Total	\$ 2,174	\$ 1,699	\$ —	\$ 150	\$ 4,023
Liabilities:					
Energy-related derivatives ^(a)	\$ 10	\$ 36	\$ —	\$ —	\$ 46
Interest rate derivatives	—	29	—	—	29
Foreign currency derivatives	—	79	—	—	79
Contingent consideration	—	—	14	—	14
Other	—	13	—	—	13
Total	\$ 10	\$ 157	\$ 14	\$ —	\$ 181
Alabama Power					
Assets:					
Energy-related derivatives	\$ —	\$ 55	\$ —	\$ —	\$ 55
Nuclear decommissioning trusts: ^(b)					
Domestic equity	468	216	—	—	684
Foreign equity	165	—	—	—	165
U.S. Treasury and government agency securities	—	21	—	—	21
Municipal bonds	—	1	—	—	1
Corporate bonds	1	271	—	—	272
Mortgage and asset backed securities	—	22	—	—	22
Private equity	—	—	—	150	150
Other	9	—	—	—	9
Cash equivalents	839	14	—	—	853
Other investments	—	35	—	—	35
Total	\$ 1,482	\$ 635	\$ —	\$ 150	\$ 2,267
Liabilities:					
Energy-related derivatives	\$ —	\$ 11	\$ —	\$ —	\$ 11

Notes to Financial Statements

At December 31, 2021:	Fair Value Measurements Using			Net Asset Value as a Practical Expedient (NAV)	Total
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
<i>(in millions)</i>					
Georgia Power					
Assets:					
Energy-related derivatives	\$ —	\$ 75	\$ —	\$ —	\$ 75
Nuclear decommissioning trusts: ^{(b)(c)}					
Domestic equity	323	1	—	—	324
Foreign equity	—	185	—	—	185
U.S. Treasury and government agency securities	—	293	—	—	293
Municipal bonds	—	55	—	—	55
Corporate bonds	—	251	—	—	251
Mortgage and asset backed securities	—	71	—	—	71
Other	13	25	—	—	38
Total	\$336	\$956	\$ —	\$ —	\$1,292
Liabilities:					
Energy-related derivatives	\$ —	\$ 8	\$ —	\$ —	\$ 8
Mississippi Power					
Assets:					
Energy-related derivatives	\$ —	\$ 56	\$ —	\$ —	\$ 56
Cash equivalents	40	—	—	—	40
Total	\$ 40	\$ 56	\$ —	\$ —	\$ 96
Liabilities:					
Energy-related derivatives	\$ —	\$ 5	\$ —	\$ —	\$ 5
Southern Power					
Assets:					
Energy-related derivatives	\$ —	\$ 4	\$ —	\$ —	\$ 4
Liabilities:					
Foreign currency derivatives	\$ —	\$ 16	\$ —	\$ —	\$ 16
Contingent consideration	—	—	14	—	14
Other	—	13	—	—	13
Total	\$ —	\$ 29	\$ 14	\$ —	\$ 43
Southern Company Gas					
Assets:					
Energy-related derivatives ^(a)	\$ 24	\$ 5	\$ —	\$ —	\$ 29
Interest rate derivatives	—	6	—	—	6
Non-qualified deferred compensation trusts:					
Domestic equity	—	8	—	—	8
Foreign equity	—	3	—	—	3
Pooled funds – fixed income	—	13	—	—	13
Cash equivalents	2	—	—	—	2
Total	\$ 26	\$ 35	\$ —	\$ —	\$ 61
Liabilities:					
Energy-related derivatives ^{(a)(b)}	\$ 10	\$ 12	\$ —	\$ —	\$ 22
Interest rate derivatives	—	5	—	—	5
Total	\$ 10	\$ 17	\$ —	\$ —	\$ 27

(a) Excludes immaterial cash collateral.

(b) Excludes receivables related to investment income, pending investment sales, payables related to pending investment purchases, and currencies. See Note 6 under "Nuclear Decommissioning" for additional information.

(c) Includes investment securities pledged to creditors and collateral received and excludes payables related to the securities lending program. See Note 6 under "Nuclear Decommissioning" for additional information.

Notes to Financial Statements

Valuation Methodologies

The energy-related derivatives primarily consist of exchange-traded and over-the-counter financial products for natural gas and physical power products, including, from time to time, basis swaps. These are standard products used within the energy industry and are valued using the market approach. The inputs used are mainly from observable market sources, such as forward natural gas prices, power prices, implied volatility, and overnight index swap interest rates. Interest rate derivatives are also standard over-the-counter products that are valued using observable market data and assumptions commonly used by market participants. The fair value of interest rate derivatives reflects the net present value of expected payments and receipts under the swap agreement based on the market's expectation of future interest rates. Additional inputs to the net present value calculation may include the contract terms, counterparty credit risk, and occasionally, implied volatility of interest rate options. The fair value of cross-currency swaps reflects the net present value of expected payments and receipts under the swap agreement based on the market's expectation of future foreign currency exchange rates. Additional inputs to the net present value calculation may include the contract terms, counterparty credit risk, and discount rates. The interest rate derivatives and cross-currency swaps are categorized as Level 2 under Fair Value Measurements as these inputs are based on observable data and valuations of similar instruments. See Note 14 for additional information on how these derivatives are used.

For fair value measurements of the investments within the nuclear decommissioning trusts and the non-qualified deferred compensation trusts, external pricing vendors are designated for each asset class with each security specifically assigned a primary pricing source. For investments held within commingled funds, fair value is determined at the end of each business day through the net asset value, which is established by obtaining the underlying securities' individual prices from the primary pricing source. A market price secured from the primary source vendor is then evaluated by management in its valuation of the assets within the trusts. As a general approach, fixed income market pricing vendors gather market data (including indices and market research reports) and integrate relative credit information, observed market movements, and sector news into proprietary pricing models, pricing systems, and mathematical tools. Dealer quotes and other market information, including live trading levels and pricing analysts' judgments, are also obtained when available.

The NRC requires licensees of commissioned nuclear power reactors to establish a plan for providing reasonable assurance of funds for future decommissioning. See Note 6 under "Nuclear Decommissioning" for additional information.

Southern Power has contingent payment obligations related to certain acquisitions whereby it is primarily obligated to make generation-based payments to the seller, which commenced at the commercial operation of the respective facility and continue through 2026. The obligations are categorized as Level 3 under Fair Value Measurements as the fair value is determined using significant unobservable inputs for the forecasted facility generation in MW-hours, as well as other inputs such as a fixed dollar amount per MW-hour, and a discount rate. The fair value of contingent consideration reflects the net present value of expected payments and any periodic change arising from forecasted generation is expected to be immaterial.

Southern Power also has payment obligations through 2040 whereby it must reimburse the transmission owners for interconnection facilities and network upgrades constructed to support connection of a Southern Power generating facility to the transmission system. The obligations are categorized as Level 2 under Fair Value Measurements as the fair value is determined using observable inputs for the contracted amounts and reimbursement period, as well as a discount rate. The fair value of the obligations reflects the net present value of expected payments.

"Other investments" include investments traded in the open market that have maturities greater than 90 days, which are categorized as Level 2 under Fair Value Measurements and are comprised of corporate bonds, bank certificates of deposit, treasury bonds, and/or agency bonds.

The fair value measurements of private equity investments held in Alabama Power's nuclear decommissioning trusts that are calculated at net asset value per share (or its equivalent) as a practical expedient totaled \$161 million and \$150 million at December 31, 2022 and 2021, respectively. Unfunded commitments related to the private equity investments totaled \$78 million and \$69 million at December 31, 2022 and 2021, respectively. Private equity investments include high-quality private equity funds across several market sectors and funds that invest in real estate assets. Private equity funds do not have redemption rights. Distributions from these funds will be received as the underlying investments in the funds are liquidated.

Notes to Financial Statements

At December 31, 2022 and 2021, other financial instruments for which the carrying amount did not equal fair value were as follows:

	Southern Company ^(*)	Alabama Power	Georgia Power	Mississippi Power	Southern Power	Southern Company Gas ^(*)
	<i>(in billions)</i>					
At December 31, 2022:						
Long-term debt, including securities due within one year:						
Carrying amount	\$ 54.6	\$10.6	\$ 14.7	\$ 1.5	\$ 3.0	\$ 7.4
Fair value	48.6	9.2	13.0	1.3	2.8	6.5
At December 31, 2021:						
Long-term debt, including securities due within one year:						
Carrying amount	\$ 52.1	\$ 9.7	\$ 13.6	\$ 1.5	\$ 3.7	\$ 6.9
Fair value	57.1	10.9	15.1	1.6	4.1	7.8

(*) The long-term debt of Southern Company Gas is recorded at amortized cost, including the fair value adjustments at the effective date of the 2016 merger with Southern Company. Southern Company Gas amortizes the fair value adjustments over the remaining lives of the respective bonds, the latest being through 2043.

The fair values are determined using Level 2 measurements and are based on quoted market prices for the same or similar issues or on the current rates available to the Registrants.

14. DERIVATIVES

The Registrants are exposed to market risks, including commodity price risk, interest rate risk, weather risk, and occasionally foreign currency exchange rate risk. To manage the volatility attributable to these exposures, each company nets its exposures, where possible, to take advantage of natural offsets and enters into various derivative transactions for the remaining exposures pursuant to each company's policies in areas such as counterparty exposure and risk management practices. Prior to the sale of Sequent on July 1, 2021, Southern Company Gas' wholesale gas operations used various contracts in its commercial activities that generally met the definition of derivatives. For the traditional electric operating companies, Southern Power, and Southern Company Gas' other businesses, each company's policy is that derivatives are to be used primarily for hedging purposes and mandates strict adherence to all applicable risk management policies. Derivative positions are monitored using techniques including, but not limited to, market valuation, value at risk, stress testing, and sensitivity analysis. Derivative instruments are recognized at fair value in the balance sheets as either assets or liabilities and are presented on a net basis. See Note 13 for additional fair value information. In the statements of cash flows, any cash impacts of settled energy-related and interest rate derivatives are recorded as operating activities. Any cash impacts of settled foreign currency derivatives are classified as operating or financing activities to correspond with the classification of the hedged interest or principal, respectively. See Note 1 under "Financial Instruments" for additional information. See Note 15 under "Southern Company Gas" for additional information regarding the sale of Sequent.

Energy-Related Derivatives

The Subsidiary Registrants enter into energy-related derivatives to hedge exposures to electricity, natural gas, and other fuel price changes. However, due to cost-based rate regulations and other various cost recovery mechanisms, the traditional electric operating companies and the natural gas distribution utilities have limited exposure to market volatility in energy-related commodity prices. Each of the traditional electric operating companies and certain of the natural gas distribution utilities of Southern Company Gas manage fuel-hedging programs, implemented per the guidelines of their respective state PSCs or other applicable state regulatory agencies, through the use of financial derivative contracts, which are expected to continue to mitigate price volatility. The traditional electric operating companies (with respect to wholesale generating capacity) and Southern Power have limited exposure to market volatility in energy-related commodity prices because their long-term sales contracts shift substantially all fuel cost responsibility to the purchaser. However, the traditional electric operating companies and Southern Power may be exposed to market volatility in energy-related commodity prices to the extent any uncontracted capacity is used to sell electricity. Southern Company Gas retains exposure to price changes that can, in a volatile energy market, be material and can adversely affect its results of operations.

Southern Company Gas also enters into weather derivative contracts as economic hedges in the event of warmer-than-normal weather. Exchange-traded options are carried at fair value, with changes reflected in operating revenues. Non-exchange-traded options are accounted for using the intrinsic value method. Changes in the intrinsic value for non-exchange-traded contracts are reflected in operating revenues.

Notes to Financial Statements

Energy-related derivative contracts are accounted for under one of three methods:

- *Regulatory Hedges* – Energy-related derivative contracts designated as regulatory hedges relate primarily to the traditional electric operating companies' and the natural gas distribution utilities' fuel-hedging programs, where gains and losses are initially recorded as regulatory liabilities and assets, respectively, and then are included in fuel expense as the underlying fuel is used in operations and ultimately recovered through an approved cost recovery mechanism.
- *Cash Flow Hedges* – Gains and losses on energy-related derivatives designated as cash flow hedges (which are mainly used to hedge anticipated purchases and sales) are initially deferred in AOCI before being recognized in the statements of income in the same period and in the same income statement line item as the earnings effect of the hedged transactions.
- *Not Designated* – Gains and losses on energy-related derivative contracts that are not designated or fail to qualify as hedges are recognized in the statements of income as incurred.

Some energy-related derivative contracts require physical delivery as opposed to financial settlement, and this type of derivative is both common and prevalent within the electric and natural gas industries. When an energy-related derivative contract is settled physically, any cumulative unrealized gain or loss is reversed and the contract price is recognized in the respective line item representing the actual price of the underlying goods being delivered.

At December 31, 2022, the net volume of energy-related derivative contracts for natural gas positions, together with the longest hedge date over which the respective entity is hedging its exposure to the variability in future cash flows for forecasted transactions and the longest non-hedge date for derivatives not designated as hedges, were as follows:

	Net Purchased mmBtu	Longest Hedge Date	Longest Non-Hedge Date
	<i>(in millions)</i>		
Southern Company ^(*)	431	2030	2025
Alabama Power	111	2026	—
Georgia Power	125	2026	—
Mississippi Power	94	2027	—
Southern Power	8	2030	2023
Southern Company Gas ^(*)	93	2025	2025

(*) Southern Company Gas' derivative instruments include both long and short natural gas positions. A long position is a contract to purchase natural gas and a short position is a contract to sell natural gas. Southern Company Gas' volume represents the net of long natural gas positions of 98 million mmBtu and short natural gas positions of 5 million mmBtu at December 31, 2022, which is also included in Southern Company's total volume. See Note 15 under "Southern Company Gas" for information regarding the sale of Sequent.

In addition to the volumes discussed above, the traditional electric operating companies and Southern Power enter into physical natural gas supply contracts that provide the option to sell back excess natural gas due to operational constraints. The maximum expected volume of natural gas subject to such a feature is 23 million mmBtu for Southern Company, which includes 6 million mmBtu for Alabama Power, 8 million mmBtu for Georgia Power, 3 million mmBtu for Mississippi Power, and 6 million mmBtu for Southern Power.

For cash flow hedges of energy-related derivatives, the estimated pre-tax gains (losses) expected to be reclassified from AOCI to earnings for the year ending December 31, 2023 are \$(27) million for Southern Company, \$(11) million for Southern Power, and \$(16) million for Southern Company Gas.

Interest Rate Derivatives

Southern Company and certain subsidiaries may enter into interest rate derivatives to hedge exposure to changes in interest rates. Derivatives related to existing variable rate securities or forecasted transactions are accounted for as cash flow hedges where the derivatives' fair value gains or losses are recorded in OCI and are reclassified into earnings at the same time and presented on the same income statement line item as the earnings effect of the hedged transactions. Derivatives related to existing fixed rate securities are accounted for as fair value hedges, where the derivatives' fair value gains or losses and hedged items' fair value gains or losses are both recorded directly to earnings on the same income statement line item. Fair value gains or losses on derivatives that are not designated or fail to qualify as hedges are recognized in the statements of income as incurred.

Notes to Financial Statements

At December 31, 2022, the following interest rate derivatives were outstanding:

	Notional Amount	Weighted Average Interest Rate Paid	Interest Rate Received	Hedge Maturity Date	Fair Value Gain (Loss) December 31, 2022
	(in millions)				(in millions)
Cash Flow Hedges of Forecasted Debt					
Southern Company parent	\$ 400	3.50%	N/A	June 2033	\$ 12
Fair Value Hedges of Existing Debt					
Southern Company parent	400	1-month LIBOR + 0.68%	1.75%	March 2028	(55)
Southern Company parent	1,000	1-month LIBOR + 2.36%	3.70%	April 2030	(161)
Southern Company Gas	500	1-month LIBOR + 0.38%	1.75%	January 2031	(86)
Southern Company	\$2,300				\$ (290)

For cash flow hedges of interest rate derivatives, the estimated pre-tax gains (losses) expected to be reclassified from AOCI to interest expense for the year ending December 31, 2023 are \$(16) million for Southern Company and immaterial for the other Registrants. Deferred gains and losses related to interest rate derivatives are expected to be amortized into earnings through 2052 for Southern Company, Alabama Power, and Georgia Power, 2028 for Mississippi Power, and 2046 for Southern Company Gas.

Foreign Currency Derivatives

Southern Company and certain subsidiaries, including Southern Power, may enter into foreign currency derivatives to hedge exposure to changes in foreign currency exchange rates, such as that arising from the issuance of debt denominated in a currency other than U.S. dollars. Derivatives related to forecasted transactions are accounted for as cash flow hedges where the derivatives' fair value gains or losses are recorded in OCI and are reclassified into earnings at the same time and on the same income statement line as the earnings effect of the hedged transactions, including foreign currency gains or losses arising from changes in the U.S. currency exchange rates. Derivatives related to existing fixed rate securities are accounted for as fair value hedges, where the derivatives' fair value gains or losses and hedged items' fair value gains or losses are both recorded directly to earnings on the same income statement line item, including foreign currency gains or losses arising from changes in the U.S. currency exchange rates. Southern Company has elected to exclude the cross-currency basis spread from the assessment of effectiveness in the fair value hedges of its foreign currency risk and record any difference between the change in the fair value of the excluded components and the amounts recognized in earnings as a component of OCI.

At December 31, 2022, the following foreign currency derivatives were outstanding:

	Pay Notional	Pay Rate	Receive Notional	Receive Rate	Hedge Maturity Date	Fair Value Gain (Loss) December 31, 2022
	(in millions)		(in millions)			(in millions)
Cash Flow Hedges of Existing Debt						
Southern Power	\$ 564	3.78%	€ 500	1.85%	June 2026	\$ (47)
Fair Value Hedges of Existing Debt						
Southern Company parent	1,476	3.39%	1,250	1.88%	September 2027	(169)
Southern Company	\$2,040		€1,750			\$ (216)

For cash flow hedges of foreign currency derivatives, the estimated pre-tax losses expected to be reclassified from AOCI to earnings for the year ending December 31, 2023 are \$11 million for Southern Power.

Derivative Financial Statement Presentation and Amounts

The Registrants enter into derivative contracts that may contain certain provisions that permit intra-contract netting of derivative receivables and payables for routine billing and offsets related to events of default and settlements. Southern Company and certain subsidiaries also utilize master netting agreements to mitigate exposure to counterparty credit risk. These agreements may contain provisions that permit netting across product lines and against cash collateral. The fair value amounts of derivative assets and liabilities on the balance sheets are presented net to the extent that there are netting arrangements or similar agreements with the counterparties.

Notes to Financial Statements

At December 31, 2022 and 2021, the fair value of energy-related derivatives, interest rate derivatives, and foreign currency derivatives was reflected in the balance sheets as follows:

Derivative Category and Balance Sheet Location	2022		2021	
	Assets	Liabilities	Assets	Liabilities
	<i>(in millions)</i>			
Southern Company				
Energy-related derivatives designated as hedging instruments for regulatory purposes				
Assets from risk management activities/Other current liabilities	\$123	\$ 121	\$129	\$ 30
Other deferred charges and assets/Other deferred credits and liabilities	52	44	72	6
Total derivatives designated as hedging instruments for regulatory purposes	175	165	201	36
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Assets from risk management activities/Other current liabilities	3	27	7	5
Other deferred charges and assets/Other deferred credits and liabilities	6	4	1	—
Interest rate derivatives:				
Assets from risk management activities/Other current liabilities	12	62	19	—
Other deferred charges and assets/Other deferred credits and liabilities	—	240	—	29
Foreign currency derivatives:				
Assets from risk management activities/Other current liabilities	—	34	—	39
Other deferred charges and assets/Other deferred credits and liabilities	—	182	—	40
Total derivatives designated as hedging instruments in cash flow and fair value hedges	21	549	27	113
Energy-related derivatives not designated as hedging instruments				
Assets from risk management activities/Other current liabilities	13	13	9	4
Other deferred charges and assets/Other deferred credits and liabilities	2	1	1	—
Total derivatives not designated as hedging instruments	15	14	10	4
Gross amounts recognized	211	728	238	153
Gross amounts offset^(a)	(70)	(111)	(25)	(28)
Net amounts recognized in the Balance Sheets^(b)	\$141	\$ 617	\$213	\$125
Alabama Power^(c)				
Energy-related derivatives designated as hedging instruments for regulatory purposes				
Other current assets/Other current liabilities	\$ 42	\$21	\$ 30	\$ 9
Other deferred charges and assets/Other deferred credits and liabilities	20	18	25	2
Total derivatives designated as hedging instruments for regulatory purposes	62	39	55	11
Gross amounts offset	(24)	(24)	(5)	(5)
Net amounts recognized in the Balance Sheets	\$ 38	\$ 15	\$ 50	\$ 6
Georgia Power				
Energy-related derivatives designated as hedging instruments for regulatory purposes				
Assets from risk management activities/Other current liabilities	\$ 36	\$ 43	\$ 54	\$ 6
Other deferred charges and assets/Other deferred credits and liabilities	6	18	21	2
Total derivatives designated as hedging instruments for regulatory purposes	42	61	75	8
Energy-related derivatives not designated as hedging instruments				
Other deferred charges and assets/Other deferred credits and liabilities	—	1	—	—
Gross amounts recognized	42	62	75	8
Gross amounts offset	(21)	(21)	(8)	(8)
Net amounts recognized in the Balance Sheets	\$ 21	\$ 41	\$ 67	\$ —

Notes to Financial Statements

Derivative Category and Balance Sheet Location	2022		2021	
	Assets	Liabilities	Assets	Liabilities
	<i>(in millions)</i>			
Mississippi Power^(c)				
Energy-related derivatives designated as hedging instruments for regulatory purposes				
Assets from risk management activities/Other current liabilities	\$ 33	\$ 24	\$ 30	\$ 3
Other deferred charges and assets/Other deferred credits and liabilities	26	8	26	2
Total derivatives designated as hedging instruments for regulatory purposes	59	32	56	5
Gross amounts offset	(17)	(17)	(4)	(4)
Net amounts recognized in the Balance Sheets	\$ 42	\$ 15	\$ 52	\$ 1
Southern Power				
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Other current assets/Other current liabilities	\$ —	\$ 12	\$ 2	\$ —
Other deferred charges and assets/Other deferred credits and liabilities	5	—	1	—
Foreign currency derivatives:				
Other current assets/Other current liabilities	—	11	—	16
Other deferred charges and assets/Other deferred credits and liabilities	—	36	—	—
Total derivatives designated as hedging instruments in cash flow and fair value hedges	5	59	3	16
Energy-related derivatives not designated as hedging instruments				
Other current assets/Other current liabilities	2	—	1	—
Other deferred charges and assets/Other deferred credits and liabilities	1	—	—	—
Total derivatives not designated as hedging instruments	3	—	1	—
Net amounts recognized in the Balance Sheets	\$ 8	\$ 59	\$ 4	\$ 16
Southern Company Gas				
Energy-related derivatives designated as hedging instruments for regulatory purposes				
Other current assets/Other current liabilities	\$ 12	\$ 33	\$ 15	\$ 12
Derivatives designated as hedging instruments in cash flow and fair value hedges				
Energy-related derivatives:				
Other current assets/Other current liabilities	3	15	5	5
Other deferred charges and assets/Other deferred credits and liabilities	1	4	—	—
Interest rate derivatives:				
Other current assets/Other current liabilities	—	14	6	—
Other deferred charges and assets/Other deferred credits and liabilities	—	72	—	6
Total derivatives designated as hedging instruments in cash flow and fair value hedges	4	105	11	11
Energy-related derivatives not designated as hedging instruments				
Other current assets/Other current liabilities	11	12	8	4
Other deferred charges and assets/Other deferred credits and liabilities	1	1	1	—
Total derivatives not designated as hedging instruments	12	13	9	4
Gross amounts recognized	28	151	35	27
Gross amounts offset^(a)	—	(41)	(8)	(11)
Net amounts recognized in the Balance Sheets^(b)	\$ 28	\$ 110	\$ 27	\$ 16

(a) Gross amounts offset includes cash collateral held on deposit in broker margin accounts of \$41 million and \$3 million at December 31, 2022 and 2021, respectively.

(b) Net amounts of derivative instruments outstanding exclude immaterial premium and intrinsic value associated with weather derivatives for all periods presented.

(c) Energy-related derivatives not designated as hedging instruments were immaterial at December 31, 2022 and there were no such instruments at December 31, 2021.

Notes to Financial Statements

At December 31, 2022 and 2021, the pre-tax effects of unrealized derivative gains (losses) arising from energy-related derivative instruments designated as regulatory hedging instruments and deferred were as follows:

Regulatory Hedge Unrealized Gain (Loss) Recognized in the Balance Sheets

Derivative Category and Balance Sheet Location	Southern Company	Alabama Power	Georgia Power	Mississippi Power	Southern Company Gas
<i>(in millions)</i>					
At December 31, 2022:					
Energy-related derivatives:					
Other regulatory assets, current	\$ (71)	\$ (8)	\$ (26)	\$ (13)	\$ (24)
Other regulatory assets, deferred	(23)	(7)	(14)	(2)	—
Other regulatory liabilities, current	72	29	19	22	2
Other regulatory liabilities, deferred	31	9	2	20	—
Total energy-related derivative gains (losses)	\$ 9	\$ 23	\$ (19)	\$ 27	\$ (22)
At December 31, 2021:					
Energy-related derivatives:					
Other regulatory assets, current	\$ (17)	\$ (6)	\$ —	\$ —	\$ (11)
Other regulatory liabilities, current	107	28	48	27	4
Other regulatory liabilities, deferred	65	22	19	24	—
Total energy-related derivative gains (losses)	\$ 155	\$ 44	\$ 67	\$ 51	\$ (7)

For the years ended December 31, 2022, 2021, and 2020, the pre-tax effects of cash flow and fair value hedge accounting on AOCI for the applicable Registrants were as follows:

Gain (Loss) From Derivatives Recognized in OCI	2022	2021	2020
<i>(in millions)</i>			
Southern Company			
Cash flow hedges:			
Energy-related derivatives	\$ 3	\$ 34	\$ (8)
Interest rate derivatives	46	5	(26)
Foreign currency derivatives	(105)	(103)	48
Fair value hedges ^(*) :			
Foreign currency derivatives	(24)	(3)	—
Total	\$ (80)	\$ (67)	\$ 14
Georgia Power			
Interest rate derivatives	\$ 31	\$ —	\$ (3)
Southern Power			
Cash flow hedges:			
Energy-related derivatives	\$ (15)	\$ 12	\$ (2)
Foreign currency derivatives	(105)	(103)	48
Total	\$ (120)	\$ (91)	\$ 46
Southern Company Gas			
Cash flow hedges:			
Energy-related derivatives	\$ 18	\$ 22	\$ (6)
Interest rate derivatives	—	—	(23)
Total	\$ 18	\$ 22	\$ (29)

(*) Represents amounts excluded from the assessment of effectiveness for which the difference between changes in fair value and periodic amortization is recorded in OCI.

Notes to Financial Statements

The pre-tax effects of interest rate derivatives designated as cash flow hedging instruments on AOCI were immaterial for the other Registrants for all years presented.

The pre-tax effects of cash flow and fair value hedge accounting on income for the years ended December 31, 2022, 2021, and 2020 were as follows:

Location and Amount of Gain (Loss) Recognized in Income on Cash Flow and Fair Value Hedging Relationships	2022	2021	2020
	<i>(in millions)</i>		
Southern Company			
Total cost of natural gas	\$ 3,004	\$ 1,619	\$ 972
<i>Gain (loss) on energy-related cash flow hedges^(a)</i>	37	17	(8)
Total depreciation and amortization	3,663	3,565	3,518
<i>Gain (loss) on energy-related cash flow hedges^(a)</i>	(5)	9	(3)
Total interest expense, net of amounts capitalized	(2,022)	(1,837)	(1,821)
<i>Gain (loss) on interest rate cash flow hedges^(a)</i>	(25)	(27)	(26)
<i>Gain (loss) on foreign currency cash flow hedges^(a)</i>	(19)	(24)	(23)
<i>Gain (loss) on interest rate fair value hedges^(b)</i>	(291)	(30)	27
Total other income (expense), net	500	456	336
<i>Gain (loss) on foreign currency cash flow hedges^{(a)(c)}</i>	(83)	(104)	114
<i>Gain (loss) on foreign currency fair value hedges</i>	(106)	(63)	—
<i>Amount excluded from effectiveness testing recognized in earnings</i>	24	3	—
Southern Power			
Total depreciation and amortization	\$ 516	\$ 517	\$ 494
<i>Gain (loss) on energy-related cash flow hedges^(a)</i>	(5)	9	(3)
Total interest expense, net of amounts capitalized	(138)	(147)	(151)
<i>Gain (loss) on foreign currency cash flow hedges^(a)</i>	(19)	(24)	(23)
Total other income (expense), net	7	10	19
<i>Gain (loss) on foreign currency cash flow hedges^{(a)(c)}</i>	(83)	(104)	114
Southern Company Gas			
Total cost of natural gas	\$ 3,004	\$ 1,619	\$ 972
<i>Gain (loss) on energy-related cash flow hedges^(a)</i>	37	17	(8)
Total interest expense, net of amounts capitalized	(263)	(238)	(231)
<i>Gain (loss) on interest rate cash flow hedges^(a)</i>	(4)	—	—
<i>Gain (loss) on interest rate fair value hedges^(b)</i>	(86)	—	—

(a) Reclassified from AOCI into earnings.

(b) For fair value hedges, changes in the fair value of the derivative contracts are generally equal to changes in the fair value of the underlying debt and have no material impact on income.

(c) The reclassification from AOCI into other income (expense), net completely offsets currency gains and losses arising from changes in the U.S. currency exchange rates used to record the euro-denominated notes.

The pre-tax effects of cash flow and fair value hedge accounting on income for interest rate derivatives and energy-related derivatives were immaterial for the traditional electric operating companies for all years presented.

At December 31, 2022 and 2021, the following amounts were recorded on the balance sheets related to cumulative basis adjustments for fair value hedges:

Balance Sheet Location of Hedged Items	Carrying Amount of the Hedged Item		Cumulative Amount of Fair Value Hedging Adjustment included in Carrying Amount of the Hedged Item	
	At December 31, 2022	At December 31, 2021	At December 31, 2022	At December 31, 2021
	<i>(in millions)</i>		<i>(in millions)</i>	
Southern Company				
Long-term debt	\$(2,927)	\$(3,280)	\$ 282	\$ 9
Southern Company Gas				
Long-term debt	\$ (415)	\$ (493)	\$ 81	\$ 2

Notes to Financial Statements

The pre-tax effects of energy-related derivatives not designated as hedging instruments on the statements of income of Southern Company and Southern Company Gas for the years ended December 31, 2022, 2021, and 2020 were as follows:

Derivatives in Non-Designated Hedging Relationships	Statements of Income Location	Gain (Loss)		
		2022	2021	2020
			(in millions)	
Energy-related derivatives	Natural gas revenues ^(*)	\$(11)	\$(117)	\$134
	Cost of natural gas	(65)	(27)	15
Total derivatives in non-designated hedging relationships		\$(76)	\$(144)	\$149

(*) Excludes the impact of weather derivatives recorded in natural gas revenues of \$(7) million and \$9 million for 2022 and 2020, respectively, as they are accounted for based on intrinsic value rather than fair value. There was no weather derivatives impact for 2021.

The pre-tax effects of energy-related derivatives not designated as hedging instruments were immaterial for all other Registrants for all years presented.

Contingent Features

The Registrants do not have any credit arrangements that would require material changes in payment schedules or terminations as a result of a credit rating downgrade. There are certain derivatives that could require collateral, but not accelerated payment, in the event of various credit rating changes of certain Southern Company subsidiaries. Generally, collateral may be provided by a Southern Company guaranty, letter of credit, or cash. At December 31, 2022, the Registrants had no collateral posted with derivative counterparties to satisfy these arrangements.

For Southern Company and Southern Power, the fair value of interest rate derivative liabilities with contingent features and the maximum potential collateral requirements arising from the credit-risk-related contingent features, at a rating below BBB- and/or Baa3, were \$78 million and \$23 million, respectively, at December 31, 2022. For the traditional electric operating companies and Southern Power, energy-related derivative liabilities with contingent features and the maximum potential collateral requirements arising from the credit-risk-related contingent features, at a rating below BBB- and/or Baa3, were immaterial at December 31, 2022. The maximum potential collateral requirements arising from the credit-risk-related contingent features for the traditional electric operating companies and Southern Power include certain agreements that could require collateral in the event that one or more Southern Company power pool participants has a credit rating change to below investment grade.

Alabama Power and Southern Power maintain accounts with certain regional transmission organizations to facilitate financial derivative transactions and they may be required to post collateral based on the value of the positions in these accounts and the associated margin requirements. At December 31, 2022, cash collateral posted in these accounts was \$15 million for Southern Power and immaterial for Alabama Power. Southern Company Gas maintains accounts with brokers or the clearing houses of certain exchanges to facilitate financial derivative transactions. Based on the value of the positions in these accounts and the associated margin requirements, Southern Company Gas may be required to deposit cash into these accounts. At December 31, 2022, cash collateral held on deposit in broker margin accounts was \$41 million.

The Registrants are exposed to losses related to financial instruments in the event of counterparties' nonperformance. The Registrants only enter into agreements and material transactions with counterparties that have investment grade credit ratings by Moody's and S&P or with counterparties who have posted collateral to cover potential credit exposure. The Registrants have also established risk management policies and controls to determine and monitor the creditworthiness of counterparties in order to mitigate their exposure to counterparty credit risk.

Southern Company Gas uses established credit policies to determine and monitor the creditworthiness of counterparties, including requirements to post collateral or other credit security, as well as the quality of pledged collateral. Collateral or credit security is most often in the form of cash or letters of credit from an investment-grade financial institution, but may also include cash or U.S. government securities held by a trustee. Prior to entering a physical transaction, Southern Company Gas assigns its counterparties an internal credit rating and credit limit based on the counterparties' Moody's, S&P, and Fitch ratings, commercially available credit reports, and audited financial statements. Southern Company Gas may require counterparties to pledge additional collateral when deemed necessary.

Notes to Financial Statements

Southern Company Gas utilizes netting agreements whenever possible to mitigate exposure to counterparty credit risk. Netting agreements enable Southern Company Gas to net certain assets and liabilities by counterparty across product lines and against cash collateral, provided the netting and cash collateral agreements include such provisions. While the amounts due from, or owed to, counterparties are settled net, they are recorded on a gross basis on the balance sheet as energy marketing receivables and energy marketing payables.

The Registrants do not anticipate a material adverse effect on their respective financial statements as a result of counterparty nonperformance.

15. ACQUISITIONS AND DISPOSITIONS

None of the dispositions discussed herein, both individually and combined, represented a strategic shift in operations for the applicable Registrants that has, or is expected to have, a major effect on its operations and financial results; therefore, none of the assets related to the sales have been classified as discontinued operations for any of the periods presented.

Southern Company

In connection with the annual impairment analysis of a leveraged lease investment during the fourth quarter 2020, Southern Company management concluded that the estimated residual value of the generation assets should be reduced due to significant uncertainty as to whether the related natural gas generation assets would continue to operate at the end of the lease term in 2040 and recorded a \$34 million (\$17 million after tax) impairment charge. Also during the fourth quarter 2020, Southern Company management initiated steps to sell the investment and reclassified it as held for sale. In the fourth quarter 2020 and the second quarter 2021, additional charges of \$18 million (\$14 million after tax) and \$7 million (\$6 million after tax), respectively, were recorded to further reduce the investment to its estimated fair value, less costs to sell. In October 2021, Southern Company completed the sale to the lessee for \$45 million. No gain or loss was recognized on the sale; however, it did result in the recognition of approximately \$16 million of additional tax benefits.

In December 2021, Southern Company completed the termination of its leasehold interest in assets associated with its two international leveraged lease projects and received cash proceeds of approximately \$673 million after the accelerated exercise of the lessee's purchase options. The pre-tax gain associated with the transaction was approximately \$93 million (\$99 million gain after tax).

Alabama Power

In 2020, Alabama Power completed its acquisition of the Central Alabama Generating Station, an approximately 885-MW combined cycle generation facility in Autauga County, Alabama. The transaction was accounted for as a business combination. The total purchase price was \$461 million, of which \$452 million was related to net assets recorded within property, plant, and equipment on the balance sheet and reflected in property additions within the investing section of the statement of cash flows. The remainder primarily related to inventory, current receivables, and accounts payable. Alabama Power assumed an existing power sales agreement under which the full output of the generating facility remains committed to another third party through May 2023. During the remaining term, the revenues from the power sales agreement are expected to substantially offset the associated costs of operation. See Note 9 under "Lessor" for additional information.

On September 30, 2022, Alabama Power completed its acquisition of the Calhoun Generating Station, which was accounted for as an asset acquisition. The total purchase price was \$179 million, of which \$171 million was related to net assets recorded within property, plant, and equipment on the balance sheet and reflected in property additions within the investing section of the statement of cash flows. The remainder primarily related to fossil fuel stock and materials and supplies.

See Note 2 under "Alabama Power – Certificates of Convenience and Necessity" for additional information.

Southern Power

Southern Power's acquisition-related costs for the projects discussed under "Asset Acquisitions" and "Construction Projects" below were expensed as incurred and were not material for any of the years presented. There were no asset acquisitions during 2022.

Notes to Financial Statements

Asset Acquisitions

Project Facility	Resource	Seller	Approximate Nameplate Capacity (MW)	Location	Southern Power Ownership Percentage	COD	PPA Contract Period
Asset Acquisitions During 2021							
Deuel Harvest ^(a)	Wind	Invenergy Renewables LLC	300	Deuel County, SD	100% of Class B	February 2021	25 years and 15 years
Asset Acquisitions During 2020							
Beech Ridge II ^(b)	Wind	Invenergy Renewables LLC	56	Greenbrier County, WV	100% of Class A	May 2020	12 years

(a) In March 2021, Southern Power acquired a controlling interest in the project from Invenergy Renewables LLC and completed a tax equity transaction whereby it sold the Class A membership interests in the project. Southern Power consolidates the project's operating results in its financial statements and the tax equity partner and Invenergy Renewables LLC each own a noncontrolling interest.

(b) In May 2020, Southern Power purchased a controlling interest and now consolidates the project's operating results in its financial statements. The Class B member owns the noncontrolling interest.

Construction Projects

During 2022, Southern Power completed construction of and placed in service the remaining 40 MWs of the Tranquillity battery energy storage facility and the remaining 15 MWs of the Garland battery energy storage facility. See Note 9 under "Lessor" for additional information.

Project Facility	Resource	Approximate Nameplate Capacity (MW)	Location	COD	PPA Contract Period
Projects Completed During 2022					
Garland Solar Storage ^(a)	Battery energy storage	88	Kern County, CA	September 2021 through February 2022 ^(b)	20 years
Tranquillity Solar Storage ^(a)	Battery energy storage	72	Fresno County, CA	November 2021 through March 2022 ^(c)	20 years
Projects Completed During 2021					
Glass Sands ^(d)	Wind	118	Murray County, OK	November 2021	12 years
Projects Completed During 2020					
Skookumchuck ^(e)	Wind	136	Lewis and Thurston Counties, WA	November 2020	20 years
Reading ^(f)	Wind	200	Osage and Lyon Counties, KS	May 2020	12 years

(a) In December 2020, Southern Power restructured its ownership of the project, while retaining the controlling interests, by contributing the Class A membership interests to an existing partnership and selling 100% of the Class B membership interests. During 2021, Southern Power further restructured its ownership in the battery energy storage projects and completed tax equity transactions whereby it sold the Class A membership interests in the projects. Southern Power consolidates each project's operating results in its financial statements and the tax equity partner and two other partners each own a noncontrolling interest.

(b) The facility has a total capacity of 88 MWs, of which 73 MWs were placed in service in 2021 and 15 MWs were placed in service in February 2022.

(c) The facility has a total capacity of 72 MWs, of which 32 MWs were placed in service in 2021 and 40 MWs were placed in service in March 2022.

(d) In December 2020, Southern Power purchased 100% of the membership interests of the Glass Sands facility.

(e) In November 2020, Southern Power completed a tax equity transaction whereby it received \$121 million, resulting in 100% ownership of the Class B membership interests. Southern Power subsequently sold a noncontrolling interest in the Class B membership interests and now retains the controlling ownership interest in the facility.

(f) In June 2020, Southern Power completed a tax equity transaction whereby it received \$156 million and owns 100% of the Class B membership interests.

Development Projects

Southern Power purchased wind turbine equipment in 2016 and 2017 for deployment to development and construction projects. The significant majority of this equipment either has been deployed to projects that have been completed or has been sold to third parties. Gains on wind turbine equipment contributed to various equity method investments totaled approximately \$37 million in 2021. Gains on wind turbine equipment sales were immaterial in 2020 and there were no sales in 2022.

Notes to Financial Statements

Sale of Plant Mankato

In January 2020, Southern Power completed the sale of its equity interests in Plant Mankato (including the 385-MW expansion unit completed in 2019) to a subsidiary of Xcel Energy Inc. for a purchase price of approximately \$663 million, including final working capital adjustments. The sale resulted in a gain of approximately \$39 million (\$23 million after tax). Plant Mankato represented an individually significant component of Southern Power.

Southern Company Gas

Sale of Sequent

On July 1, 2021, Southern Company Gas affiliates completed the sale of Sequent to Williams Field Services Group for a total cash purchase price of \$159 million, including final working capital adjustments. The pre-tax gain associated with the transaction was approximately \$121 million (\$92 million after tax). The sale resulted in \$85 million of additional tax expense.

Sale of Pivotal LNG and Atlantic Coast Pipeline

In March 2020, Southern Company Gas completed the sale of its interests in Pivotal LNG and Atlantic Coast Pipeline to Dominion Modular LNG Holdings, Inc. and Dominion Atlantic Coast Pipeline, LLC, respectively, with aggregate proceeds of \$178 million, including final working capital adjustments. The loss associated with the transactions was immaterial. In connection with the sale, Southern Company Gas received two additional \$5 million payments upon Dominion Modular LNG Holdings, Inc. meeting certain milestones related to Pivotal LNG in April 2021 and May 2022, respectively.

Sale of Natural Gas Storage Facilities

In December 2020, Southern Company Gas completed the sale of Jefferson Island to EnLink Midstream, LLC for a total purchase price of \$33 million, including estimated working capital adjustments. The gain associated with the sale totaled \$22 million pre-tax (\$16 million after tax).

On September 7, 2022, certain affiliates of Southern Company Gas entered into agreements to sell two natural gas storage facilities located in California and Texas for an aggregate purchase price of \$186 million, plus working capital and certain other adjustments. The sale of the Texas facility was completed on November 18, 2022. Completion of the sale of the California facility is expected later in 2023 and is subject to certain closing conditions, including, among others, approval from the California Public Utilities Commission without a material burdensome condition. The ultimate outcome of this matter cannot be determined at this time. Completion of the sale of the Texas facility was subject to release of a Southern Company Gas parent guarantee, which was executed on October 20, 2022 and, as a result, Southern Company Gas recorded pre-tax impairment charges totaling approximately \$131 million (\$99 million after tax) in the fourth quarter 2022.

16. SEGMENT AND RELATED INFORMATION

Southern Company

Southern Company's reportable business segments are the sale of electricity by the traditional electric operating companies, the sale of electricity in the competitive wholesale market by Southern Power, and the sale of natural gas and other complementary products and services by Southern Company Gas. Revenues from sales by Southern Power to the traditional electric operating companies were \$875 million, \$515 million, and \$364 million in 2022, 2021, and 2020, respectively. Revenues from sales of natural gas from Southern Company Gas to the traditional electric operating companies were immaterial for all periods presented. Revenues from sales of natural gas from Southern Company Gas (prior to its sale of Sequent) to Southern Power were \$18 million and \$26 million in 2021 and 2020, respectively. The "All Other" column includes the Southern Company parent entity, which does not allocate operating expenses to business segments. Also, this category includes segments below the quantitative threshold for separate disclosure. These segments include providing distributed energy and resilience solutions and deploying microgrids for commercial, industrial, governmental, and utility customers, as well as investments in telecommunications and leveraged lease projects. All other inter-segment revenues are not material.

Notes to Financial Statements

Financial data for business segments and products and services for the years ended December 31, 2022, 2021, and 2020 was as follows:

	Electric Utilities							Consolidated
	Traditional Electric Operating Companies	Southern Power	Eliminations	Total	Southern Company Gas	All Other	Eliminations	
	<i>(in millions)</i>							
2022								
Operating revenues	\$20,408	\$ 3,369	\$ (904)	\$ 22,873	\$ 5,962	\$ 593	\$(149)	\$ 29,279
Depreciation and amortization	2,513	516	—	3,029	559	75	—	3,663
Interest income	44	3	—	47	3	16	(7)	59
Earnings from equity method investments	—	—	—	—	148	3	—	151
Interest expense	929	138	—	1,067	263	694	(2)	2,022
Income taxes (benefit)	828	20	—	848	180	(233)	—	795
Segment net income (loss) ^{(a)(b)(c)(d)}	3,318	354	—	3,672	572	(711)	(9)	3,524
Goodwill	—	2	—	2	5,015	144	—	5,161
Total assets	95,861	13,081	(659)	108,283	24,621	2,665	(678)	134,891
2021								
Operating revenues	\$16,614	\$ 2,216	\$ (530)	\$ 18,300	\$ 4,380	\$ 582	\$(149)	\$ 23,113
Depreciation and amortization	2,436	517	—	2,953	536	76	—	3,565
Interest income	20	1	—	21	—	4	(3)	22
Earnings from equity method investments	1	—	—	1	50	24	1	76
Interest expense	821	147	—	968	238	631	—	1,837
Income taxes (benefit)	232	(13)	—	219	275	(227)	—	267
Segment net income (loss) ^{(a)(b)(e)(f)(g)(h)}	1,981	266	—	2,247	539	(384)	(9)	2,393
Goodwill	—	2	—	2	5,015	263	—	5,280
Total assets	89,051	13,390	(667)	101,774	23,560	2,975	(775)	127,534
2020								
Operating revenues	\$15,135	\$ 1,733	\$ (371)	\$ 16,497	\$ 3,434	\$ 596	\$(152)	\$ 20,375
Depreciation and amortization	2,447	494	—	2,941	500	77	—	3,518
Interest income	26	4	—	30	5	6	(4)	37
Earnings from equity method investments	—	—	—	—	141	12	—	153
Interest expense	825	151	—	976	231	614	—	1,821
Income taxes (benefit)	514	3	—	517	173	(297)	—	393
Segment net income (loss) ^{(a)(b)(h)(i)(j)}	2,877	238	—	3,115	590	(592)	6	3,119
Goodwill	—	2	—	2	5,015	263	—	5,280
Total assets	85,486	13,235	(680)	98,041	22,630	3,168	(904)	122,935

(a) Attributable to Southern Company.

(b) For the traditional electric operating companies, includes pre-tax charges to income at Georgia Power for the estimated probable loss associated with the construction of Plant Vogtle Units 3 and 4 of \$183 million (\$137 million after tax) in 2022, \$1.7 billion (\$1.3 billion after tax) in 2021, and \$325 million (\$242 million after tax) in 2020. See Note 2 under "Georgia Power – Nuclear Construction" for additional information.

(c) For Southern Company Gas, includes pre-tax impairment charges totaling approximately \$131 million (\$99 million after tax) related to the sale of natural gas storage facilities. See Note 15 under "Southern Company Gas" for additional information.

(d) For the "All Other" column, includes a \$119 million goodwill impairment loss (pre-tax and after tax) at PowerSecure. See Note 1 under "Goodwill and Other Intangible Assets and Liabilities" for additional information.

Notes to Financial Statements

- (e) For Southern Power, includes gains on wind turbine equipment contributed to various equity method investments totaling approximately \$37 million pre-tax (\$28 million after tax). See Notes 7 and 15 under “Southern Power” for additional information.
- (f) For Southern Company Gas, includes a pre-tax gain of \$121 million (\$92 million after tax) related to its sale of Sequent, as well as the resulting \$85 million of additional tax expense due to changes in state apportionment rates, and pre-tax impairment charges totaling \$84 million (\$67 million after tax) related to its equity method investment in the PennEast Pipeline project. See Notes 7 and 15 under “Southern Company Gas” for additional information.
- (g) For the “All Other” column, includes a pre-tax gain of \$93 million (\$99 million gain after tax) associated with the termination of two leveraged leases projects. See Note 15 under “Southern Company” for additional information.
- (h) For the “All Other” column, includes pre-tax impairment charges totaling \$7 million (\$6 million after tax) in 2021 and \$206 million (\$105 million after tax) in 2020 related to leveraged lease investments. See Notes 9 and 15 under “Southern Company Leveraged Lease” and “Southern Company,” respectively, for additional information.
- (i) For Southern Power, includes a \$39 million pre-tax gain (\$23 million gain after tax) on the sale of Plant Mankato. See Note 15 under “Southern Power” for additional information.
- (j) For Southern Company Gas, includes a \$22 million pre-tax gain (\$16 million gain after tax) on the sale of Jefferson Island. See Note 15 under “Southern Company Gas” for additional information.

Products and Services

Year	Electric Utilities' Revenues			
	Retail	Wholesale	Other	Total
	<i>(in millions)</i>			
2022	\$18,197	\$3,641	\$1,035	\$22,873
2021	14,852	2,455	993	18,300
2020	13,643	1,945	909	16,497

Year	Southern Company Gas' Revenues			
	Gas Distribution Operations	Gas Marketing Services	All Other	Total
	<i>(in millions)</i>			
2022	\$5,240	\$638	\$ 84	\$5,962
2021	3,656	475	249	4,380
2020	2,902	408	124	3,434

Southern Company Gas

Southern Company Gas manages its business through three reportable segments – gas distribution operations, gas pipeline investments, and gas marketing services. Prior to the sale of Sequent on July 1, 2021, Southern Company Gas' reportable segments also included wholesale gas services. The non-reportable segments are combined and presented as all other. See Note 15 under “Southern Company Gas” for additional information on the disposition activities described herein.

Gas distribution operations is the largest component of Southern Company Gas' business and includes natural gas local distribution utilities that construct, manage, and maintain intrastate natural gas pipelines and gas distribution facilities in four states.

Gas pipeline investments consists of joint ventures in natural gas pipeline investments including a 50% interest in SNG and a 50% joint ownership interest in the Dalton Pipeline. These natural gas pipelines enable the provision of diverse sources of natural gas supplies to the customers of Southern Company Gas. Gas pipeline investments also includes a 20% ownership interest in the PennEast Pipeline project, which was cancelled in September 2021, and through its March 2020 sale, included a 5% ownership interest in the Atlantic Coast Pipeline construction project. See Notes 5 and 7 for additional information.

Through July 1, 2021, wholesale gas services provided natural gas asset management and/or related logistics services for each of Southern Company Gas' utilities except Nicor Gas as well as for non-affiliated companies. Additionally, wholesale gas services engaged in natural gas storage and gas pipeline arbitrage and related activities.

Gas marketing services provides natural gas marketing to end-use customers primarily in Georgia and Illinois through SouthStar.

The all other column includes segments and subsidiaries that fall below the quantitative threshold for separate disclosure, including storage and fuels operations. The all other column included a natural gas storage facility in Texas through its sale on November 18, 2022, Jefferson Island through its sale in December 2020, and Pivotal LNG through its sale in March 2020. See Note 15 to the financial statements under “Southern Company Gas” for additional information, including the sale of a natural gas storage facility in California expected to be completed later in 2023.

Notes to Financial Statements

Financial data for business segments for the years ended December 31, 2022, 2021, and 2020 was as follows:

	Gas Distribution Operations	Gas Pipeline Investments	Wholesale Gas Services ^(a)	Gas Marketing Services	Total	All Other	Eliminations	Consolidated
<i>(in millions)</i>								
2022								
Operating revenues	\$ 5,267	\$ 32	\$ —	\$ 638	\$ 5,937	\$ 55	\$ (30)	\$ 5,962
Depreciation and amortization	516	5	—	16	537	22	—	559
Operating income (loss)	803	21	—	133	957	(135)	(8)	814
Earnings from equity method investments	—	148	—	—	148	—	—	148
Interest expense	229	27	—	3	259	4	—	263
Income taxes (benefit)	145	35	—	37	217	(37)	—	180
Segment net income (loss) ^(b)	470	107	—	94	671	(99)	—	572
Total assets	22,040	1,577	—	1,616	25,233	8,943	(9,555)	24,621
2021								
Operating revenues	\$ 3,679	\$ 32	\$ 188	\$ 475	\$ 4,374	\$ 38	\$ (32)	\$ 4,380
Depreciation and amortization	482	5	—	18	505	31	—	536
Operating income (loss)	708	21	241	125	1,095	(40)	—	1,055
Earnings from equity method investments	—	50	—	—	50	—	—	50
Interest expense	207	25	2	3	237	1	—	238
Income taxes (benefit)	120	27	32	34	213	62	—	275
Segment net income (loss) ^{(c)(d)(e)}	412	19	107	88	626	(87)	—	539
Total assets	20,917	1,467	31	1,556	23,971	12,114	(12,525)	23,560
2020								
Operating revenues	\$ 2,952	\$ 32	\$ 74	\$ 408	\$ 3,466	\$ 36	\$ (68)	\$ 3,434
Depreciation and amortization	442	5	1	22	470	30	—	500
Operating income (loss)	655	20	20	119	814	(7)	5	812
Earnings from equity method investments	—	141	—	—	141	—	—	141
Interest expense	192	29	4	3	228	3	—	231
Income taxes (benefit)	114	33	3	28	178	(5)	—	173
Segment net income (loss) ^(f)	390	99	14	89	592	(2)	—	590
Total assets	19,090	1,597	850	1,503	23,040	11,336	(11,746)	22,630

(a) As a result of the sale of Sequent, wholesale gas services is no longer a reportable segment in 2022. Prior to the sale of Sequent, the revenues for wholesale gas services were netted with costs associated with its energy and risk management activities. A reconciliation of operating revenues and intercompany revenues is shown in the following table.

	Third Party Gross Revenues	Inter- company Revenues	Total Gross Revenues	Less Gross Gas Costs	Operating Revenues
<i>(in millions)</i>					
2021	\$3,881	\$ 90	\$3,971	\$3,783	\$188
2020	4,544	115	4,659	4,585	74

(b) For the "All Other" column, includes pre-tax impairment charges totaling approximately \$131 million (\$99 million after tax) related to the sale of natural gas storage facilities. See Note 15 under "Southern Company Gas" for additional information.

(c) For gas pipeline investments, includes pre-tax impairment charges totaling \$84 million (\$67 million after tax) related to the equity method investment in the PennEast Pipeline project. See Note 7 under "Southern Company Gas" for additional information.

(d) For wholesale gas services, includes a pre-tax gain of \$121 million (\$92 million after tax) related to the sale of Sequent.

(e) For the "All Other" column, includes \$85 million of additional tax expense as a result of the sale of Sequent.

(f) For the "All Other" column includes a \$22 million pre-tax gain (\$16 million gain after tax) on the sale of Jefferson Island.

Shareholder Information

Transfer Agent

EQ Shareowner Services is Southern Company's transfer agent, dividend-paying agent, investment plan administrator and registrar. If you have questions concerning your registered Southern Company shareowner account, please contact:

EQ Shareowner Services
1110 Centre Pointe Curve, Suite 101
Mendota Heights, Minnesota 55120

Telephone: 1.800.554.7626

Website: shareowneronline.com

Southern Company Shareholder Relations

Telephone: 404.506.0965

Email: shareholderservices@southernco.com

Southern Investment Plan

The Southern Investment Plan is a convenient way to become a Southern Company shareholder. Participants in the Plan can purchase additional shares in Southern Company through optional cash purchases and reinvestment of dividends. The Southern Investment Plan prospectus can be found at investor.southerncompany.com/shareowner-services.

Dividend Payments

Southern Company has paid dividends since 1948. Historically, dividends are declared and paid quarterly at the discretion of the board of directors.

Auditors

Deloitte & Touche LLP
191 Peachtree St. NE
Suite 2000
Atlanta, GA 30303

Investor Information

For information about earnings and dividends, stock quotes and current news releases, please visit us at investor.southerncompany.com.

Institutional Investor Inquiries

Southern Company maintains an investor relations office in Atlanta, Georgia, 404.506.0901, to meet the information needs of institutional investors and securities analysts.

Electronic Delivery of Proxy Materials

Any stockholder may enroll for electronic delivery of proxy materials by logging on at www.icsdelivery.com/so.

Environmental, Social and Governance (ESG) Information

Southern Company publishes ESG information at www.southerncompany.com/sustainability.

Common Stock

Southern Company common stock is listed on the NYSE under the ticker symbol SO. On January 31, 2023, Southern Company had 99,521 shareholders of record.

The 2022 annual report is submitted for shareholders' information. It is not intended for use in connection with any sale or purchase of, or any solicitation of, offers to buy or sell securities.

Southern Company is a holding company that conducts business through its subsidiaries. Unless the context otherwise requires, references to Southern Company's customers, communities and operations in this 2022 annual report refer to the customers, communities and operations of its subsidiaries.

Pages 16-198 of this 2022 annual report contain excerpts from Southern Company's Annual Report on Form 10-K for the year ended December 31, 2022, which was filed with the SEC on February 15, 2023. Information in these pages is provided as of the February 15, 2023 filing date and has not been updated for any subsequent events or developments.

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