

# Vogtle 3&4



**OWNERS:** Georgia Power · 45.7% | Oglethorpe Power · 30% | MEAG Power · 22.7% | Dalton Utilities · 1.6% | LOCATION: Waynesboro, GA LICENSEE/OPERATOR FOR OWNERS: Southern Nuclear | TECHNOLOGY: Two Westinghouse AP1000 nuclear units · about 1,117 MW each

Georgia Power is constructing the nation's first new nuclear units in more than 30 years at Plant Vogtle near Waynesboro, Ga. Upon completion, Units 3 & 4, along with existing Vogtle units 1 & 2, are expected to power more than one million homes and businesses in Georgia.

## **Project Benefits**

- Vogtle 3 & 4 will be the nation's first new nuclear units in more than 30 years and are an essential part of Georgia Power's commitment to deliver safe, clean, reliable and affordable energy for customers. The units will also play a significant role in supporting Southern Company's goal of net-zero carbon emissions by 2050.
- Once operating, the two new units will be able to power more than 500,000 homes and businesses, providing customers with a reliable, carbon-free energy source for the next 60 to 80 years.
- The Vogtle 3 & 4 project is currently the largest construction project in the state of Georgia, employing more than 7,000 workers and 800 permanent jobs once the units begin operating. The project has also been an economic development driver for the region during construction.





# Project Update

- Significant progress continues to be made at the Vogtle 3 & 4 nuclear expansion site with Unit 3 direct construction approximately 99% complete and the total project approximately 93% complete. Georgia Power currently projects a Unit 3 in-service date in the second quarter of 2022 and a Unit 4 in-service date in the first quarter of 2023.
- Unit 3 has completed Hot Functional Testing, marking a significant step towards commercial operations. During hot functional testing, plant systems achieved normal operating pressure and temperature, without nuclear fuel, to verify the successful operation of reactor components and systems together.
- Georgia Power's share of the total project capital cost forecast is \$9.2 billion, although the company has not sought approval of any capital costs above the \$7.3 billion previously approved by the Georgia Public Service Commission. Additionally, there are special protections in place for customers during construction, including a reduction in the company's return on investment for the project. Every month of delay in the project equates to an incrementally lower return, which translates to lower bill impacts during construction. For future, final cost recovery, an open and transparent prudency review is planned near the completion of Unit 4.
- Today, after including anticipated customer benefits from federal production tax credits, interest savings from loan guarantees from the DOE and the fuel savings of nuclear energy, the projected peak rate impact to Georgia Power retail customers is approximately 10 percent, with 3.4% already in rates well below original projections.

### Recent Project Milestones

- Completion of Hot Functional Testing for Unit 3 Marks a significant step towards commercial operations. During hot functional testing, plant systems achieved normal operating pressure and temperature, without nuclear fuel, to verify the successful operation of reactor components and systems together.
- Initial Energization for Unit 4 Plant equipment for Unit 4 is energized, or permanently powered, which is needed to perform all subsequent testing for the unit.
- **Final Module Placed** All modules for Georgia Power's Vogtle 3 & 4 project have now been set as a massive water tank, known as CB20, has been lifted into place atop the Unit 4 containment vessel and shield building roof.
- Unit 4 Starting Integrated Flush This test pushes water through the permanent plant system piping that feeds into the reactor vessel and reactor coolant loops. Integrated flush represents a critical step as the process is key to helping ensure the safe startup of Unit 4 and marks the start of extensive testing ahead for the unit's systems.
- Unit 3 Nuclear Fuel Receipt The first nuclear fuel assemblies for Unit 3 arrived at the site in December 2020, and the site has now received more than a third of the fuel required for Unit 3 fuel load.
- Unit 3 Condenser Vacuum Test The test was conducted with the main turbine on turning gear and by operating supporting systems to establish the condenser vacuum, which is necessary to demonstrate the steam supply and water-cooling systems operate together and are ready to support hot functional testing and initial fuel load in the reactor.

## Vogtle 3 & 4 Timeline

- 2012 Nuclear Regulatory Commission issues the Construction and Operating Licenses for Vogtle units 3 & 4.
- 2013 First nuclear concrete is placed for both units.
- 2016 One of the heaviest lifts of the project took place when the 2 million-pound CA20 module was placed.
  - The first class of Vogtle 3 & 4 nuclear operators passed the Nuclear Regulatory Commission licensing exam, ensuring that licensed, qualified operators are in place prior to nuclear fuel loading and the plant start up.
- 2017 Following the Westinghouse bankruptcy filing, construction momentum continued uninterrupted.
  - Georgia Power received unanimous approval from the Georgia Public Service Commission to complete Vogtle units 3 & 4.
- **2019** The top of the containment vessel for Unit 3 was lifted into place, signifying that all modules and large components have been placed inside the unit.
- **2020** Georgia Power received the first nuclear fuel shipment for Vogtle Unit 3, representing the first nuclear fuel shipment for this newly-designed AP1000 reactor in the U.S.
- **2021** Hot functional testing has been completed for Unit 3, marking a significant step towards commercial operations. During hot functional testing, plant systems achieved normal operating pressure and temperature, without nuclear fuel, to verify the successful operation of reactor components and systems together.
  - All modules have been set as the Passive Containment Cooling Water Storage Tank, known as CB-20, was lifted into place atop the Unit 4 containment vessel and shield building roof. The placement also represents the last major crane lift at the project site.

### **Cautionary Note Regarding Forward-Looking Statements**

Certain information contained in this communication is forward-looking information based on current expectations and plans that involve risks and uncertainties. Forward-looking information includes, among other things, statements concerning the projected cost and schedule for completion of Plant Vogtle units 3 and 4 and expected job creation. Georgia Power cautions that there are certain factors that can cause actual results to differ materially from the forward-looking information that has been provided. The reader is cautioned not to put undue reliance on this forward-looking information, which is not a guarantee of future performance and is subject to a number of uncertainties and other factors, many of which are outside the control of Georgia Power; accordingly, there can be no assurance that such suggested results will be realized. The following factors, in addition to those discussed in Georgia Power's Annual Report on Form 10-K for the year ended December 31, 2020, Quarterly Reports on Form 10-Q for the quarters ended March 31, 2021 and June 30, 2021, and subsequent securities filings, could cause actual results to differ materially from management expectations as suggested by such forward-looking information: the potential effects of the continued COVID-19 pandemic; 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, due to current and future challenges which include, but are not limited to, changes in labor costs, availability and productivity, challenges with 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, 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 nuclear units, inspections and the timely submittal by Southern Nuclear of the Inspections, Tests, Analyses, and Acceptance Criteria documentation for each unit and the related investigations, reviews and approvals by the U.S. Nuclear Regulatory Commission ("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, and challenges related to the COVID-19 pandemic; the ability to overcome or mitigate the current challenges at Plant Vogtle Units 3 and 4 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, including Public Service Commission approvals 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 and the ability of other Vogtle owners to tender a portion of their ownership interests to Georgia Power following certain construction cost increases; 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; the inherent risks involved in operating and constructing nuclear generating facilities; the ability of counterparties of Georgia Power to make payments as and when due and to perform as required; the direct or indirect effect on Georgia Power's business resulting from cyber intrusion or physical attack and the threat of physical attacks; catastrophic events such as fires, earthquakes, explosions, floods, tornadoes, hurricanes and other storms, droughts, pandemic health events, political unrest or other similar occurrences; and the direct or indirect effects on Georgia Power's business resulting from incidents affecting the U.S. electric grid or operation of generating or storage resources. Georgia Power expressly disclaims any obligation to update any forward-looking information.

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