

Bin 10230 241 Ralph McGill Boulevard, NE Atlanta, GA 30308-3374

August 31, 2022

Ms. Sallie Tanner Executive Secretary Georgia Public Service Commission 244 Washington Street, SW Atlanta, GA 30334-5701

RE: Georgia Power Company's Twenty-seventh Semi-annual Construction Monitoring Report for Plant Vogtle Units 3 and 4; Docket No. 29849

Dear Ms. Tanner:

Enclosed for filing is Georgia Power Company's Twenty-seventh Semi-annual Construction Monitoring Report for Plant Vogtle Units 3 and 4 pursuant to O.C.G.A. § 46-3A-7(b), Georgia Public Service Commission ("Commission") Rule 515-3-4-.07(2)(b), and the Commission's Final Order in Docket No. 27800.

There is no trade secret information included in this Twenty-seventh Semi-annual Report.

Should you have any questions, please call me at 404-506-3044.

Sincerely,

ey M. Ballcom

Kelley M. Balkcom Director, Regulatory Affairs <u>mmcclosk@southernco.com</u>



Twenty-seventh Semi-annual Vogtle Construction Monitoring Report

August 2022 · Docket No. 29849

Vogtle Unit 3 Power Plant 🚡



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Vogtle Units 3 and 4 Twenty-seventh Semi-annual Construction Monitoring Report

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Unit 3 Nuclear and Turbine Islands

As of July 2022



EXECUTIVE SUMMARY

• Georgia Power Company ("Georgia Power" or the "Company") and Southern Nuclear Operating Company ("SNC"), as agent for Georgia Power, are committed to safety, quality, and compliance.

Site leadership cultivates and enhances a culture that promotes safety first. The Site continues to have an OSHA Recordable Incidence Rate well below the heavy construction industry average. In 2021, the Project experienced the fewest number of recordable incidents since 2015 and has continued a strong safety trend this year.

During the reporting period of January 1, 2022, through June 30, 2022 (the "Reporting Period"), the NRC conducted a follow up inspection on the previously reported electrical quality issues. In April 2022, the Nuclear Regulatory Commission ("the NRC") issued the final 90001 Inspection Report, which closed the two white findings and moved Unit 3 back to the Licensee Response Column. Further, SNC received no Notices of Violation during the Reporting Period and remained in favorable standing with the NRC as indicated by its green status under the NRC's Construction Reactor Oversight Process (the "cROP"). The NRC's cROP was designed and implemented to ensure reactors under construction are built according to the NRC-approved design. This program allows the NRC to arrive at objective conclusions about a licensee's effectiveness in guaranteeing construction quality, providing for predictable responses to performance issues, and clearly communicating performance assessment results to the public.

• Unit 3 receives the 103(g) finding from the NRC.

On July 29, 2022, the Company announced that documentation for the 398 Inspection, Test, Analysis, and Acceptance Criteria ("ITAACs") had been submitted to the NRC in accordance with 10 C.F.R Part 52.103(g) ("103(g)"). This submittal means that the Project has completed all of the inspections, tests, and analyses to provide the NRC assurance that the unit meets strict nuclear safety and quality standards.

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. This historic event, a requirement for operation, allows for Unit 3 to load nuclear fuel and begin start-up testing later this year in accordance with its combined license.

With the receipt of the 103(g) finding, Unit 3 will move from the NRC's cROP to NRC's Reactor Oversight Process (the "ROP"). Unit 4 will remain under cROP while under construction. The NRC's ROP was designed and implemented to help ensure public health and safety in the operation of commercial power plants. This program allows the NRC to monitor reactor safety, radiation safety for both plant workers and the public during routine operations, and protection of the unit against sabotage or other security threats. Additionally, the ROP will communicate plant performance and assessments to the public.

• Georgia Power incurred \$522 million of capital expenditures during the Reporting Period.

Table 1 – 27 th VCM Expenditur	es	
Dollars in Millions		
Site Construction Management	\$	458
Owner's Costs		39
Ad Valorem Tax		25
Transmission Interconnection		-
Total 27 th VCM Expenditures	\$	522

• Georgia Power presents \$522 million in capital expenditures for review only and does not request the Commission take any action at this time.

As reported in the Company's 25th VCM Report, Project expenditures have exceeded the \$7.3 billion capital cost forecast previously deemed reasonable by the Commission in its VCM 17 Order. In the Commission's VCM 24 Order Adopting Stipulation, the Company agreed that it will not request verification and approval of any costs exceeding the \$7.3 billion until the prudency review contemplated in the Commission's VCM 17 Order. Thus, the Company is not currently seeking verification and approval of the \$522 million incurred during the Reporting Period at this time and presents these costs for Commission review only.

• The Company's share of the total Project cost forecast remains approximately \$10 billion.

The Company and SNC continue to monitor and evaluate costs associated with the completion of the Project. The total project capital cost forecast remains approximately \$10 billion with the addition of \$36 million since the 26th VCM to replenish the unallocated construction contingency. The Company is not requesting Commission approval of this cost forecast increase in this filing but may request that the Commission evaluate expenditures allocated from contingency for future rate recovery (excluding the \$694 million for which the Company has agreed it will not seek recovery) no earlier than the prudence review contemplated by the VCM 17 Order.

During the first half of 2022, \$126 million of established construction contingency was assigned to the Project's base capital forecast for costs primarily associated with construction productivity, the pace of system turnovers, additional craft and support resources, and procurement for Units 3 and 4.

Cumulative capital expenditures through the Reporting Period are \$8.9 billion after accounting for receipt of the Toshiba Parent Guaranty. The estimated remaining capital spend to complete the Project is approximately \$1.0 billion, which includes Georgia Power's share of Project contingency.

• The in-service date for Unit 3 is projected in the first quarter 2023.

Following receipt of the 103(g) finding from the NRC, fuel load is projected by the end of October 2022, which should allow for a projected in-service date at the end of the first quarter of 2023. Unit 3's projected schedule primarily depends on the volume and completion of construction remediation work, completion of work packages, including inspection records, and other documentation necessary to begin fuel load, the pace of system and area turnovers, and the progression of startup and other testing. Any further delays could result in a later inservice date.

Leading up to and during Fuel Load, the Project team will continue to complete room and area turnovers, component and pre-operational testing, documentation closure, and system transitions to Operations. Following Fuel Load, Unit 3 will transition to a start-up testing sequence leading to commercial operation.

• The in-service date for Unit 4 is projected in the fourth quarter of 2023.

In August 2022, the Unit 4 site working schedule was re-baselined to account for construction, and testing, progress. The site work plan now targets an in-service date of August 2023 for Unit 4, which primarily depends on overall electrical construction productivity and production levels increasing as appropriate levels of electricians and field support are added and maintained. As the site work plan includes minimal margin to the site work plan milestone dates, an in-service date during fourth quarter 2023 for Unit 4 is projected, although any further delays could result in a later in-service date.

• The Site Operations organization is prepared to support Fuel Load and start-up testing.

During the Reporting Period, the Site Operations organization established procedures and Mode change checklists to support Fuel Load and start-up testing. With the issuance of the NRC's 103(g) finding, the Technical Specifications within the plant's license becomes the governing document for plant operations for Unit 3.

The World Association of Nuclear Operators ("WANO") team was on site in August 2022. The team reviewed Operations training, systems transition to Operations, and progress on the culture shift to an Operating plant. The WANO team found no areas for improvement or gap focus areas. This visit completes the Unit 3 Pre-Startup Review and reinforces that the site team is ready for Fuel Load, startup testing, and plant operations.

• Vogtle Units 3 and 4 peak rate impact for customers is expected to be approximately ten percent.

Using the construction capital costs deemed reasonable as of this 27th VCM Report, the projected peak rate impact to retail customers is approximately ten percent, with approximately two percent already in rates. Vogtle Units 3 and 4 will serve as an economic baseload resource to meet the electricity needs of our customers, in addition to the value that nuclear energy provides to Georgia's future, particularly when potential environmental regulations are considered. Upon completion, Vogtle Units 3 and 4 is expected to be an asset to Georgia

Power, its customers, the state, and the nation for at least 60 years. The new units will support Georgia's economic growth and provide economic benefits to current electric customers, as well as those looking to expand or relocate to the state.

Consistent with previous VCM reports, the rate impacts include customer benefits that the Company proactively pursued – including federal production tax credits ("PTCs") and interest savings from the Department of Energy ("DOE") loan guarantees. The projections also include the fuel savings associated with adding additional nuclear units to the generation mix.

In addition, as a result of the Commission's VCM 17 Order, penalties against the Company for schedule delays are providing customers with positive benefits in the form of lower financing costs while the Project remains under construction.



Figure A – Projected Cumulative Rate Impacts

RESPONSES TO STIPULATED QUESTIONS

1. The reasons for any additional change in the estimated costs and schedules of the units since the process began.

The total Project capital cost forecast remains approximately \$10 billion. The details of the current total Project capital cost forecast are provided in Table 1.1, which also reflects the to-date capital investment, actual-to-forecast variances, and the total financing costs during construction. Total financing costs include amounts collected and forecasted to be collected pursuant to the NCCR tariff and amounts accrued and forecasted to be accrued through AFUDC.

Since the 26th VCM Report, \$126 million of established contingency was allocated to cover costs primarily associated with construction productivity, the pace of system turnovers, additional craft and support resources, and procurement for Units 3 and 4. The Company also replenished the unallocated construction contingency balance with an additional \$36 million, which resulted in a corresponding increase to the total project capital cost forecast.

The risk-adjusted in-service dates for both units remain the same as those reported in the 26th VCM Report. Unit 3 Fuel Load is currently projected to begin by the end of October 2022 in order to support the projected in-service date at the end of the first quarter of 2023. Unit 3's projected schedule primarily depends on the volume and completion of construction remediation work, completion of work packages, including inspection records, and other documentation necessary to begin fuel load, the pace of system transitions and area turnovers, and the progression of startup and other testing.

On Unit 4, an in-service date by the end of the fourth quarter 2023 is still anticipated, but successfully meeting current milestone targets depends on Unit 3 progress and electrical construction production and productivity on Unit 4. The Unit 4 site work plan was adjusted in August 2022, and now targets Cold Hydro Start in October 2022, Hot Functional Testing start in December 2022, Fuel Load in March 2023, and an in-service date in August 2023.

Table 1-A – Unit 3 Risk Adjusted Schedule			
Unit 3 Major Milestone March 2023 Risk Adjusted Schedule			
103(g) Letter ReceivedAugust 2022 (Actual)			
Fuel Load October 2022			
Commercial Operation Date	March 2023		

In Table 1-A below, the Unit 3 milestone date are shown.

Table 1-B below shows a comparison of milestone dates between the current Unit 4 site work plan and the Risk Adjusted Schedule.

Table 1-B – Unit 4 Comparison to Risk Adjusted Schedule				
Unit 4 Major Milestone	August 2022 Site Work Plan	December 2023 Risk Adjusted Schedule		
Open Vessel Testing Start	Decembe	December 2021 (Actual)		
Structural Integrity Test ("SIT")/ Integrated Leak Rate Test ("ILRT") Start	February 2022 (Actual)			
Cold Hydro Testing Start	October 2022	January 2023		
Hot Functional Testing StartDecember 2022March 2023				
Fuel Load Start	March 2023	July 2023		
Commercial Operation Date	August 2023	December 2023		

The Company and SNC recognize that the Project may continue to experience challenges, including additional COVID-related challenges resulting from future variants, and that these challenges and unanticipated events, or failure to meet the current site work plan, may require additional revision to the site work plan, capital cost forecast, and/or Project schedule.

Table 1.1

<u>To</u>	tal Project Capital		<u>Proj</u>	ect to Date Ca	pital
VCM 26 <u>(\$ millions)</u>	Total Current Forecast (\$ millions)	Variance (\$ millions)	Actual To Date (\$ millions)	Budget To Date (\$ millions)	Variance (\$ millions
\$ 3,198	\$ 3,198	-	\$ 3,198	\$ 3,198	0
411	411	(0)	409	409	-
577 1,483 3,066 1,012 6,137	632 1,507 3,154 <u>954</u> 6 247	56 24 88 (58)	549 1,404 2,871 <u>643</u> 5,467	554 1,407 2,857 672 5,489	(5) (3) 15 (29) (23)
1,158 318 62 (4) 1,534	1,174 318 62 <u>(4)</u> 1,549	15 - 0 	1,051 253 61 	1,066 250 61 0 1,378	(14) 3 (0)
11,280	11,405	126	10,439	10,474	(35)
(1,492) (694)	(1,492) (694)	-	(1,492) (694)	(1,492) (694)	-
(1,794)	(1,919)	(126)	-	-	-
\$ 7,300	\$ 7,300 (2) (3)	\$ (0)	\$ 8,253	8,288	(35)
		(0)	18	18	(0)
	VCM 26 (\$ millions) \$ 3,198 411 577 1,483 3,066 1,012 6,137 1,158 318 62 (4) 1,534 11,280 (1,492) (694) (1,794) \$ 7,300	Total Project Capital Current VCM 26 VCM 26 Forecast (\$ millions) \$ 3,198 \$ 3,198 411 411 577 632 1,483 1,507 3,066 3,154 1,012 954 6,137 6,247 1,158 1,174 318 318 62 62 (4) (4) 1,534 1,549 11,280 11,405 (1,492) (1,492) (694) (694) (1,794) (1,919) \$ 7,300 \$ 7,300 (2) (3)	Total Current VCM 26 Forecast Variance (\$ millions) (\$ millions) (\$ millions) \$ 3,198 \$ 3,198 - 411 411 (0) 577 632 56 1,483 1,507 24 3,066 3,154 88 1,012 954 (58) 6,137 6,247 110 1,158 1,174 15 318 318 - 62 62 0 (4) (4) 0 1,534 1,549 15 11,280 11,405 126 (1,492) (1,492) - (694) (694) - (1,794) (1,919) (126) \$ 7,300 \$ 7,300 (2)(3) \$ (0) (0)	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Total CurrentVCM 26ForecastVariance(\$millions)(\$millions)(\$millions)\$ 3,198\$ 3,198-411411(0)57763256577632561,4831,507241,4831,507241,012954(58)6,1376,2471101,1581,17415318318-62620(4)(4)0(1,492)(1,492)-(1,492)(1,492)-(1,492)(1,492)-(1,794)(1,919)(126)\$ 7,300\$ 7,300(2) (3)\$ (0)\$ 8,2538,288

	Total Project Financing	Project to Date Financing		
	Total	Actual	Budget	
	Current	То	То	
	Forecast	Date	Date	Variance
	(\$ millions)	(\$ millions)	(\$ millions)	(\$ millions)
Project Schedule Financing				
Return on CWIP in Rate Base ⁽⁶⁾	2,914	2,698	2,698	(0)
AFUDC - Accrued on CWIP Above Original Certified Cost	387	247	249	(2)
AFUDC - Accrued through Dec 2010 and Related Return	109	109	109	
Total Project Schedule Financing	\$ 3,411	\$ 3,055	\$ 3,057	\$ (2)
Total Capital Cost and Financing ⁽⁵⁾	\$ 10,711	\$ 11,308	\$ 11,345	\$ (37)

Footnotes:

1. Includes Original EPC contract payment milestones and EPC Scope Change. 2. \$7.3 billion is the Total Construction & Capital Cost approved by Georgia Public Service Commission (Order dated January 11, 2018). Above exclude s \$60 million in unspecified project contingency. Such amounts may be recommended for consideration by the GPSC as and when included in the Construction and Capital Cost forecast. 3. Above excludes approximately \$455 million of costs associated with the cost-sharing and tender provisions of the joint ownership agreement that Georgia Power will not seek recovery for from retail customers.

4. The Company is not requesting Commission approval of the \$1.9 billion of contingency allocated to construction cost categories in this filing but may request that the Commission evaluate expenditures allocated to contingency for rate recovery as and when appropriate.

5. Excludes construction monitor fees pursuant to the VCM 19 Order.

6. NCCR will only be collected on the certified capital cost of \$4.418 billion per the January 3, 2017 Order Adopting Stipulation and VCM 17 Order.

7. Excludes construction monitor fees approved by Georgia Public Service Commission in August 2022.

Note: Details may not add to totals due to rounding.

Table 1.2

Replace	ement E	nergy Costs a	and Deferr	ed Operati	ng Costs			
		Deferred Benefits			Deferred Ope	rating Costs		
							Total	
							Deferred	
		Replacement	Deferred				Operating	
Date	VCM	Energy Cost	PTCs	O&M	Depreciation	Ad Valorem	Costs	Net Cost
Total 201	6	43.6	89.6	(67.0)	(41.2)	(9.3)	(117.5)	15.7
Total 201	7	115.8	186.5	(130.4)	(112.3)	(23.2)	(265.9)	36.4
T-1-1-201	0	474.0	464 5	(424.0)	(407.7)	(25.6)	(205.4)	50.7
Total 201	8	1/4.3	161.5	(131.9)	(127.7)	(25.6)	(285.1)	50.7
Total 201	9	140.2	161.5	(150.2)	(127.9)	(25.0)	(303.1)	(1.4)
Total 202	0	116.3	166.2	(140.6)	(127.9)	(36.2)	(304.6)	(22.2)
Total 202	1	239.9	170.8	(135.1)	(131.7)	(44.4)	(311.3)	99.4
	I .						[
Jan-22	27th	22.6	14.2	(11.8)	(11.1)	(3.5)	(26.4)	12.0
Feb-22	27th	19.2	14.2	(11.5)	(11.1)	(4.9)	(27.5)	12.5
Mar-22	27th	23.1	14.2	(11.6)	(11.1)	(3.7)	(26.4)	16.7
Apr-22	27th	35.1	14.2	(11.5)	(11.1)	(3.7)	(26.3)	19.6
May-22	27th	58.2	14.2	(11.0)	(11.1)	(3.7)	(25.8)	9.7
Jun-22	27th	66.5	14.2	(11.5)	(11.1)	(3.6)	(26.2)	10.9
Total VCN	127	224.8	85.6	(79.3)	(67.1)	(25.1)	(171.5)	138.9
Total to I	Date	1,054.9	1,021.8	(834.5)	(736.0)	(188.7)	(1,759.1)	317.6

2. The status of the Company's loan guarantee application at the DOE and to the extent that the application is granted, then the Company shall also report on the impact it has or would have on the final expected in-service cost of the units.

Table 2 – DOE Loan Guarantee				
Available	Received	Remaining		
\$5.13 billion	\$5.13 billion	\$0		

Georgia Power has borrowed all \$5.13 billion related to Vogtle Units 3 and 4 costs through the DOE Loan Guarantee Agreement and a multi-advance credit facility among Georgia Power, the DOE, and the Federal Financing Bank.

The DOE loan guarantee does not have a material impact on the in-service cost of Vogtle Units 3 and 4, but it does provide benefits to customers through access to lower credit spreads during construction and future operation. Georgia Power customers are estimated to save approximately \$532 million, which has already been secured through draws against the credit facility.

3. The status of Quality and Compliance, Procurement, Engineering, Construction and Operational Readiness.

TOTAL PROJECT PERCENT COMPLETE

As of July 31, 2022, the total Project is approximately 97% complete. The major remaining scopes of work are finishing direct construction, subcontractor construction, and completing the Initial Test Program ("ITP"). As shown below, total construction, covering both Units 3 and 4, is approximately 98% complete. Direct construction on Unit 4 (as shown in Figure B on page 14) is approximately 96% complete, which represents approximately 65% of the total construction scope. The remaining 35% of construction scope includes subcontracted scopes of work, which are approximately 98% complete as of July 2022. The ITP scope is approximately 76% complete and will continue to progress as Construction turns over components and systems to the ITP team.

Table 3.1 – Total Project Percent Complete			
Project Phase July 2022 % Complete			
Engineering	100%		
Procurement	99.9%		
Construction	98.2%		
I&C / Cyber Security	100%		
Initial Test Program	76.4%		
Total Project	97.3%		

QUALITY AND COMPLIANCE

During the Reporting Period, the Company continued to provide oversight of the Project while SNC directed and provided guidance to contractors and actively addressed issues and concerns. SNC also continued quality oversight of construction, the ITP organization, and Site Operations to help ensure compliance with laws, regulations, and Project licensing documents. SNC-led Quality Assurance ("QA") teams monitored the safety and quality of work being conducted by Bechtel and various subcontractors through audits and field surveillances.

SNC personnel continue to lead the Bechtel Quality Control organization, which has resulted in early identification of adverse quality installation, improved first-time quality via corrective actions led by Quality Control's documentation of non-conforming inspection results, and faster inspection turnaround time. The Company and SNC are committed to bringing Vogtle 3 and 4 on-line safely and with the highest quality.

ENGINEERING

During the Reporting Period, the overall Engineering organization continued to support construction, ITP, and start-up progress. The Construction Engineering organization continued to support Construction by ensuring engineering documentation was completed and ready for area turnovers, system transitions and final construction documentation closeout. The Start-up Engineering organization focused on processes and programs to support Fuel Load and plant operation. The ITP Design Engineering team focused on resolving issues identified during component and system testing.

During the upcoming reporting period, several significant Engineering milestones are expected to be accomplished on Unit 3. These milestones include the expected completion and certification of all American Society of Mechanical Engineers ("ASME") Section III documentation by the N-Certificate holder, Westinghouse, and the completion and certification of the remaining Overpressure Protection Reports ("OPPRs") on behalf of the Owner (SNC), which are the last steps prior to the finalization of the N-3 (Owners' data report for nuclear power plant components). Completion of the N-3 signifies that all ASME Section III requirements have been met will allow Unit 3 to transition from ASME Section III (rules for new construction) to ASME Section XI (rules for in-service inspection, testing, and repairs and replacement activities) code jurisdiction. Additionally, Unit 3 is expected to complete Design Authority Turnover by transferring the design authority from Westinghouse, the design engineer of record, to SNC. SNC continues to prepare for the turnover of design authority and is staffed to accept the responsibilities.

PROJECT PERFORMANCE

As of the end of July 2022, Unit 3 direct construction is greater than 99% complete. The remaining work to be completed on Unit 3 involves construction remediation, paper closure, system and area turnovers to operations, component and pre-op testing, Fuel Load, and start-up.

Unit 4's direct earnings through July 2022 are shown in Figure B below. As of the end of July 2022, direct construction on Unit 4 is approximately 96% complete. The milestone markers show dates from the current August 2022 Site Working Plan and the December 2023 Risk Adjusted Schedule.



Direct Construction Percent Complete – Unit 4

Figure B – Direct Construction Percent Complete – Unit 4

Construction Schedule Performance

The Schedule Performance Index ("SPI") is a measure of how efficiently the Project is progressing compared to the schedule:

$$SPI = \frac{hours \ planned}{hours \ earned}$$

If the SPI is above 1.0, the Project is earning fewer hours than planned in the schedule during a given time. If SPI is less than 1.0, the Project is earning more hours than planned during a given time.



Figure C–Direct Construction Schedule Performance Index

Construction Cost Performance

The Cost Performance Index ("CPI") is a measure of the cost efficiency of direct construction resources expressed as a ratio of earned value to actual cost:

$$CPI = \frac{hours \ spent}{hours \ earned}$$

If the CPI is above 1.0, the Project is spending more hours than planned to complete a task. If CPI is less than 1.0, the Project is spending fewer hours than planned to complete a task.

The Project is currently running a cumulative direct construction CPI near 1.5, which is largely attributable to increased construction complexity, system completion, work remediation, productivity challenges exacerbated by the impacts from the COVID-19 pandemic. To better quantify the impacts of lower than desired productivity on the required direct construction resources, the Project continues to adjust the to-go budget forecast for Unit 3 and Unit 4 with the allocation of contingency as necessary to account for higher CPI.



Figure D – Direct Construction Cost Performance Index

Critical Path – Unit 3

The Unit 3 Risk Adjusted Schedule Critical Path follows multiple parallel paths, among them are Electrical completions in Containment, Construction Area transition to Operations, and ITP system testing and transition to Operations that lead to Fuel Load and Operations Startup. Once the projected 160 day Startup commences, Operations will transition the plant from Mode 6 (Fuel Load) through Mode 2, then start Mode 1 power Ascension to 100% final power and COD.



Figure E – Unit 3 Critical Path

<u>Critical Path – Unit 4</u>

The Unit 4 Critical Path goes through the Containment Building with the completion of Cold Hydro Testing, HFT, declaration of construction complete, receipt of the 103(g) finding, and then Fuel Load.



Figure F – Unit 4 Critical Path

Project Milestones

Table 3.2 shows the remaining major milestones for each unit, along with the estimated dates in the current Risk Adjusted Schedules.

	Table 3.2 – Remaining Project Milestones				
	Milestone	March 2023 / December 2023 Risk Adjusted Schedule Dates			
	Protected Area Lockdown	August 3, 2022 (A)			
	Submit Final ITAAC to NRC	July 29, 2022 (A)			
	Achieve full Vogtle 1-3 Security Integration	October 2022			
$\tilde{\mathbf{c}}$	Commence Fuel Load	October 2022			
nit	Start Power Ascension Testing	October 2022			
n,	Initial Criticality	November 2022			
,	Design Authority Turnover	October 2022			
	100% Rated Thermal Power	February 2023			
	Commercial Operation	March 2023			
	Complete SIT/ILRT	February 8, 2022 (A)			
	Complete Open Vessel Testing	August 18, 2022 (A)			
	Complete Turbine on Turning Gear	December 2022			
	Complete Cold Hydro Testing	January 2023			
4	Start Hot Functional Testing	March 2023			
it ,	Complete Hot Functional Testing	May 2023			
Jn	Complete Fuel Receipt	June 2023			
	Commence Fuel Load	July 2023			
	Start Power Ascension Testing	July 2023			
	Initial Criticality	August 2023			
	100% Rated Thermal Power	October 2023			
	Commercial Operation	December 2023			

PROJECT RISK

The Project continues to evaluate areas of risk commensurate with their significance, potential impact, and likelihood of occurrence. Risks continue to be actively managed, and mitigation plans are developed and administered, to decrease the probability and scope of such impacts.

SNC and contractors on the Project manage a comprehensive risk program which captures and tracks potential risks to the Project. The Company's continued oversight of the risk program and its execution reduces the probability of experiencing potential risks and curtails impacts to the Project from realized risks.

The Project risk register captures threats and opportunities that are routinely evaluated until the risk event is realized or retired, as well as mitigation plans that have been developed and executed to reduce the potential impacts of identified risks. The project risk register is provided monthly to Commission Staff as a recurring data request (STF-142-4) and is included in the Company's Monthly Status Report. The following section identifies some of the Project risks and discusses strategies the Project team is undertaking to mitigate the impacts.

• The risk that construction is unable to achieve the projected completion rate for both Units, even with sufficiently qualified resources available.

A project execution risk, the ability to achieve the projected completion rates, will remain active throughout the Project lifecycle. The risk is that the Project is unable to execute with the resources accounted for by current projections, leading to the inability to reach forecasted construction production targets.

With receipt of the 103(g) finding from the NRC, Unit 3 remains focused on the completion of final work items to support the near-term Project milestone of Fuel Load, which includes efforts to conduct component/pre-operational testing, complete documentation closure, transition systems to Operations, turn over areas to Operations and demobilize the Unit construction. As the Project team works towards the completion of these activities, they have deployed work teams to identify and resolve the outstanding items and complete work package closure leading up to Fuel Load. Additional strategies include continued alignment of construction work scope in conjunction with final testing activities, continued utilization of dedicated crews for complex commodity installation activities and "work to go" meetings, which concentrate on completion of outstanding scopes of work for area turnovers, system transitions and Project completion.

Unit 4 continues to focus on electrical commodity installation in support of milestone completions, including Closed Vessel Testing ("CVT"), CHT, Turbine on Gear ("TOG"), Condenser Vacuum ("CV"), and HFT. Unit 4 continues to complete complex scopes of work more efficiently by implementing lessons learned from Unit 3, even with some of the key Unit 4 craft and support resources being deployed to assist with the completion of Unit 3. The redistribution of resources has impacted Unit 4; however, many of the resources are now being transferred back and further resources have been added to Unit 4, which has led to an increase in key electrical commodity installation in recent weeks. Unit 4 continues to refine the commodity sequencing and installation execution by adapting the construction schedule to incorporate experience gained from Unit 3.

Unit 4 personnel continue to receive training regarding IEEE-384 standards to reinforce lessons learned from Unit 3 and to bolster the Project's focus on first-time quality for electrical installation. Unit 4's process of closing work packages and completing Inspection Records ("IRs") is reenforcing a "sign as you go" approach to mitigate the risk that Unit 4 faces the same backlog of work package closure and IR review as Unit 3 experienced. This strategy has proven to be successful thus far, and the Project team continues to focus their attention on documentation completion as Unit 4 progresses. Collectively, management continues to evaluate available options as part of selecting the best strategies to maintain focus on the Project's goal of completing Vogtle Units 3 and 4 in a safe and quality manner.

• The risk that construction is unable to maintain or improve performance.

Another project execution risk is CPI continuing to increase or remaining above budgeted rates for the duration of the Project life cycle. The Project must increase the number of direct construction hours earned relative to the number of direct construction hours spent to improve the Project's CPI.

First-time quality remains an area of focus for the Project team. Higher than projected amounts of rework and construction remediation have placed pressure on the Project team's ability to improve performance. The Project team implemented organizational changes that were designed to focus on first time quality improvements and reduce remediation work. In addition, the Site team's reinforcement of the "sign as you go" approach continues to encourage completion of documentation earlier in the construction and testing processes and improves the rate of first-time quality. Further, the Site team continues to conduct focused training programs to remind existing and new craft of the standards required in the construction of nuclear facilities. Project management remains focused on initiatives to increase direct construction hours earned in comparison to the direct construction hours spent. Several of the strategies are discussed below as part of the description of construction schedule performance risk. Additionally, the Unit 4 team implemented a "Ready-Ready" strategy during the Reporting Period, which focuses on identifying barriers to future work activities and establishes mitigating actions to improve the team's readiness for work execution. For example, such actions have included the incorporation of lessons learned, review of engineering documentation, verification of material availability and work package readiness. Further actions being implemented on Unit 4 to increase productivity include the transfer of craft and field non-manual employees from Unit 3 to Unit 4, addition of craft and field non-manual staffing beyond those being transferred between Units, and increase in electrical craft training, with a specific focus on terminations.

The Project team continues to review and implement opportunities to create better alignment and improve communication across all areas of the Project.

• The risk that the Project is unable to complete the final work scope and open items associated with System and Area turnovers as projected in the Project Schedule for Unit 3 and Unit 4.

With receipt of the 103(g) finding, Unit 3 has increased the focus on work to support the transition of rooms, areas, and systems to Operations. Additionally, the team remains focused on completing testing to ensure the Plant is constructed as designed and will operate safely for the next 60 to 80

years. Each transition and successfully completed test represents a step closer to Fuel Load and Commercial Operation. Significant coordination is required to complete the remaining work activities, perform the required testing, complete demobilization activities, and ensure the closure of all required documentation. Project Management monitors the outstanding work fronts daily and coordinates the mitigation of cross functional activities which impact the Unit 3 critical and near-critical paths to transition. The Project team is focused on the challenges of completing the outstanding scope, including the remaining open work items, and corresponding testing, within the timelines projected in the Project Schedule.

In addition to the remaining construction, testing work scopes, and completion of required documentation, the Operations team will monitor and complete technical specification surveillances post-system transitions as the Unit continues its progression towards Fuel Load and Commercial Operation. Additional work may be identified as Unit 3 completes testing and start-up activities.

Unit 4 continues its progress towards near-term milestones including the completion of CVT. Project management has remained focused on the "sign as you go" expectation, which delayed the turnover of several systems due to ensuring adherence to the expectation for previous work scopes. Incorporating lessons learned from Unit 3 and focusing on system turnover completion is anticipated to reduce the amount of risk between HFT and Fuel Load. Although there has been a delay in the transition of craft resources to Unit 4, it is anticipated the experience gained on Unit 3 will improve the efficiency of system and area turnovers.

• The risk the Project is unable to complete the required documentation on a timeline that supports the current schedule.

During the Reporting Period, the Project team completed documentation required to receive the 103(g) finding for Unit 3 and made significant progress with completing documentation in support of achieving Fuel Load. Additionally, the Project team has bifurcated the remaining documentation into safety and non-safety significant items. This strategy will help ensure the Project team remains focused on the most critical activities to support Fuel Load and Commercial Operation. Management remains committed to ensuring the Unit is brought online safely with the expected high level of quality.

For Unit 4, the Project team continues to close the documentation required to support the turnover of systems in support of upcoming milestones and the closure of ITAACs. Although challenges with documentation closure remain on Unit 4, considerable progress was made during the Reporting Period to close documentation for previous work scopes associated with systems turning over for near-term milestones. Document closure has impacted the pace of the system turnovers; however, this effort should produce a positive impact in the future as later milestones are achieved. In the next reporting period, Unit 4 will need to continue to monitor the impact of resources required to support Unit 3 and ensure the "Ready-Ready" process continues to identify restraints early and prioritize documentation needs.

• The risk the Project experiences a significant unanticipated challenge during the start-up phase that requires modification.

Although this risk is deemed low probability, it is possible that during the first of a kind start-up of Unit 3, the Project will experience an unanticipated challenge that requires modification and impacts the forecasted in-service dates. SNC is highly skilled and experienced with the operation of nuclear power plants and has retained experienced personnel who were involved with the first of a kind startup technology in China. The organization has a fleet of resources that it can call upon for support in the event of an unanticipated challenge during the start-up phase of the Project. The organization is well equipped to handle challenges and has the required licensed operators which are prepared to operate Vogtle Units 3 and 4.

During the lifecycle of the Vogtle Project, the Operations organization has spent significant time learning about the Units, identifying, and implementing lessons learned, and performing simulator operations. SNC operators are also embedded in the ITP organization to support testing prior to Site Operations ownership so that they are aware of any technical issues, challenges, or design modification to the system. Although the Operations team stands ready to operate Unit 3 and recognizing that most changes to design, equipment, and simulator are caught as part of the testing process, a risk remains that one or more of the site modifications will require troubleshooting and may create a delay to final commercial operation.

PROJECT CONTINGENCY

Since the 26th VCM Report, \$126 million of established contingency was allocated to cover costs primarily associated with construction productivity, pace of system turnovers, additional craft and support resources, and procurement for Units 3 and 4. The Company also replenished the unallocated construction contingency balance with an additional \$36 million, which resulted in a corresponding increase to the total project capital cost forecast.

The Company continues to anticipate that all the forecasted contingency, including the additional construction contingency, will be spent by the completion of the Project.

CONSTRUCTION

<u>Unit 3</u>

On August 3, 2022, the Project team achieved a historic milestone with receipt of the 103(g) finding from the NRC. This milestone represents the culmination of millions of manhours of work, and the letter signifies that all the license acceptance criteria for Unit 3 have been achieved. Upon receipt of the 103(g) finding from the NRC, no further NRC actions are necessary for SNC to load fuel or begin the startup-up sequence for Unit 3. The site will continue to transition Unit 3 from a construction site to an operating unit.

During the Reporting Period, the Project team continued to transition the plant towards its final operating state as it progresses towards Fuel Load and Commercial Operation. Project leadership continues to organize and direct all site activities daily. The construction contractor, Bechtel, made significant progress in reducing the backlog of construction IRs; and has shifted its focus to work completion for transitioning systems, rooms, and areas to SNC Operations as remaining work



Unit 3 PLS Room preparing for Transition

scope for Fuel Load is completed. In the coming months, the Project team expects to complete the final tests in preparation for the next major Unit 3 milestone, Fuel Load.

The most noticeable changes as the site transitions are the completion of architectural finishes and the vast amount of coating progress on both walls and floors throughout the Plant. Additionally, a significant number of rooms and areas have been turned

over to the SNC Operations team, which is evident through the change of jurisdiction signs and tags. Furthermore, the pace of the demobilization of temporary equipment, lighting and scaffolding has continued to increase which represents the final stages in any major Construction project. Finally, the areas around the Plant have been placed in a condition to operate the unit safely and securely.

Additional accomplishments include:

- Turnover of all systems in support of the 103(g) milestone;
- Completion of work and submittal of the "All ITAAC Complete (103(g) Letter;"
- Receipt of the 103(g) finding;
- Completion of all the Mechanical and Structural modules inside Containment;
- Completion of the ventilation systems throughout the Unit;

- Security Lockdown of the Unit;
- Successful completion of the follow-up WANO Pre-Startup Review ("PSUR");
- Transition of 32 areas and 14 systems to Site Operations; and
- Completion and transition of the Turbine First Bay and Diesel Generator Building.

<u>Unit 4</u>

During the Reporting Period, Unit 4 continued to progress towards several significant milestones including CVT and Turbine on Gear ("TOG") and the August 2022 successful completion of OVT. In Containment, the progress includes completion of electrical field work and terminations on key systems including Protection and Safety Monitoring System ("PMS") and Class 1E DC and UPS System ("IDS") in support of OVT completion. In the Auxiliary Building, focus remained on electrical work for OVT completion including terminations inside the PMS cabinets. Additionally, testing and preparation of the reactor vessel internals continued with the insertion of the upper reactor vessel internals into the lower reactor vessel internals.

One visible sign of the progress on Unit 4 continues to be the Shield Building, which no longer



Unit 4 Turbine and Shield Buildings

has exterior scaffolding and has substantially completed coatings on the shield building exterior. Inside the Shield Building, the installation of the air baffle plates continues to make progress towards completion.

One factor for success on Unit 4, remains the steadfast commitment to

implementing the lessons learned from Unit 3. A key focus has been aligning the closure of documentation with completion of the work activities. Additionally, the Unit 4 team has utilized the Unit 3 lessons learned related to the routing of electrical commodities to ensure further success of the first-time quality program. Some of the evaluations have required remediation of existing work; however, performing the adjustments as the systems are completed is expected to augment the rate of progress on Unit 4 as it achieves later milestones.



In the Turbine Building, preparations continue for placing the TOG with the completion and turnover of two systems in support of this milestone. The Construction team continues to progress with the installation of electrical commodities in support of the upcoming TOG and CV milestones, which will support the performance of HFT in the coming months. The Annex Building continues its transformation as walls, ceilings and architectural finishes are installed throughout the building.

Unit 4 SWS Cooling Tower

Additional accomplishments include:

- Completion of construction work to support the Lube Oil Flush;
- Completion of the PMS and IDS systems;
- Completion of construction work to support the successful testing during SIT / ILRT;
- Completion of Open Vessel Testing; and
- Installation of the blast door near the truck ramp on the east side of the Annex Building.

Balance of Plant ("BOP")

The Bechtel Construction BOP team became the first group to complete their work scope on the Project. This Team's efforts concluded with the transition of remaining small and miscellaneous work scopes to Unit 4. The Bechtel Construction BOP Team completed all significant work scopes, including the underground installation in and around the power block for commodities that range from piping, duct banks, conduit, manholes, roads, and final grading. This team also constructed wall and tank foundations that supported structures like the Annex ramp, Service Water System ("SWS") cooling tower, Chemical Feed Building, Transformers, Passive Containment Cooling System ("PCS") tank, Demineralized Water Treatment System ("DTS") tank, and the Standby Diesel Fuel Oil System ("DOS") tanks. This accomplishment represents yet another milestone accomplished towards the completion of Vogtle Units 3 and 4.

Additional accomplishments include:

- Completion of Bechtel Construction bulk work scopes in BOP for both Units;
- Final Cable pulls for Plant Security System "SES" system Unit 4;
- Completion of the Unit 4 plant access roads.

Subcontracts

During the Reporting Period, subcontractors continued to contribute to Project progress and significant milestone achievements. Critical areas include HVAC air balancing on Unit 3 and HVAC installation work in Unit 4, along with installation of fire suppression and detection, penetration seals, coatings, and pipe insulation.

As noted in the 26th VCM Report, the Project team and critical subcontractors worked collaboratively to develop a plan to implement lessons learned from Unit 3 on Unit 4. As

previously noted, on Unit 4, subcontractors have been able to work ahead of the Unit 3 progress by taking advantage of lower craft density, sequencing knowledge, and the reduced number of work fronts. During the Reporting Period, they continued to remain ahead on the HVAC, coatings, insulation, and fire protection/detection subcontractor scopes when compared to their progress at a similar point on Unit 3.



Unit 4 Annex Building Offices

Additional Accomplishments include:

- SSMI continued installation of HVAC ductwork and equipment throughout Unit 4 and is completing HVAC system air balancing for Unit 3;
- FD Thomas, the primary coatings subcontractor on the Project, continued to apply coatings inside Containment, the Auxiliary Building, and other areas throughout both Units;
- PCI Promatec, the Penetration Seal contractor, closed out several areas in Unit 3 and continues to progress in Unit 4; and
- API, the insulation contractor, is substantially completed with Unit 3 and continues to make progress on Unit 4.

TURNOVER AND TESTING

Systems for Unit 3 and Unit 4 as of August 2022 are broken down by each organization. Ultimately, all systems will be turned over from Construction to ITP for testing, and then to Site Operations.

Table 3.3 – System Jurisdictional Control				
Construction ITP				
Unit 3	3	161		
Unit 4	Unit 4 99 68			

Construction Turnover to Testing

During the Reporting Period, the Testing & Completions team completed the testing requirements in support of the receipt of the historic 103(g) finding and made significant progress towards Fuel Load for Unit 3. More than 95% of component tests and pre-operational tests have been completed for Fuel Load. Additionally, Construction has successfully turned over 229 systems or partial systems to the ITP organization through August 2022.

Initial Test Program

During the Reporting Period, the Project Control Center ("PCC") continued to manage the remaining activities to achieve the 103(g) and Fuel Load milestones on Unit 3 while the Testing Control Center ("TCC") continued to manage the testing efforts on Unit 4.

The ITP organization successfully completed numerous major testing evolutions in support of the upcoming Unit 3 major milestones. The ITP team has completed roughly 8,700 component tests for Unit 3 and over 1,600 component tests for Unit 4. Throughout the next reporting period, ITP will continue to focus on the completion of the remaining open items on Unit 3 in support of Fuel Load, system transition, startup testing, and Commercial Operation. Unit 4 will continue to progress through major testing evolutions, in support of TOG, CVT, and CHT.

Unit 3 Startup Testing

The NRC's issuance of the 103(g) finding signifies no further NRC findings are necessary to load fuel into the Reactor Vessel to perform startup testing. Upon completion of all the prerequisite steps the Project team will load fuel and initiate the Startup testing sequence. Startup testing will demonstrate the integrated operation of the primary coolant system and steam supply system at design temperature and pressure with fuel inside the reactor. Operators will utilize the general

operating procedures to bring the plant from cold shutdown to initial criticality, synchronize the Unit to the grid, and achieve power ascension through multiple steps, ultimately raising power to 100%. This test is to ensure all systems are operating together and to validate operating procedures declaration prior to of Commercial Operation.

With the receipt of the 103(g) finding, Technical Specifications



Unit 3 Steam Turbine

become the governing document for plant operations. Technical Specifications are part of an NRC license authorizing the operation of a nuclear production or utilization facility. A Technical Specification establishes requirements for items such as safety limits, limiting safety system settings, limiting control settings, limiting conditions for operation. There are six different plant conditions ("MODEs") defined in the Technical Specifications through which the plant transitions from having no fuel in the reactor, all the way to 100% power output from the reactor. Each of these plant conditions, or Modes, has its own requirements that need to be meet and maintained. Technical Specification surveillances are a series of tests tied to a specific Mode, which are required to be performed and met satisfactorily before the plant can change Modes. Some surveillance tests are going to be performed for the first time, while others have been completed through previous ITP testing. In accordance with standard industry practice, the Project has established the Mode change checklist to ensure all the Technical Specifications surveillance tests are successfully met before transitioning to the next Mode during startup testing. Table 3.4 below shows the various Modes and how the plant will progress from initial fueling through power operation.

Table 3.4 – Plant Start-up MODES					
MODES	Title	% Rated Thermal Power (MWth)	Avg. RCS Temperature (°F)		
6	Refueling	N/A	N/A		
5	Cold Shutdown	N/A	≤ 200		
4	Safe Shutdown	N/A	$420 \ge Tavg > 200$		
3	Hot Standby	N/A	> 420		
2	Startup	≤ 5	N/A		
1	Power Operation	>5	N/A		

Unit 4 Open Vessel Testing (OVT)

During the Reporting Period, ITP continued work towards Unit 4 OVT, which was completed in August 2022. OVT included flow measurement, pump performance, line resistance, and tank mapping testing for the major systems flushed during Integrated Flush. Measurements obtained during OVT ensured that safety and defense-in-depth systems and components function properly to support pre-operational testing and meet the design requirements for protection of the plant and the public during normal and emergency operating conditions.

Unit 4 Turbine on Gear Testing (TOG)

The Unit 4 TOG milestone is forecasted to start in the fourth quarter of 2022. The test is conducted by simultaneously rotating the four steam turbines with the use of the turning gear motor continuously for twenty-four hours to show reliable operation. This milestone includes placing the required lubricating oil systems in operation following the completion of initial testing. Successful completion of this test is important in preparing for Condenser Vacuum testing and HFT and marks the completion of the main turbine generator assembly.

Unit 4 Condenser Vacuum Testing (CV)

The Unit 4 CV test is forecasted to begin in the first quarter of 2023. The CV will be established with the main turbine on turning gear and by placing auxiliary steam, condensate, feedwater, and their support systems in service. The test will be completed once the CV has been fully established with feedwater in circulation and secondary water cleaned and deaerated. This milestone is significant in demonstrating the steam supply systems including feedwater, main steam, and the main turbine operating together to support HFT and startup.

Unit 4 Cold Hydro Testing (CHT)

Unit 4 CHT is forecasted to begin in the first quarter of 2023. CHT includes several separate tests in different areas of the plant to verify that welds, joints, pipes, and other components of the Reactor Coolant System ("RCS"), steam-supply system and associated high pressure systems do not leak and will hold pressure. To accomplish these tests, internals will be installed in the Reactor Vessel and the Integrated Head Package attached, the RCS will be filled and pressurized above normal operating conditions, then backed down to normal design pressure, and held there while the comprehensive inspection is concluded.

Unit 4 Hot Functional Testing (HFT)

Unit 4 HFT is forecasted to begin in the first quarter of 2023. Many of the plant systems will be required to be turned over and tested to complete this milestone. HFT will demonstrate the integrated operation of the primary coolant system and steam supply system at design temperature and pressure, but without fuel in the reactor. Operators use the heat generated by the Reactor Coolant Pumps ("RCPs") to raise the temperature and pressure of plant systems to normal operating levels. The Unit's main turbine will be raised to normal operating speed using plant steam. This test will be the first time that components and systems are operated together, allowing

operators to exercise and validate procedures as required before Fuel Load. Completion of the test will validate many testing ITAACs that are required for Fuel Load.

SITE OPERATIONS

Site Operations and Maintenance

During the Reporting Period, the Project team continued the transition to plant operations with an increase focus on area and system transitions. Unit 3 transitioned 14 systems and 32 areas to Operations in preparation for Fuel Load. 29 more systems will be transitioned to Operations in support of achieving Fuel Load for Unit 3 and the remaining systems, areas, and rooms will be turned over prior to power ascension testing. The pace of room and area turnover is expected to continue to increase during the next reporting period to support Unit 3 Fuel Load and startup testing.

The Maintenance organization continues with the preservation of installed equipment. Utilizing the Maintenance group to preserve equipment minimizes equipment failure prior to operation, while providing valuable on-the-job experience prior to acceptance. Additionally, similar to Operations, maintenance personnel are also supporting ITP testing by validating component functionality to ensure equipment can be safely energized and will function as part of component and pre-operational testing. Further, the organization is involved in the repair and replacement of components and equipment parts needed to support system operations.

As of June 2022, Operations is fully staffed and has achieved a significant milestone by obtaining dual-unit licenses to 72 Operators. Receiving dual-unit licenses means all Operators licensed to operate Unit 3 are now also licensed to operate Unit 4. The fifth Initial Licensing Training ("ILT")



Unit 3 Main Control Room

class, which began in July 2020, was completed and all participants successfully passed the NRC exam. ILT-5 will receive their licenses upon completion of meaningful work time on the units and once complete, the units will have 79 dual unit licensed operators.

The WANO team was on site in August 2022. The team reviewed Operations

training, systems transition to Operations, and progress on the culture shift to an Operating plant. The WANO team found no areas for improvement or gap focus areas. This visit completes the Unit 3 Pre-Startup Review and reinforces that the site team is ready for Fuel Load, startup testing and plant operations.

Cyber Security

During the Reporting Period, the Cyber Security organization continued to make significant progress towards getting the system ready for enrolling in the Cyber Security Program to support Fuel Load and startup testing. Over 60% of the Unit 3 systems are ready to be enrolled into the Cyber Security program and it is expected that half of the systems will be enrolled by Fuel Load. The enrollment of systems into Cyber Security program is dependent on system transition to Site Operations. Additionally, the Site team is establishing a Cyber Security Laboratory that will serve as Security Operations Central ("SOC") and an Incident Response Center for all cyber activities during the plant's operation.

ITAAC and Licensing

During the Reporting Period, the ITAAC organization continued to support construction and testing for submittal of ITAAC Completion Notifications ("ICN"). At the end of July 2022, SNC

submitted the Unit 3 "All ITAACs Complete Letter" to the NRC, which is the final submission to support the NRC's issuance of the 103(g) finding required for Fuel Load. The completion of these ITAACs provided the NRC assurance that the unit meets strict nuclear safety and quality standards. As previously noted, on August 3, 2022, the Project received the 103(g) finding from the NRC, which signifies that no further NRC findings are necessary for SNC to load fuel or begin the Unit 3 startup up sequence. As for Unit 4, 124 Unit 4 ICNs have been submitted to the NRC and 269 ICNs remain outstanding as of July 2022.

Site and Corporate Licensing continue to provide support to Construction, Operations, and Engineering to ensure the Project's compliance with regulatory requirements. During the Reporting Period, the Site and Corporate Licensing and ITAAC teams continued to work

UNITED STATES NUCLEAR REGULATORY COMMISSION SOUTHERN NUCLEAR OPERATING COMPANY, INC. GEORGIA POWER COMPANY OGLETHORPE POWER CORPORATION MEAG POWER SPVM, LLC MEAG POWER SPVJ. LLC MEAG POWER SPVP, LLC CITY OF DALTON, GEORGIA VOGTLE ELECTRIC GENERATING PLANT, UNIT 3 DOCKET NO. 52-025 FINDING THAT THE ACCEPTANCE CRITERIA IN THE COMBINED LICENSE ARE MET License No. NPF-91 In accordance with Section 185b. of the Atomic Energy Act of 1954, as amended, and Title 10 of the *Code of Federal Regulations*, Section 52.103(g), the U.S. Nuclear Regulatory Commission finds that the acceptance criteria in the combined license for Vogite Electric Generating Plant, Unit 3 are met. This finding is effective as of August 3, 2022 FOR THE U.S. NUCLEAR REGULATORY Andrea D. Digitally signed by D. Vol Date: 2022.08.03 07:45:37.04007 Veil Andrea D. Veil, Director Office of Nuclear Reactor Regulation

Unit 3 NRC 103(g)Finding

with the NRC on timely submittal of ICNs for review.

Integration of the Four Unit Site

During the Reporting Period, the final phase of security lockdown was conducted to fully establish the Protected Area for Unit 3 prior to Fuel Load. The security lockdown establishes security control of all areas within the Unit 3 physical security zones and is important to ensure all security and safety related components are protected after testing and being placed in service. Additionally, the Plant Access Point ("PAP") has been established and all personnel are now required to process through to access Unit 3. By requiring all personnel to enter through a controlled access point, the Site team can effectively control and protect Unit 3 physical security. The integration of the Unit 3 Protected Area with Vogtle Units 1 and 2 is the next significant integration milestone and will occur in the next reporting period.



Plant Vogtle Units 3-4

4. An updated comparison of the economics of the certified project to other capacity options.

Per the stipulated agreement adopted by the Commission in its Order on the 23rd VCM Report on February 16, 2021, this stipulated question is no longer required in the Company's VCM Reports.

5. The Company will be under a continuing obligation to supplement its response to PIA Staff DR STF-TN-1-2 by ensuring that the financing data reflected in the schedules attached to that DR response reflect the most current and updated information at the time of each semi-annual monitoring report. In addition, the Company will provide the most current information shared with each of the Rating Agencies.

Simultaneous with this filing, the Company has filed supplemental PIA Staff DR STF-TN-1-2.

Vogtle 3&4 - Construction, June 5, 2022



Glossary of Abbreviations	
103(g)	10 C.F.R Part 52.103(g)
ASME	American Society of Mechanical Engineers
BOP	Balance of Plant
CB20	Passive Containment Cooling Water Tank
CHT	Cold Hydrostatic (or "Hydro") Testing
CPI	Cost Performance Index
cROP	Construction Reactor Oversight Process
CV	Condenser Vacuum
CVT	Closed Vessel Testing
DOE	Department of Energy
DOS	Standby Diesel Fuel Oil System
DTS	Demineralized Water Treatment System
HFT	Hot Functional Testing
I&C	Instrumentation & Controls
ICN	ITAAC Closure Notifications
IDS	Class 1E DC System
ILRT	Integrated Leak Rate Test
ILT	Initial Licensing Training
IRs	Inspection Records
ITAAC	Inspection, Test, Analysis, and Acceptance Criteria
ITP	Initial Test Program
MWth	Megawatt Thermal
NRC	Nuclear Regulatory Commission
OPPRs	Overpressure Protection Reports
OVT	Open Vessel Testing
PAP	Personnel Access Point
PCC	Project Control Center
PCS	Passive Containment Cooling System
PMS	Protection and Safety Monitoring
PSUR	Pre-Startup Review
PTC	Production Tax Credit
QA	Quality Assurance
RCP	Reactor Coolant Pump
RCS	Reactor Coolant System
ROP	Reactor Oversight Process
RVI	Reactor Vessel Internals
SES	Plant Security System
SIT	Structural Integrity Test
SNC	Southern Nuclear Company
SPI	Schedule Performance Index
SWS	Service Water System
TCC	Testing Control Center
TOG	Turbine On Gear
VCM	Vogtle Construction Monitoring
WANO	World Association of Nuclear Operators