

**BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION
GEORGIA POWER COMPANY
DOCKET NO. 29849**

**Georgia Power Company's Application to Adjust Rates to Include Reasonable and Prudent
Plant Vogtle Units 3 and 4 Costs**

**Basis for the Assertion that Redacted Portions of the Information Submitted
are Protected Trade Secrets**

In support of its Application to Adjust Rates to Include Reasonable and Prudent Plant Vogtle Units 3 and 4 Costs, in Georgia Public Service Commission Docket No. 29849, Georgia Power Company ("Georgia Power" or the "Company") has provided Information in the form of an expert schedule report (the "Information"). Certain provisions of the Information are trade secrets of Georgia Power, Southern Company, Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia, and the City of Dalton (collectively, the "Owners"), and their affiliates and contractors. These portions of the Information are protected under Commission Rule 515-3-1-.11.

The trade secret portions of the Information derive economic value from not being generally known to, and not being readily ascertainable by proper means by other persons who can obtain economic value from their disclosure or use. Public disclosure of the trade secret portions of the Information could give competitors and vendors an unfair advantage by showing the Company's individual components of costs, forecasts, plans, estimates, and models. The resulting economic harm could in turn impair Owners, Owners' affiliates and contractors, and Owners' customers.

More specifically, the trade secret portions of the Information pertaining to the proposed nuclear units that have been redacted contain risk analyses, impact and scope forecasts, construction scheduling, and sensitive testing information that is specific to Vogtle Units 3 and 4. The trade secret portions of the Information are considered confidential and proprietary by the Company and its contractors and are not generally known by the public. Revealing these terms would compromise the Company's ability to procure the best cost resources from fuel, labor, equipment, or commodity suppliers in future solicitations. In the event such information were released, it is likely that suppliers for future services and materials would use this Information to set the floor on negotiated pricing or that bidders in future Requests For Proposals would use the trade secret portions of the Information to set the floor in constructing their own bids, thus artificially and inefficiently setting a market price and other generation characteristics for the Company that may not be representative of the best cost or best resource that the market could offer.

Moreover, public release of the trade secret portions of the Information could have adverse economic consequences for the Company. Public release of the trade secret portions of the Information could make potential vendors unwilling or unable to conduct business with the Company. By causing proprietary information to be publicly available, even fewer vendors might be willing to sell to the Company, thus, reducing the opportunity for the Company to purchase the materials or services best suited to meeting its customers' needs, and potentially compelling the

Company to deal with a vendor that does not offer the best cost option. This could cause significant added costs to the Company and ultimately to Georgia Power's ratepayers. Additionally, potential competitors of the Company could use the trade secret portions of the Information to guide purchases from and sales to the Company, thereby gaining an unfair competitive advantage to the disadvantage of the Company's customers. Finally, competitors, investors, and other external stakeholders could use the financial data to determine non-public information on the Owners' financial assumptions, assets, liabilities, and other positions, to the detriment of the Owners, their affiliates, and their customers.

The trade secret portions of the Information are subject to extensive efforts to maintain their secrecy. Only select Georgia Power and Southern Company personnel and their legal counsel are granted access to this information. Those personnel receive access only on a "need to know" basis. If a party outside Georgia Power and Southern Company and their legal counsel are granted access to the trade secret portions of the Information, the party is required to sign a confidentiality agreement.

DOCKET NO. 29849
STATE OF GEORGIA
BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION

IN RE: GEORGIA POWER COMPANY'S APPLICATION TO ADJUST RATES TO
INCLUDE REASONABLE AND PRUDENT VOGTLE UNITS 3 AND 4 AND
COMMON COSTS

EXPERT REPORT OF MARK GENTRY

September 8, 2023

ON BEHALF OF:	Georgia Power Company
PREPARED FOR:	Troutman Pepper Hamilton Sanders LLP
SUBJECT MATTER:	Analysis of Delays to Commercial Operation of Vogtle Units 3 and 4

Mark Gentry



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September 8, 2023

EXPERT REPORT OF MARK GENTRY

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September 8, 2023

EXPERT REPORT OF MARK GENTRY

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1. INTRODUCTION

HKA Global, LLC (“HKA”) is a business and litigation consulting firm with significant experience in construction and major power plant projects in the United States and internationally. HKA’s professionals have substantial experience with the public utility industry, nuclear power plants, design and construction and have sponsored expert testimony with respect to damages and schedule analyses before state and federal courts and domestic and international arbitration tribunals, as well as state utility commissions.

This report was prepared under the direction of Mark Gentry, a Partner at HKA. Prior to working at HKA, Mr. Gentry was a Project Manager with JE Dunn Construction, an Engineering News Record Top 25 Contractor. In addition, Mr. Gentry previously worked at The Kenrich Group (“Kenrich”), Navigant Consulting, and Tucker Alan, Inc. preparing construction damages and schedule analyses. He has substantial experience in schedule analysis consistent with the scope performed on this engagement.

Mr. Gentry is a registered professional engineer¹ and project manager with over 20 years of experience in the construction and engineering industry. He is widely experienced in the investigation of schedule delays on utility construction projects. Mr. Gentry has testified as an expert in arbitrations, state utility company proceedings, and court as well as presented damage and schedule delay analysis during mediations and settlement negotiations. He has provided consulting services on nearly every type of electric utility supply, including nuclear, coal, gas, hydroelectric, solar and wind generation facilities as well as battery energy storage projects. In addition, Mr. Gentry has been involved in the retrofit, upgrade, construction, and decommissioning of numerous nuclear power facilities in the United States of America and internationally. See Attachment A for Mr. Gentry’s resume.

In April 2008, Georgia Power Company (“GPC”),² Oglethorpe Power Corporation, the Municipal Electric Authority of Georgia and the City of Dalton through Dalton Utilities (collectively the “Owners”) contracted with the consortium of Westinghouse Electric Company LLC (“WEC”) and Stone & Webster, Inc. (“S&W”) (collectively the “Contractor”) for the engineering, procurement and construction of two new AP1000 nuclear plants (the “EPC Agreement”), Plant Vogtle Units 3 and 4, near Waynesboro, Georgia (the “Project”).

In 2011, Balch & Bingham, LLP, counsel for the Owners, engaged Kenrich³ as the expert witness for cost and schedule damages in the litigation between the Owners and the Contractor (“the litigation”).⁴

¹ In the state of Minnesota.

² GPC designated Southern Nuclear Company (“SNC”) as its agent for contract management and construction services. Reference the Construction Completion Agreement (the “CCA”) between the Owners and Bechtel dated October 23, 2017, page 4.

³ HKA acquired Kenrich in July 2019. The author of this report, Mark Gentry, co-authored the Kenrich Estimate to Complete prepared in August 2017, worked extensively on the litigation and on other work related to the Project.

⁴ Stone & Webster, Inc. was the party named in the litigation with the Owners. The Shaw Group (“Shaw”) acquired Stone & Webster (“S&W”) in July 2000. Chicago Bridge & Iron Company (“CB&I”) agreed to acquire Shaw in July 2012. That acquisition was completed in February 2013.

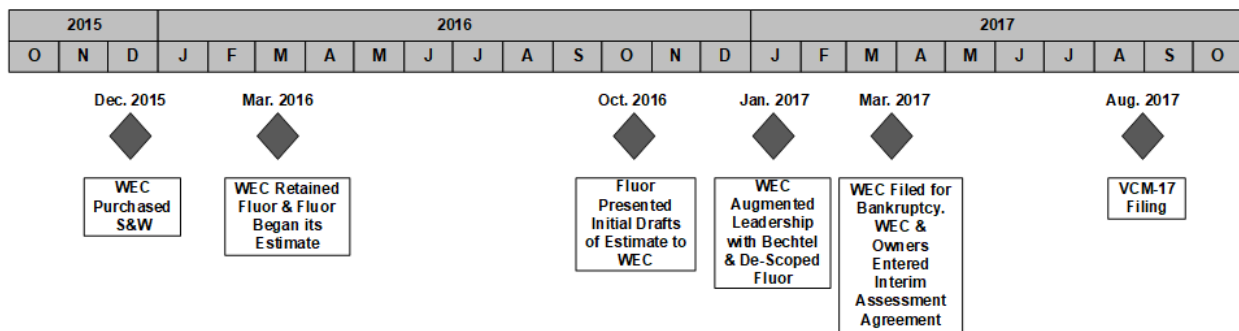
In December 2015, WEC acquired S&W, became the “prime contractor” on the Project, and needed to engage a new subcontractor.⁵ In early 2016, WEC retained Fluor Corporation (“Fluor”) as its construction subcontractor, who began developing its basis of estimate (“Fluor Basis of Estimate”) for WEC. In January 2017, WEC brought in Bechtel Power Corporation (“Bechtel”) for leadership augmentation as WEC removed scope from Fluor.

After the settlement of the litigation in January 2016, Troutman Sanders LLP, counsel for GPC, engaged Kenrich as the scheduling expert for the prudence review before the Georgia Public Service Commission (the “Commission” or “GPSC”) in 2016.⁶

On March 29, 2017, WEC filed for bankruptcy and entered into the Interim Assessment Agreement with the Owners, allowing the Owners access to WEC’s cost information, invoices, subcontracts, and planning and scheduling documents that were not previously available. SNC also obtained Fluor’s Basis of Estimate that had been under discussion between WEC and Fluor at the time.⁷

On August 11, 2017, Kenrich authored a report that analyzed the Project Estimate-To-Complete as a part of GPC’s Seventeenth Semi-Annual Vogtle Construction Monitoring Report (“VCM 17”).⁸ Bechtel was the contractor hired by the Owners in October 2017 who assisted with the completion of the Project following the filing of GPC’s VCM 17 report. See Figure 1-1 below for a Project timeline between the fall of 2015 through GPC’s filing of its VCM 17 report.⁹

Figure 1-1: Project Timeline From Fall 2015 Through VCM 17 Filing



Beginning in 2023, Troutman Pepper Hamilton Sanders LLP retained HKA on behalf of GPC to provide an analysis of the delays that have occurred on the Project subsequent to VCM 17. HKA’s analysis is based on our review of documents, data and information made available to HKA (previously, Kenrich) throughout its assignments on the Project, and HKA’s extensive industry related experience.

⁵ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, page 31.

⁶ Expert Report of Richard J. Sieracki and Mark A. Gentry dated April 5, 2016, provided in the Supplemental Information Report filing to support the 2016 Definitive Settlement Agreement.

⁷ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, page 46.

⁸ Report of Richard J. Sieracki and Mark A. Gentry dated August 11, 2017.

⁹ Attachment B – Timeline From Fall 2015 Through VCM 17 Filing.

2. EXECUTIVE SUMMARY

Following VCM 17, the Commission approved planned commercial operation dates (“Commercial Operation” or “COD”) of November 2021 and November 2022 for Units 3 and 4, respectively. The approval was received following the VCM 17 proceeding, which included testimony and/or reports from SNC, Kenrich, Bechtel, and PricewaterhouseCoopers (“PwC”). As discussed above, SNC was not provided access to WEC’s detailed Project cost and schedule files until March 2017 following WEC’s bankruptcy. SNC needed to review these files and prepare its estimate to complete for the VCM 17 filing, which occurred approximately five-months later. The challenges associated with quickly taking over a project following the bankruptcy of the primary contractor is further discussed in the expert report of HKA expert Timothy Chitester.

GPC’s VCM 17 reports identified certain risks and uncertainties which could impact the planned CODs. Several of those risks and uncertainties and other issues have impacted the achievement of Commercial Operation for the units. As an example of other issues, the Project team encountered and worked through the challenges presented by the COVID-19 worldwide pandemic. As a result of the challenges the Project team encountered, Units 3 and 4 achieved and are forecast to achieve Commercial Operation 20 and 13 months later, respectively, than the Commission approved dates of November 2021 and November 2022.

HKA has reviewed and analyzed certain Project data and identified that the most significant causes of delay to the Project include:

1. The challenges presented by the COVID-19 pandemic,
2. The identification of additional scope required to complete the Project that was not reasonably ascertainable at the time of the cost and schedule estimate to complete as presented at VCM 17,
3. The need for more rework than planned, including the need to remediate the cable separation and segregation issues to comply with IEEE 384,¹⁰
4. The inability of the construction completion contractor, Bechtel, to achieve production rates necessary to timely complete its work, and
5. Greater than expected testing and startup challenges experienced on Unit 3 after Fuel Load was achieved.

Each of these causes of delay will be discussed in more detail in the sections that follow.

¹⁰ The Institute of Electrical and Electronics Engineers (“IEEE”) publishes standards for installation of electrical scopes of work on construction projects. IEEE standards have been incorporated by the Nuclear Regulatory Commission (“NRC”) as part of the design requirements for new nuclear power plants within the United States. IEEE 384 is one of those standards that was violated on the Project and explained in further detail in Section 6.

3. ENGAGEMENT OVERVIEW

In preparing this report, Mr. Gentry considered the following information:

- Project contracts / agreements,
- Project schedules,
- Project change orders and change order requests,
- Project progress reporting documents,
- Project meeting minutes,
- In person site visit,
- VCM testimony transcripts,
- Various Project correspondence,
- Discussions with SNC & GPC personnel or former personnel, including Frederick Willis (Business Operations Director), Jeremiah Haswell (Project Oversight Director), Anthony Pelnar (Principle Project Scheduler (Lead)), Steve Owen (Project Controls Vice President), Jonathan Scott Henard (Business Operations Analyst), Dennis Bembenek (Site Commercial Director), David Oliver (Regulatory & External Affairs Project Manager), Christina Bagby (Business Operations Commercial Support Lead), Peng Cheng (Business Operations Commercial Manager), Thomas Blythe (Nuclear Development Regulatory Support), Todd Yelverton (Commercial Director – Nuclear Development), Chad Harvell (Contract Compliance), and
- Other select Project records.

The opinions and analyses presented in this report are based on currently available information. If new information becomes available that is relevant to the analyses or opinions, or we are asked to perform more analysis, we may supplement this report.

This report is also supplemented by work papers that may be updated prior to hearings to incorporate changed circumstances or additional information that is determined to have a material impact on our opinions. If this matter proceeds to hearings, selected pages of the documents and information relied upon may be used as exhibits. Additionally, we may prepare graphic or illustrative exhibits based on the contents of this report, the documents and information considered, and analysis of those documents and information. HKA currently anticipates attending the hearings in person or virtually to hear (and/or reading testimony transcripts of) relevant witness testimony that HKA may also rely on for our testimony at the hearings.

4. THE ANALYSIS OF THE TO-GO SCHEDULE CONDUCTED FOR VCM 17 WAS ROBUST

At the time of VCM 17, the revised construction completion schedule forecast November 2021 and November 2022 Unit 3 and Unit 4 CODs, respectively (or +29 months from the previously approved dates). GPC, on behalf of all Owners, retained external experts to provide opinions on the estimated to-go cost and schedule for the Project. SNC also provided an estimate of the to-go cost and schedule. As described in detail in the following sections, the analyses performed by SNC, Bechtel, and other consultants were robust, utilized a variety of recognized estimating methodologies and included various ways to account for risk to attempt to provide a reasonable cost and schedule estimate to complete the Project.

Based on these analyses, GPC recommended that the Project continue and deemed the revised schedule with November 2021/2022 Units 3 and 4 CODs as the most reasonable schedule.¹¹ The Commission approved GPC's revised schedule and the revised capital cost forecast of \$7.3 billion, requiring GPC to retain the burden of proof on prudence for all capital costs above \$5.680 billion.¹²

A summary of the schedule extension ranges forecasted by SNC, Kenrich, and Bechtel for Units 3 and 4 CODs is provided in Table 4-1 and Table 4-2 below.¹³ All of these analyses described that if any assumptions were incorrect or certain risks were realized (such as the inability to achieve production, productivity or craft unavailability) the COD could be later than forecast.

Table 4-1: Unit 3 COD Estimates By SNC, Kenrich And Bechtel

Estimate	Low Range	Mid-Range		High Range
SNC	Feb. 2021	May 2021	Nov. 2021	Mar. 2022
Kenrich	Feb. 2021			Nov. 2022
Bechtel		Jan. 2021	Jun. 2021	

Table 4-2: Unit 4 COD Estimates By SNC, Kenrich And Bechtel

Estimate	Low Range	Mid-Range		High Range
SNC	Feb. 2022	May 2022	Nov. 2022	Mar. 2023
Kenrich	Feb. 2022			Nov. 2023
Bechtel		Jan. 2022	Mar. 2022	

¹¹ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, pages 7, 12, and 48.

¹² GPSC's Order on GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, page 16. While a high-level overview of certain cost analyses is provided below, the focus of this report section is on the schedule forecast estimates prepared by SNC or its experts as part of VCM 17.

¹³ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, pages 48, 50-51, and 58.

4.1 SUMMARY OF ESTIMATES

4.1.1 SNC ESTIMATE TO COMPLETE

SNC prepared an Estimate to Complete (“ETC”) report to estimate the remaining costs to complete the design, engineering, procurement, construction, testing, and startup with SNC managing the Project. The SNC analysis involved developing a revised schedule with inputs from the construction, field engineering and project controls groups. SNC then prepared a probabilistic analysis for the schedule considering the likelihood of various risks. Overall, SNC’s probabilistic analysis identified a curve of possible completion dates. SNC utilized those possible completion dates to estimate an associated cost to complete for four different scenarios compared to the previously approved schedule. The scenarios included a: 1) +20 month/+20 month; 2) +23 month/+23 month (the “Target Schedule”); 3) +29 month/+29 month (the “High Confidence Schedule”); and 4) +33/+33 month (the “Outer Bound”).

Ultimately, GPC identified the High Confidence Schedule associated with November 2021 and November 2022 for Unit 3 and Unit 4 CODs, respectively, as the most reasonable schedule.¹⁴ SNC attempted to account for Project execution risks, for example, by incorporating performance factors¹⁵ into its quantification of the ETC. Incorporating the performance factors into the estimate was a means to account for the productivity rates being experienced and forecast to be experienced at the Project. However, as described in more detail below, SNC and GPC personnel testified that the risk that production levels (which are associated with performance factors) were not able to be met and other risks like procurement or unidentified scope could compromise SNC’s ability to complete the schedule within the High Confidence Schedule scenario or even within the Outer Bound range.

The SNC schedule was developed and refined by considering, for example: 1) the then-estimated remaining quantities at the building and commodity level and then applying the Fluor Basis of Estimate

¹⁴ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, pages 7, 12, and 48.

¹⁵ A performance factor is a measure of the actual direct labor hours expended compared to the budgeted hours for a given activity. A performance factor equal to 1.0 means the contractor is meeting its budget. A performance factor less than 1.0 means the contractor is performing better than its budget. A performance factor greater than 1.0 means the contractor is performing worse than its budget. As the estimated performance factor increases, not only do the direct labor hours and costs increase, but also the related indirect costs increase as well, since those costs are required to support direct construction labor on the Vogtle Project.

unit rates¹⁶ and performance factors¹⁷; 2) remaining activities in each building, elevation, and room and associated logic to account for work area density limitations and performing resource leveling; 3) WEC-developed sequence plans, drawings, model shots, and plans; and 4) experience gained from the Chinese plant construction. Through this process, SNC identified the critical path as being through the Auxiliary Building and ultimately the installation of the electrical commodities.¹⁸

After developing its schedule, SNC then implemented two methodologies to further inform its overall estimated range of potential CODs for the units. The first methodology involved performing a Monte Carlo simulation¹⁹ (limited to the representation of the Project critical path) to determine a probabilistic view of the schedule. This methodology resulted in the following outputs: a probability of 20% for Unit 3 COD by February 2021 (the +20/+20-month scenario), a probability of 50% for Unit 3 COD by May 2021 (the Target Schedule scenario), and a probability of 80% for Unit 3 COD by November 2021 (the High Confidence Schedule scenario). SNC determined the High Confidence Schedule with November 2021 and November 2022 CODs for Units 3 and 4, respectively, as the schedule for approval in VCM 17. SNC's second methodology involved performing an analysis to determine its bounding case for the ETC. This second methodology assumed the production and productivity at the site would not meet its planned earned weekly hours through 90% Project Complete. When SNC modeled earning only approximately 80% (i.e., 53,041 / 66,999 manhours for Unit 3 and 33,605 / 40,326 manhours for Unit 4) of the weekly manhours required to achieve the Target Schedule scenario, it resulted in the Outer Bound scenario with March 2022 and March 2023 CODs for Units 3 and 4, respectively.²⁰

Although SNC's analysis identified the Outer Bound schedule as its bounding range, the VCM 17 testimony of David McKinney (SNC) and Jeremiah Haswell (GPC) specifically noted that "the bounding range depends on the assumptions that underlie this analysis. If these assumptions are incorrect or if

¹⁶ SNC hired consultants Work Management, Inc. / High Bridge Associates ("WMI/HBA") to perform an independent review of the piping and electrical commodity installation unit rates. WMI/HBA confirmed the viability of the unit rates used in the ETC. The unit rates assumed in the quantification included a 12.5% improvement from Unit 3 to Unit 4, which was conservative based on historical data suggesting a 34% improvement between the Units. SNC did not factor in WEC's Localization Factor/Unit-to-Unit learning improvement percentage based on a four-plant learning sequence between Vogtle and V.C. Summer because the V.C. Summer project was cancelled. Reference GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, pages 11 and 13.

¹⁷ SNC relied on the performance factors in Fluor's Basis of Estimate and applied them to the final to-go hours. The blended, weighted performance factor for the total scope of direct man-hours was 1.46. Reference GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, page 13.

¹⁸ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, pages 3-4.

¹⁹ A Monte Carlo simulation models a variety of possible risks and predicts the probable outcome or impact of those risks.

²⁰ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, pages 7, 49-50, and Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, pages 4-5.

unanticipated circumstances occur, a delay beyond thirty-three months is possible.”²¹ Mr. McKinney and Mr. Haswell’s testimony outlined the following risks that could impact the SNC ETC:²²

- “The risk that Toshiba will be financially unable to meet the payment obligations of the Toshiba Parent Guaranty;
- The risk that WEC will not meet its obligations under the new Services Agreement;
- The risk that the labor force and craft will be unable to maintain their productivity improvements (“Project Execution Risk”);
- The risk that the Project will be unable to continue to meet first of a kind (“FOAK”) challenges;
- The risk that Congress will not extend the PTCs (“Production Tax Credits”);
- The risk that the DOE Loan Guarantee will not be expanded;
- Procurement Risk;
- Unidentified Scope Risk;
- Stranded Technology Risk;
- Fuel Risk;
- Risks of Carbon Emissions Controls;
- Testing/Startup Risk; and
- The impact of the V.C. Summer Owners’ decision to cease construction on V.C. Summer Units 2 and 3.”

The SNC ETC attempted to capture the costs of the Project Execution Risk by including a wide range of performance factors which accounted for the possibility that production rates and productivity would be lower than the forecast. Of course, lower production rates and lower productivity will or can result in project delay as well. Through its testimony, GPC acknowledged the possibility that it may be unable to reach or sustain the forecasted production rates, encounter higher than anticipated rates of rework or greater than expected design changes, or have insufficient work fronts or field engineering resources for a period of time.²³

SNC utilized a variety of recognized estimating and scheduling methodologies to attempt to forecast the ETC for the Project. In addition, SNC outlined several of the key risks that it identified that could impact its ability to complete the Project within its ETC.

²¹ Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 24.

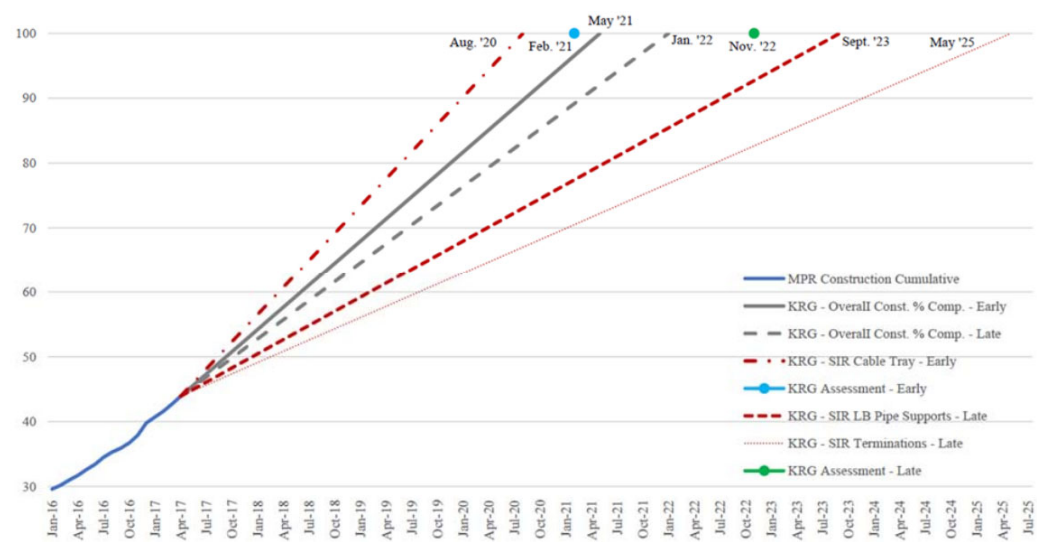
²² Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, pages 35-36.

²³ Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, pages 37-38 and 40.

4.1.2 KENRICH ESTIMATE TO COMPLETE

As described above, counsel for GPC retained Kenrich to develop and provide an analysis and evaluation of the cost and schedule estimate to complete the Vogtle Project.²⁴ Kenrich's independent schedule forecast analysis used three methodologies to develop early and late projections for the Unit 3 COD ranging from as early as August 2020 to as late as September 2023²⁵ as shown in Figure 4-1 below.

Figure 4-1: Kenrich Unit 3 COD Projections Comparison²⁶



Kenrich concluded based on its nuclear and construction experience and familiarity with the Vogtle Project that the most reasonable range of Unit 3 CODs would be from an early date of February 2021 (+20-month scenario) to a late date of November 2022 (+41-month scenario) and Unit 4 would reasonably follow by one year.

Kenrich implemented three different analysis methodologies, 1) Sustained Installation Rates, 2) Unit 3 Nuclear Island Percent Complete, and 3) Overall Project Construction Percent Complete, to determine its Unit 3 COD early and late date range. These methodologies are described in further detail below.

4.1.2.1 SUSTAINED INSTALLATION RATES

The Sustained Installation Rates methodology involved evaluating the historical sustained installation rates for mechanical and electrical bulk commodities to project the remaining commodity installation duration. Kenrich identified that most of the major bulk commodities, like large bore pipe, large bore pipe

²⁴ HKA acquired Kenrich in July 2019. The author of this report, Mark Gentry, co-authored Kenrich's Report "Analysis of Project Estimate-To-Complete" dated August 11, 2017 (Exhibit 4 to GPC's 17th VCM Report for Reporting Period January 2017 through June 2017).

²⁵ Kenrich determined its calculated late date for terminations, May 2025, was an outlier and that the large bore pipe supports late date, September 2023, was more reasonable.

²⁶ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, page 12.

supports, small bore pipe, cable tray and supports, conduit and supports, cable, and terminations, were less than 10% complete site-wide as of April 2017. For purposes of determining a range of completion dates, Kenrich ultimately focused on the large bore pipe supports and terminations sustained installation rates. It then multiplied the to-go quantities by the high and low historical sustained installation rates for each respective commodity.²⁷ After excluding certain outlier data, Kenrich identified its early and late finish dates for installation of these scopes. From this analysis, Kenrich calculated Unit 3 CODs of August 2020 and September 2023.²⁸

In our VCM 17 testimony, Rich Sieracki and I articulated the following limitations of this methodology: “The primary limitation is that the sustained installation rate methodology only factors in the installation of individual commodities, rather than the sequencing of multiple commodities. This factor is significant because major construction projects typically install more than one major commodity at a time and the practical sequencing of installing multiple commodities can lead to congestion and other issues that impact the installation rate and schedule. Other limitations may include the accuracy of the to-go quantities and the ability of the craft at Vogtle to achieve the installation rates that were achieved for the numerous nuclear plants that were constructed during the 1970s and 1980s.”²⁹

4.1.2.2 UNIT 3 NUCLEAR ISLAND PERCENT COMPLETE

To calculate the monthly percent complete achieved for the Unit 3 nuclear island between January 2016 and August 2016, Kenrich analyzed data GPC provided to the Commission in May 2016 and status information the Contractor provided in its August 2016 monthly report. Kenrich calculated an average of 0.83% complete per month achieved by the Contractor in the Unit 3 nuclear island. Kenrich then modelled two scenarios and calculated two additional early and late CODs using this data: 1) assuming performance doubled from 0.83% to 1.65%, Kenrich calculated a Unit 3 COD of June 2021 (early date), and 2) assuming the 0.83% complete per month performance improved to 1.10% due to decreased standby/set up time and more productive work anticipated, Kenrich calculated a Unit 3 COD of April 2023 (late date).³⁰ At approximately the time of our August 2017 report, productivity studies were being conducted to measure “tool time”, and Dr. William Jacobs, the Independent Construction Monitor hired by

²⁷ Based on a Burns & Roe analysis in a 1985 *Power Engineering* article. See footnote 19 to GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete.

²⁸ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, pages 6-10.

²⁹ Direct Testimony of Richard J. Sieracki and Mark A. Gentry in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 9.

³⁰ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, pages 10-11.

the Commission for Vogtle Units 3 and 4, reported that some productivity improvements were being achieved.³¹

4.1.2.3 OVERALL MONTHLY PROJECT PERCENT COMPLETE

To calculate the monthly percent complete achieved for the overall Project between April 2016 and April 2017,³² Kenrich analyzed data in the Contractor's regular monthly reporting and Construction Monitor reports. Kenrich identified monthly performance of 0.99% to 1.15% complete per month and calculated associated early and late Unit 3 CODs of May 2021 and January 2022. Kenrich verified its overall Project construction percent complete by comparing them to the rates for the two AP1000 projects under construction in China at Sanmen and Haiyang (1.1% to 1.2% per month).³³

4.1.2.4 LAG BETWEEN UNITS

As part of its analysis, Kenrich also investigated historical data associated with two-unit nuclear plants built in the United States and concluded that most of those plants required 12 months (or significantly more time) between the Commercial Operation of each unit. Therefore, Kenrich agreed with the Contractor's and Owner's expectations that Unit 4 Commercial Operation would follow Unit 3 Commercial Operation by one year.³⁴

4.1.2.5 KENRICH ESTIMATE TO COMPLETE CONCLUSION

Kenrich ultimately concluded from its schedule forecast analysis and its nuclear and construction experience and familiarity with the Vogtle Project that the most reasonable early and late dates for Unit 3 COD would be an early date of February 2021 (+20-month scenario) to a late date of November 2022 (+41-month scenario) with a reasonable one-year lag between the COD for Units 3 and 4.³⁵

4.1.3 PWC QUANTITATIVE RISK ANALYSIS

Counsel for GPC retained PwC to perform a Quantitative Risk Analysis ("QRA") to inform the probable costs associated with three different scenarios: 1) complete Units 3 and 4; 2) cancel Units 3 and 4; and 3) complete Unit 3 but cancel Unit 4. The results of PwC's ETC is shown in Figure 4-2 below.

³¹ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, page 10.

³² Kenrich analyzed the overall Project construction percent complete from April 2016 through April 2017 due to availability of a consistent data source – the monthly Construction Monitor reports authored by Dr. William Jacobs.

³³ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, page 11.

³⁴ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, pages 11-12.

³⁵ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, pages 7 and 13.

**Figure 4-2: PwC Summary Of Risk Adjusted Cost Estimates
For The Plant Vogtle Units 3 And 4 Scenarios³⁶**

No.	Scenario	Risk Adjusted Est. (\$M) P20	Risk Adjusted Est. (\$M) P80	Key Cost Drivers
1	Complete Units 3 and 4 Based on the SNC ETC	\$8,981	\$10,129	- Construction performance - Schedule duration
2	Cancel Units 3 and 4	\$671	\$782	- Terminating subcontractors - Yard demobilization - Equipment Resale/Salvage
3	Complete Unit 3 ¹ / Cancel Unit 4	\$6,219	\$7,023	- Completion of Unit 3 - Demobilization of Unit 4

PwC met with GPC, SNC, and other experts (like Kenrich, Black & Veatch, and Pegasus Global Holdings³⁷) to identify the risk events, the probability of the risk events occurring, and the cost impact range of each risk event for each scenario.³⁸

For the “complete Units 3 and 4” scenario, PwC found that the risks with the most significant impact on the estimate to complete were construction performance cost, schedule delay, additional WEC fees and/or Craft per diem cost, and start-up testing for new technology.³⁹ For the “cancel Units 3 and 4” scenario, the following risks had the most significant impact on PwC’s estimate to complete: increased safety investigations (internal and legal costs).⁴⁰ For the “complete Unit 3 and cancel Unit 4” scenario, the risks that had the most significant impact on PwC’s estimate to complete were the same as the prior

³⁶ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 7 – PwC Plant Vogtle Units 3 & 4 Quantitative Risk Assessment, page 1.

³⁷ As noted above, Kenrich performed an ETC analysis for the completion of Vogtle Units 3 and 4. Black & Veatch quantified deferral cost estimates for two scenarios: 1) the deferral both Units 3 & 4, and 2) the deferral of only Unit 4. Pegasus Global Holdings quantified cancellation cost estimates for two scenarios: 1) the cancellation of both Units 3 & 4, and 2) the completion of Unit 3 and cancellation of Unit 4. Reference GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibits 5 and 6.

³⁸ PwC modelled a minimum, most likely, and maximum schedule range and assigned a minimum, most likely, and maximum cost impact and probability factor for each risk based on its discussions with GPC, SNC, and its consultants. Reference the Direct Testimony of Daryl Walcroft in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, pages 13-15.

³⁹ PwC modelled 12 risks total for this scenario, including: 1) attraction pay for field non-manual labor; 2) evolving emergency planning, fire protection, and security (“EFS”) requirements; 3) start-up testing risk for new technologies; 4) subcontractors use bankruptcy to renegotiate contracts; 5) additional Westinghouse fees and/or craft per diem cost; 6) start-up and testing; 7) rework; 8) additional resources needed; 9) design changes; 10) additional material costs; 11) additional vendor costs; and 12) equipment costs. GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 7 – PwC Plant Vogtle Units 3 & 4 Quantitative Risk Assessment, pages 14 and 16.

⁴⁰ PwC modelled eight risks total for this scenario, including: 1) stabilize and secure site, 2) equipment resale (salvage), 3) terminating subcontracts, 4) satisfying current liens against WEC, 5) outstanding invoices, 6) project and site overheads (15 month demobilization), 7) site employee severance, and 8) site remediation/environmental costs. GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 7 – PwC Plant Vogtle Units 3 & 4 Quantitative Risk Assessment, pages 14 and 16.

two scenarios.^{41,42} See Figure 4-3 below from PwC's analysis summarizing the risk factors for each scenario.

Figure 4-3: PwC Summary Of Potential Event Risks With Most Significant Impact On The ETC

Scenario	Potential Risk
Complete Units 3&4 based on SNC ETC	Performance cost
	Schedule delay
	Additional WEC fees and/or Craft per diem cost
	Start-up testing for new technology
Cancel Units 3&4	Increased safety investigations - internal and legal costs
Complete Unit 3/Cancel Unit 4	Risk associated with completing Unit 3 – same as risks to complete both units but with a smaller impact
	Increased safety investigations as a risk to canceling Unit 4

In his VCM 17 testimony, Daryl Walcroft of PwC testified that the QRA is a valuable tool for understanding the confidence around both the overall estimate and individual elements of the estimate, provides the opportunity to better understand and plan for known risks, and supports decision-making by aggregating and quantifying estimates and risks that are otherwise difficult to value and compare.⁴³

PwC's analysis was one of the many documents at the time of VCM 17 that identified potential risks that could impact the Project and completion of Units 3 and 4.

4.1.4 BECHTEL COST AND SCHEDULE ASSESSMENT

Prior to executing the CCA with the Owners, Bechtel prepared a cost and schedule assessment for its assumed construction scope through Units 3 and 4 "Ready for Hot Function Testing (Mechanical Completion)."⁴⁴ Bechtel's schedule assessment resulted in a 50% chance (P50) that an April 2020 "Ready for Hot Functional Testing (Mechanical Completion)" date (+19-month extension) could be achieved and an 80% chance (P80) that a September 2020 "Ready for Hot Functional Testing (Mechanical Completion)" date (+24-month extension) could be achieved. The P80 scenario correlated to

⁴¹ PwC modelled the same 12 risks for the Complete Unit 3 scenario and the same eight risks for the Cancel Unit 4 scenario referenced in the prior footnotes.

⁴² PwC was unable to model the following risks in its analysis due to its inability to establish a reasonable probability and/or impact: changes in Federal regulatory requirements, potential impacts of the Vogtle Project on future rate-making proceedings, election of new commissioners to the GPSC, impact on future right to self-build projects, clawback of finance costs, and craft labor termination covered by the Warn Act. Reference GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 7 – PwC Plant Vogtle Units 3 & 4 Quantitative Risk Assessment, pages 14-15.

⁴³ Direct Testimony of Daryl Walcroft in Support of GPC's 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, pages 7-8.

⁴⁴ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 11 – Bechtel Cost and Schedule Assessment for the Completion of Construction for Southern Nuclear Operating Company's Vogtle Units 3 & 4, pages 5-7.

Fuel Load dates of January 2021 (+24-month extension) and October 2021 (+21-month extension) for Units 3 and 4, respectively, when using SNC's durations for startup and commissioning.⁴⁵

Bechtel provided an assessment of the cost to complete based on its P80 schedule dates but, as described further below, Bechtel did not assign its assessment a cost estimating classification because of the uncertainty surrounding key risks that would affect both the cost and schedule assessment.⁴⁶ It also caveated that the P50 and P80 dates did not guarantee confidence in the achievement of these results.

Bechtel used historical data from its prior nuclear power projects as the basis for its schedule assessment. Bechtel personnel examined to-go construction activities, conducted site walkdowns, and independently reviewed schedule logic. It considered SNC's Level 2 and 3 schedules and evaluated SNC-provided bulk quantities for commodities but applied its own historical unit rates. Bechtel then evaluated the schedule based on several criteria to identify projected completion dates based on its historical nuclear power project data:

- 1) overall percent complete able to be achieved on a monthly basis,
- 2) craft manpower by facility (to account for building densities),
- 3) total craft manpower able to be accommodated by the site,
- 4) site total sustained commodity installation rates able to be achieved based on historical data,
- 5) facility-specific sustained commodity installation rates able to be achieved based on historical data, and
- 6) window between 90% commodity installation complete to Fuel Load to reflect durations able to be achieved from construction turnover to start-up.

Bechtel reviewed each unit for these criteria separately and then jointly. Ultimately, it determined the +19-scenario to be a P50 schedule. Bechtel then ran the Primavera Risk Analysis tool (a Monte Carlo simulation) on the top critical paths of SNC's Level 3 schedule, which resulted in a 5-month duration addition to achieve a P80 rating. Bechtel ran additional analyses to evaluate probable job hour increases on the Unit 3 and Unit 4 schedules. This analysis found that the duration of each unit would be extended, but it would also allow Unit 4 to be complete 9 months (instead of 12 months) after Unit 3. Therefore, Bechtel's P80 schedule assessment resulted in a September 2020 Unit 3 "Ready for Hot Functional Testing (Mechanical Completion)" date (+24-months) and a June 2021 Unit 4 "Ready for Hot Functional Testing (Mechanical Completion)" date (+21-months). This correlated to Fuel Load dates of January 2021 (+24-months) and October 2021 (+21-months) for Units 3 and 4, respectively, when using SNC's durations for startup and commissioning.

Bechtel made several assumptions in its cost and schedule assessment, including, for example, that engineering deliverables would support the construction schedule and that there would be sufficient

⁴⁵ Ibid.

⁴⁶ Ibid.

qualified craft. Bechtel described the following key risks that would affect its cost and schedule assessment: engineering resulting in quantity and constructability changes, craft labor, multiple interfaces (Direct Hire construction scope and Subcontracted construction scope), and the rapid Project execution transition. Bechtel also noted that risks, such as the need for rework, a shortage of skilled labor, and out-of-sequence construction, could negatively affect the productivity of craft labor on site.⁴⁷

4.2 SUMMARY OF COMMISSION FINDINGS

As described above, based on the robust analyses and testimony provided, the Commission ultimately approved and found reasonable GPC's revised schedule associated with November 2021/2022 Units 3 and 4 CODs as shown in Figure 4-4 below.

Figure 4-4: Select Excerpts From The Commission's Order On VCM 17⁴⁸

COMMISSIONERS: STAN WISE, CHAIRMAN CHUCK EATON TIM G. ECHOLS H. DOUG EVERETT LAUREN "BUBBA" McDONALD, JR.		FILED JAN 11 2018 EXECUTIVE SECRETARY GPSC	DEBORAH K. FLANNAGAN EXECUTIVE DIRECTOR REECE McALISTER EXECUTIVE SECRETARY
Georgia Public Service Commission			
(404) 656-4501 (800) 282-5813	244 WASHINGTON STREET, S.W. ATLANTA, GEORGIA 30334-5701		FAX: (404) 656-2341 www.psc.state.ga.us
Verification of Expenditures Pursuant to Georgia Power Company's Certificate of Public Convenience and Necessity for Plant Vogtle Units 3 and 4, Seventeenth Semi-Annual Construction Monitor Report; Proposed Forecast Cost and Schedule Revisions; and Determination of Continuation or Cancellation of the Project DOCKET# Docket No. 29849 DOCUMENT# _____			
<u>ORDER ON THE SEVENTEENTH SEMI-ANNUAL VOGTLE CONSTRUCTION MONITORING REPORT FOR THE PERIOD JANUARY 1, 2017 THROUGH JUNE 30, 2017</u>			
ORDERED FURTHER, that Georgia Power shall move forward to complete construction of Vogtle Units 3 and 4.			
ORDERED FURTHER, that the Commission approves and finds reasonable the Company's revised schedule and cost forecast.			
ORDERED FURTHER, that the Commission approves the revised project structure whereby Southern Nuclear will construct, test and bring to commercial operation Vogtle Units 3 and 4 as a self-build project.			

⁴⁷ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 11 – Bechtel Cost and Schedule Assessment for the Completion of Construction for Southern Nuclear Operating Company's Vogtle Units 3 & 4, pages 8 and 13.

⁴⁸ GPSC's Order on GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, pages 1 and 17-18.

5. ANALYSIS OF PROJECT DELAYS SINCE COMMISSION APPROVED PLAN IN VCM 17

5.1 SCHEDULE ANALYSIS METHODOLOGY

HKA analyzed the delays that occurred to the Project following VCM 17. Our analysis utilized critical path method schedule analysis techniques, focused on delays to certain key milestones on the Project, and identified the most significant causes of delay. Based on our analysis of the schedules, contemporaneous documentation, and construction knowledge, many of the key milestones were on the critical path.⁴⁹ The critical path for a project is the series of activities and corresponding logic relationships that determine the date by which a project can be completed. Any delay to a critical path activity will delay project completion unless a work-around (e.g., change in planned activity sequence or forecasted duration) or mitigation effort is implemented.

As described above, in performing our analysis, HKA analyzed the contemporaneous documents, including information from various Project schedule updates and discussed the issues with Project personnel.

HKA utilized the June 2, 2018 schedule as the as-planned or baseline schedule for our analysis. The June 2, 2018 schedule reflected the Project team's planned approach to meet the High Confidence Schedule scenario target schedule dates approved in VCM 17. HKA further understands that the June 2, 2018 schedule is consistent with the baseline schedule referenced by the Georgia Public Service Commission Public Interest Advocacy Staff.⁵⁰

HKA utilized the latest reasonably available schedule update, the schedule update with a July 28, 2023 data or status date, along with key dates from other contemporaneous Project records for the as-built portion of its schedule analysis. HKA used the SNC Weekly Projects Metrics report dated August 22, 2023 for the latest forecast of the Unit 4 COD.

5.2 SCHEDULE ANALYSIS OVERVIEW

HKA determined that during this time period the as-built Project critical path⁵¹ started in the Unit 3 Auxiliary Building concrete construction, then transitioned to installation of Unit 3 Containment and/or Auxiliary Building electrical commodities to support electrical systems turnover to achieve key milestones such as Cold Hydro Testing, HFT, and Fuel Load. Around the time of Unit 3 Fuel Load, the Project critical path transitioned to the installation of Unit 4 Auxiliary Building electrical commodities to support

⁴⁹ In general, the milestones for Unit 3 dictated the overall critical path of the Project.

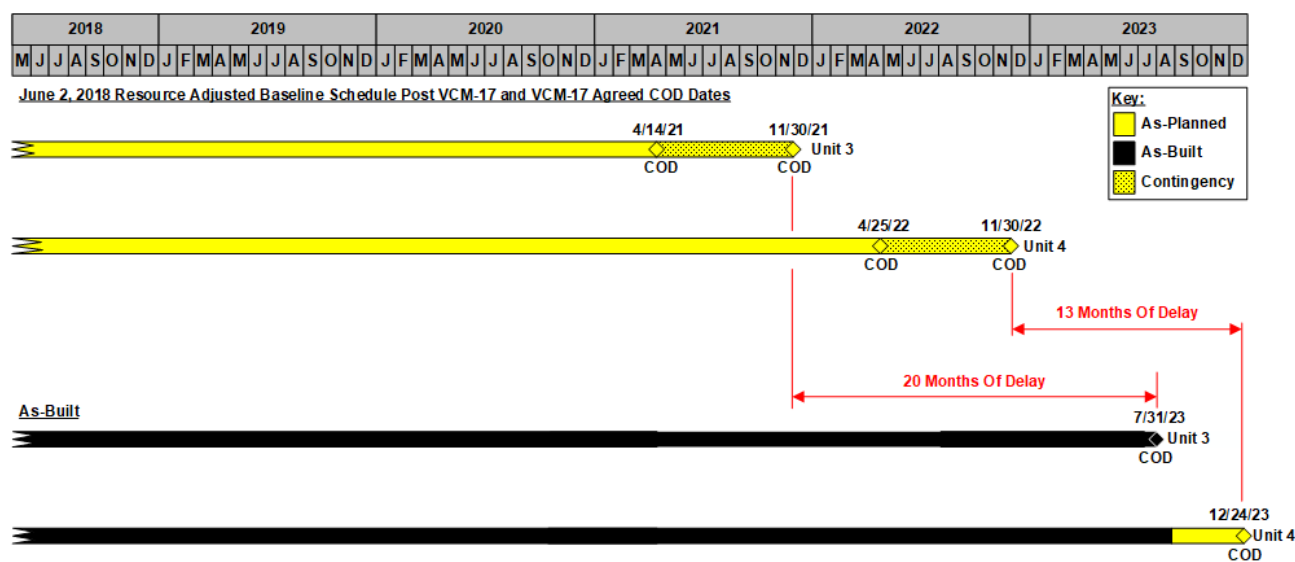
⁵⁰ Direct Testimony of Don Grace in the matter of GPC's 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018 on behalf of the GPSC Public Interest Advocacy Staff, page 13.

⁵¹ Generally, the as-planned Project critical path consisted of the same sequence of activities and key major milestones.

electrical systems turnover to achieve major milestones, including Cold Hydro Testing, HFT, and Fuel Load, while Unit 3 critical path was through testing and startup to achieve Commercial Operation.

As shown in Figure 5-1 below, Units 3 and 4 are forecasted to achieve Commercial Operation approximately 20 and 13 months later, respectively, than the VCM 17 Commission-approved dates of November 2021 and November 2022.

Figure 5-1: Project As-Planned v. As-Built⁵²



The results of HKA's analysis are summarized in Table 5-1 below.

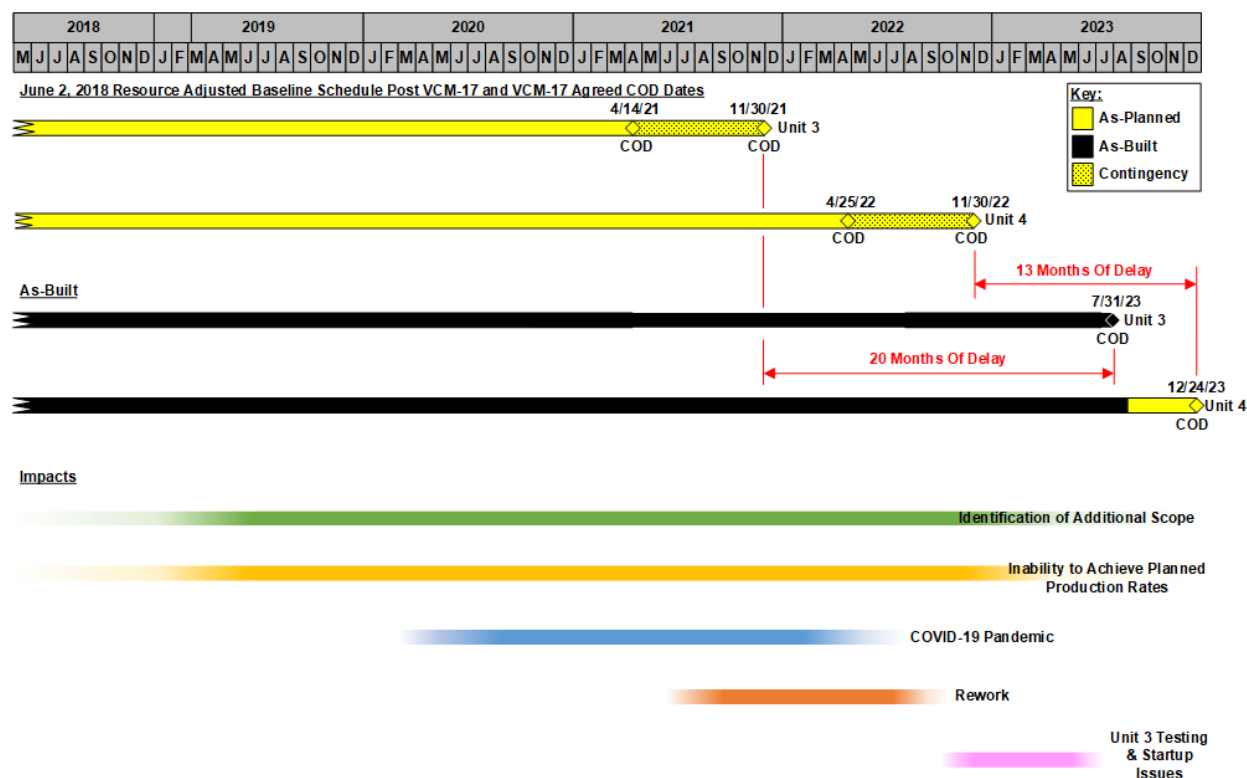
Table 5-1: Schedule Analysis Summary⁵³

Milestone	VCM 17 Approved	Actual/ Forecasted	Delay Months
Unit 3 Commercial Operation	11/30/21	07/31/23	20
Unit 4 Commercial Operation	11/30/22	12/24/23	13

HKA found that the most significant causes of critical path delay to Commercial Operation of the units included the COVID-19 pandemic, the identification of additional scope required to complete the Project, the need for more rework than anticipated, Bechtel's inability to achieve the production rates included in the schedule, and testing and startup issues. The timing of these impacts is demonstrated by Figure 5-2 below.

⁵² Attachment C – As-Planned v. As-Built Schedule Analysis.

⁵³ Attachment C – As-Planned v. As-Built Schedule Analysis.

Figure 5-2: As-Planned v. As-Built Project Impacts⁵⁴

Each of those causes will be discussed in more detail in the following sections.

6. ANALYSIS OF CAUSES OF DELAY SINCE VCM 17 AND ASSOCIATED SNC ACTION

6.1 COVID-19 PANDEMIC

The COVID-19 pandemic was an unprecedented and unforeseen event that impacted the entire world. HKA analyzed specific impacts from the COVID-19 pandemic to the Project that began in March 2020. GPC's prior VCM 17 testimony acknowledged the ability to timely complete the Project was at risk from a wide variety of events,⁵⁵ and the testimony from PwC's Mr. Daryl Walcroft acknowledged that it was of course not possible to identify every potential risk that could impact the Project.⁵⁶ The COVID-19 pandemic was one of those unforeseeable and unaccounted-for risks that ultimately impacted the ability of the Owner to timely complete the Project.

Following the onset of the COVID-19 pandemic, the Project management team prioritized protecting the health and safety of the Units 3 and 4 craft and non-manual workforce, as well as the surrounding

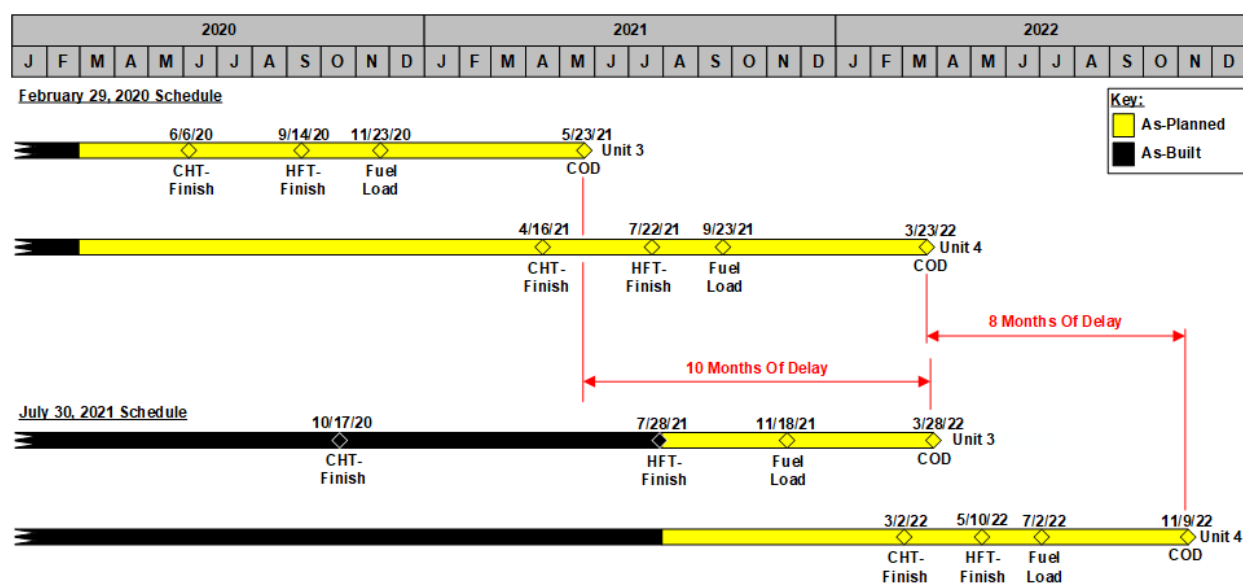
⁵⁴ Attachment D – Project Impacts Over Time.

⁵⁵ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, pages 20-21 and 23.

⁵⁶ Direct Testimony of Daryl Walcroft in Support of GPC's 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 6.

community.⁵⁷ For example, individuals exposed to COVID-19 and awaiting test results, along with any close contacts of the tested individual, were subject to a 14-day isolation protocol until test results were received.⁵⁸ As described below, the Project experienced high levels of absenteeism and implemented virus transmission mitigation and isolation measures to protect Project personnel. However, the COVID-19-related absenteeism and mitigation measures disrupted construction work and resulted in an inability to timely complete the work and worsened productivity (i.e., Cost Performance Index, “CPI”), both leading to schedule delays. The Project execution team’s response evolved over time, adapting COVID-19 pandemic site protocols based on Centers for Disease Control and Prevention (“CDC”) guidelines. SNC and Bechtel actively managed and developed strategies to mitigate the near-term and long-term effects. Despite the mitigation efforts, there were still delays to the Project due to, in part, the COVID-19 pandemic. Figure 6-1 below illustrates the delay to select milestones that occurred between the Pre-COVID-19 February 29, 2020 schedule update and the July 30, 2021 schedule update, months after COVID-19 was declared a global pandemic.

Figure 6-1: Pre-COVID-19 Pandemic v. Post-COVID-19 Pandemic Milestone Dates⁵⁹



6.1.1 COVID-19 ABSENTEEISM

At the onset of the COVID-19 pandemic, Bechtel and SNC developed an isolation policy to manage safety onsite and track individuals who needed to isolate. This policy required that employees within six feet of an affected individual, or in close proximity to an affected individual after coughing or sneezing, be

⁵⁷ GPC’s 23rd VCM Report for Reporting Period January 2020 through June 2020, page 3.

⁵⁸ April 2020 SNC Monthly Project Review Presentation, slide 9.

⁵⁹ Attachment E – Milestones Delay Experienced During COVID Pandemic.

mandated to isolate for 14 days or until they received a negative test.⁶⁰ Bechtel promoted social distancing and interviewed potential close contacts for those who were tested for COVID-19 as soon as the test was reported.⁶¹

Starting in March 2020, Bechtel also began tracking absences due to the COVID-19 pandemic. Bechtel developed new cost codes to track and report absent craft and field non-manual time for those who quarantined after testing positive to COVID-19, or coming into close contact with an individual who tested positive for COVID-19.⁶² From March 14, 2020 to August 28, 2022, Bechtel recorded the unit the absent employee had previously been working on, craft type, COVID-19 test date, return to work date, and other information for the individuals absent due to COVID-19.⁶³

On March 27, 2020, SNC implemented a policy that offered paid leave to individuals who could prove they were categorized as “high risk,” as defined by CDC guidelines, of a severe response to being infected with COVID-19 and a cost code was established to track the paid leave for the policy.⁶⁴

Throughout the COVID-19 pandemic, the related absenteeism impacted the ability to timely complete the Project. The Project saw craft absenteeism rates peak at 22-30% in April 2020 and May 2020, compared to significantly lower absenteeism rates of 11-14% in April 2019 and May 2019.⁶⁵ Overall, COVID-19-related absenteeism resulted in fewer individuals onsite, which subsequently caused staffing issues and less craft to progress work. GPC reported:

1. “High absenteeism for both craft and non-manual personnel”,
2. “an inability to retain key specialty craft and non-manual personnel”, and
3. “degradation of subcontractor performance.”⁶⁶

⁶⁰ Bechtel Monthly Status Report for March 2020, pages 5-6. This policy evolved with CDC guidelines. On December 16, 2020, SNC shortened the self-isolation and quarantine periods from 14 days to 10 days (reference Bechtel Monthly Status Report for December 2020, page 4). On February 2, 2021, SNC put an additional guideline in place stating that workers returning from international travel must stay at home for a minimum of 10 days and avoid contact with others. This was also applicable to workers who had someone in their household returning from international travel (reference Bechtel Monthly Status Report for January 2021, pages 3-4). In January 2022, the site policies changed from a 10-day quarantine to a 5-day quarantine and the Bechtel COVID-19 management team was no longer contact tracing (reference Bechtel Monthly Status Report for January 2022, page 7).

⁶¹ Bechtel Monthly Status Report for July 2020, page 4 and September 2020 SNC Monthly Project Review Presentation, slide 4.

⁶² March 15, 2020 Quantity and Unit Rate Report.

⁶³ Bechtel’s COVID-19 Impact Evaluation COR (Base and Supplements 1-4): Attachments “Table 13, 17-23 IMPACT Analysis new ratings for word file”, “Tables 18 & 24 COVID_analysis_May_2021 directs only”, “Covid 2_3_4 Only_rd_Final.”

⁶⁴ Bechtel Monthly Status Report for March 2020, pages 5-6.

⁶⁵ Weekly total craft absenteeism was 14.6% for April 28, 2019 (SNC Project Metrics Weekly Update, dated May 7, 2019), 11.4% for May 19, 2019 (SNC Project Metrics Weekly Update, dated May 29, 2019), 30.0% for April 26, 2020 (SNC Project Metrics Weekly Update, dated May 5, 2020), and 22.8% for May 17, 2020 (SNC Project Metrics Weekly Update, dated May 27, 2020).

⁶⁶ GPC’s 23rd VCM Report for Reporting Period January 2020 through June 2020, page 4. The April 2020 SNC Monthly Project Review Presentation, slide 2, indicates, “Subcontract ... absenteeism is challenged due to COVID impacts.”

While the Project was impacted by the COVID-19 pandemic, Unit 3 electrical work was generally on the critical path, and Unit 3 electricians absent from the jobsite working on the critical path scope limited the ability to earn hours towards the completion of the critical path activities. Based on Bechtel's absence data, there was a significant amount of absenteeism due to COVID-19 that affected the critical path and caused delay on the Project.

6.1.2 REDUCTION IN FORCE

Changes were also made to the Project's staffing levels at the time the COVID-19 pandemic was impacting the site. In April 2020, as further mitigation efforts were implemented associated with the pandemic, the management team reduced the site workforce by 20% due to the COVID-19 pandemic.⁶⁷ This reduction, when coupled with the increased pandemic-related absenteeism, resulted in Unit 4 resources transitioning to Unit 3 to focus on the Project critical path work.⁶⁸ Overall, the decrease in personnel caused reduced production. GPC reported a decline in average earnings from 140,000 hours per week during the second half of 2019 to 105,000 in VCM 23 (the first half of 2020), which it attributed largely to the COVID-19 pandemic and reduction in personnel.⁶⁹ The reduction in force ("RIF") was implemented beginning on April 16, 2020, and by April 23, 2020 the Project workforce was reduced by over 2,000 people, including:

1. 1,865 direct hire Richmond County Constructors ("RCC") craft,
2. 85 subcontract craft, and
3. 150 Bechtel / Seconded Field Non-Manual personnel.⁷⁰

SNC acknowledged the near term impacts of the RIF on the Project schedule but ultimately determined it was a necessary step to ensure site safety and mitigate the impact of the COVID-19 pandemic by allowing more opportunities for social distancing.⁷¹ Additionally, the COVID-19 pandemic impacted the available labor pool and further constrained the supply of qualified electricians. SNC and Bechtel continued to work with labor unions to identify and bring quality craft to the Project.⁷²

6.1.3 MITIGATION MEASURES

The Project's production and productivity levels also suffered from the impact the proactive COVID-19 pandemic mitigation measures had on personnel still working on the jobsite. For example, the Project

⁶⁷ GPC's 23rd VCM Report for Reporting Period January 2020 through June 2020, page 30.

⁶⁸ May 2020 SNC Monthly Project Review Presentation, slide 7 and GPC's 23rd VCM Report for Reporting Period January 2020 through June 2020, page 29.

⁶⁹ GPC's 23rd VCM Report for Reporting Period January 2020 through June 2020, page 29.

⁷⁰ May 2020 SNC Monthly Project Review Presentation, slide 7.

⁷¹ May 2020 SNC Monthly Project Review Presentation, slides 5 and 7.

⁷² June 2020 SNC Monthly Project Review Presentation, slide 8 and GPC's 25th VCM Report for Reporting Period January 2021 through June 2021, page 26.

team implemented the expansion of the onsite medical village, the deep cleaning of workspaces, reduced the number of workers in a given area to promote social distancing, increased spacing in break rooms, used facial coverings when social distancing was not possible, and allowed remote working permissions for field non-manual personnel.⁷³ Safety trainings were also conducted to ensure compliance with social distancing and face covering protocol.⁷⁴ While these actions helped to keep individuals on the jobsite safe, certain measures disrupted the “pre-COVID-19 pandemic” typical workday. Over time, this reduction in productivity became apparent as periodic CPI worsened in the months following the start of the pandemic compared to the pre-pandemic CPI. In VCM Reports throughout the COVID-19 pandemic, GPC noted an increase in Project CPI.⁷⁵ HKA validated the Project’s worsening CPI, which measures hours spent divided by hours earned, during these months, using Bechtel’s adjusted weekly scorecard (the “Scorecard”).⁷⁶ An example of these mitigation measures are shown in Figure 6-2 below.

Figure 6-2: Socially Distanced Training Session⁷⁷



Bechtel’s Monthly Status Reports from January 2021 through March 2021 indicated that they expected “the critical paths to be impacted” due a lack of resources and impacts from the COVID-19 pandemic but

⁷³ GPC’s 23rd VCM Report for Reporting Period January 2020 through June 2020, page 30; GPC’s 24th VCM Report for Reporting Period July 2020 through December 2020, pages 4, 27-28; GPC’s 25th VCM Report for Reporting Period January 2021 through June 2021, page 6. On February 22, 2021, there was a change to the onsite mask policy that required facial coverings to be worn 100% of the time in all buildings (Bechtel Monthly Status Report for February 2021, page 4).

⁷⁴ Bechtel Monthly Status Report for June 2020, page 4.

⁷⁵ Reference, for example, GPC’s 23rd VCM Report for Reporting Period January 2020 through June 2020, page 30; GPC’s 24th VCM Report for Reporting Period July 2020 through December 2020, page 29; and GPC’s 26th VCM Report for Reporting Period January 2022 through June 2022, page 24.

⁷⁶ Reference Bechtel’s file “Scorecard Data Pull Tab Adj.XLSX”, Tab “Adj” which provides weekly spent hours and earned hours on the Project. HKA calculated CPI according to the reported Scorecard hours.

⁷⁷ Bechtel Vogtle Quality Newsletter for July 2020, page 2.

were unsure how much the impact was at that time. To attempt to mitigate the delay, Bechtel implemented a mandatory 5-day, 10-hour shift plus an 8-hour two-shift operation on the Project.⁷⁸

In March 2021, the medical village team began administering the COVID-19 vaccine.⁷⁹ Vaccination efforts continued into the following months and by June 2021, over 1,100 vaccinations had been administered onsite.⁸⁰ In July 2021, SNC demobilized the on-site medical village due to the widespread availability of testing and vaccinations in surrounding areas.⁸¹

The COVID-19 pandemic also resulted in procurement challenges and issues. For example, the supply of “specific and unique material from Baumert in France has been additionally delayed/impacted due to COVID-19 issues.”⁸² In response, the Project team attempted to mitigate supply chain impacts by maintaining regular contact with its suppliers and working with its subcontractors.⁸³ As of July 2020, Bechtel reported that potential procurement impacts were being reviewed by SNC, but did not report schedule impacts for SNC or WEC equipment or material delay related to the pandemic at that time.⁸⁴ In other words, management generally successfully mitigated the COVID-19 pandemic impacts to procurement.

The COVID-19 pandemic was an unprecedented event that affected the Project. As a result of the pandemic, the Project experienced high levels of absenteeism and implemented virus transmission mitigation and isolation measures to protect field personnel. The increased absenteeism and productivity related impacts stemming from the pandemic resulted in critical path delay to the Project. During the period impacted by the pandemic, SNC and Bechtel managed the impacts to the critical path while maintaining a safe work environment.

6.2 IDENTIFICATION OF ADDITIONAL SCOPE REQUIRED TO COMPLETE THE PROJECT BUT NOT REALIZED AT THE TIME OF VCM 17

Bechtel and SNC’s discovery of additional scope following VCM 17 contributed to the delay to Commercial Operation of Units 3 and 4. Based on discussions with SNC personnel and a review of the project controls tools discussed in Section 6.2.1 below, HKA identified, as examples, two distinct means by which scope (to be earned hours) was added to the Project after VCM 17:

⁷⁸ Bechtel Monthly Status Report for January 2021, page 56; for February 2021, page 53; and for March 2021, page 53.

⁷⁹ March 2021 SNC Monthly Project Review Presentation, slide 3.

⁸⁰ GPC’s 25th VCM Report for Reporting Period January 2021 through June 2021, page 6.

⁸¹ GPC’s 25th VCM Report for Reporting Period January 2021 through June 2021, page 6.

⁸² Reference, for example, Bechtel Monthly Status Report for March 2020, page 53; for April 2020, page 52; and for July 2020, page 59.

⁸³ Direct Testimony of Stephen E. Kuczynski and Aaron P. Abramovitz in Support of GPC’s 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, page 5.

⁸⁴ Bechtel Monthly Status Report for July 2020, page 4.

1. Added quantities of like material (e.g., required additional tons of rebar), and
2. Adjustment of expected installation rate Redacted

The installation of the additional scope required additional direct craft hours. In situations where additional craft resources could not be mobilized and/or effectively utilized, which occurred in part on the Project due to the small footprint of the AP1000 reactor design, the need for additional direct craft hours to complete the critical path scope of work translated directly to Project delay. HKA reviewed the scope growth on the Project using project controls tools and determined that changes to the Project scope discovered after the estimation efforts presented in VCM 17 impacted the Project schedule. A detailed description of HKA's observations is provided below.

6.2.1 OVERVIEW OF VOGTLE PROJECT CONTROLS TOOLS

HKA analyzed two project control tools to evaluate the impact of added scope, both of which were provided to Staff monthly: Bechtel's Scorecard; and the Quantity and Unit Rate Report ("QURR"). Bechtel's Scorecard and QURR are Earned Value Management ("EVM") tools utilized to track production and productivity on the Project. At the highest level, EVM translates work installed, such as tons of rebar or linear feet of conduit installed, to "earned" hours using a defined unit installation rate. The unit installation rate is the expected craft labor hours required to install one unit of a commodity. For example, the unit installation rate for Unit 3 Auxiliary Building rebar walls on the Project was ^{Redacted} craft labor hours per ton of rebar installed.⁸⁵ Therefore, installation of one ton of Unit 3 Auxiliary Building rebar walls would "earn" ^{Redacted} hours, irrespective of the actual hours spent installing that rebar. Unit rates for the Project were originally provided by Fluor in its Basis of Estimate prepared for WEC.⁸⁶ SNC's unit rates were informed by the Fluor unit rates, specific to each scope of work, unit, and building and with adjustments, for example, to account for the discontinuation of V.C. Summer in South Carolina and the learning and improvement between Units 3 and 4.⁸⁷ SNC also hired Work Management, Inc. / High Bridge Associates ("WMI/HBA") to perform an independent review unit rates, specifically piping and electrical commodity installation unit rates given their potential impact on the critical path on the Project.⁸⁸ WMI/HBA's independent review "confirmed the viability of the unit rates utilized in the ETC."⁸⁹

⁸⁵ Attachment F – Unit 3 Auxiliary Building Civil Scope.

⁸⁶ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, page 3.

⁸⁷ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, page 11.

⁸⁸ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, pages 12-13.

⁸⁹ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, page 13.

The Scorecard provided an overview of the to-date and to-go earned and spent hours for specific commodities identified by Bechtel and SNC (e.g., concrete, rebar, conduit, etc.) on a weekly basis. Scorecard data served as a summary of the more detailed cost account level information provided in the QURR. For example, utilizing the rebar example discussed above, the QURR separated Unit 3 Auxiliary Building rebar into three cost accounts: walls, elevated slabs, and miscellaneous components.⁹⁰ For the Scorecard, those three separate cost accounts were aggregated into the single Unit 3 Auxiliary Building rebar commodity line.

6.2.2 BASELINE SCOPE IDENTIFIED IN VCM 17

Following WEC's declaration of bankruptcy in March 2017, SNC and WEC executed an interim assessment agreement which allowed SNC to access WEC's internal information related to the Project.⁹¹ This information was previously unavailable to SNC under the EPC Agreement structure, and SNC worked diligently to investigate and review the newly accessible information. For example, the interim assessment agreement allowed SNC to review Fluor's Basis of Estimate.⁹² SNC reviewed the to-go quantities reflected in Fluor's Basis of Estimate and adjusted the to-go material quantities as appropriate to reflect the status of construction on the Project.⁹³ SNC's efforts resulted in a comprehensive quantification of to-go quantities as of May 2017 considering the approximate two-month time period in which it had to perform its evaluation.⁹⁴ The to-go quantities established by SNC as of May 2017 formed the basis for the Kenrich and SNC ETCs submitted as part of the VCM 17 proceedings.⁹⁵ Bechtel utilized the quantity to-go estimate, along with specific adjustments informed by site specific and general industry knowledge, as the basis for its ETC submitted as part of the VCM 17 proceedings.⁹⁶

Notwithstanding the considerable effort undertaken by both SNC and Bechtel to quantify the scope remaining to complete the Project as of VCM 17, SNC specifically enumerated the risk of scope growth in its VCM 17 filings and testimony. GPC's executive summary explicitly identified the risk of the Project

⁹⁰ Additional cost accounts were established but ultimately not used. Additionally, a cost account for rebar bearing plates was established after initial alignment of the Scorecard and QURR (cost account 312.ZZ.12.39110).

⁹¹ Direct Testimony of Mark D. Rauckhorst (SNC), Joseph B. Klecha (SNC), and Tyrone P. Troutman (Bechtel) in Support of GPC's 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 5.

⁹² GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, page 10. WEC engaged Fluor in March 2016 to develop an ETC for the construction scope of work on the Project, a process that continued in an iterative manner into early 2017.

⁹³ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, page 11. Additionally, SNC took steps to independently validate Fluor's unit rate findings via engagement of Work Management, Inc. / High Bridge Associates.

⁹⁴ VEGP Unit-3 "Quantities to Go" dated May 16, 2017.

⁹⁵ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 3 - SNC Vogtle 3&4 Estimate to Complete (ETC) Report, page 11 and Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, page 7.

⁹⁶ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 11 – Bechtel Cost and Schedule Assessment for the Completion of Construction for Southern Nuclear Operating Company's Vogtle Units 3 & 4, pages 39-42.

team encountering “Unidentified Scope Risk”, which it defined as “changes that are made to the amount of work that must be completed that are not currently included in the Southern Nuclear ETC.” GPC acknowledged various mechanisms for the emergence of unidentified scope, including “design changes that cause the need for rework or that make performing the work more difficult” and “difference in interpretations of the applicable codes with the NRC.”⁹⁷ Furthermore, GPC stated, “the risk of unidentified work scope from factors that have not been anticipated cannot be eliminated entirely.”⁹⁸

As described above, SNC, Kenrich, and Bechtel performed a relatively quick yet comprehensive review of the to-go scope for the Project following WEC’s bankruptcy and prior to VCM 17. Despite its best efforts, SNC specifically identified the risk of scope growth to the Commission in its VCM 17 filings.

6.2.3 TIMELINE OF ADDED SCOPE

The finalization of the quantities for the Project continued to be refined throughout construction, resulting in Bechtel and SNC regularly adjusting the associated Scorecard and underlying QURR hours throughout the Project. HKA reviewed documentation related to scope growth and divided the Project into two periods, the period from VCM 17 through the implementation of Forecast 1 into Bechtel’s Scorecard (April 21, 2019) and the period from Forecast 1 through Commercial Operation. Forecast 1 was an integrated and comprehensive effort by Bechtel and SNC to reconcile Project quantities and direct hire hours as described in Section 6.2.3.2 below.

6.2.3.1 VCM 17 THROUGH FORECAST 1

Beginning in October 2017, shortly after the CCA was executed, Bechtel began tracking discrete issues related to scope growth in its trend log.⁹⁹ The trend log is Bechtel’s project controls tool for tracking “trends” or items that could impact the cost or schedule for the Project such as the impact of design changes, site challenges, and other differing conditions on the Project. Trends substantiated internally by Bechtel were incorporated into Change Control Forms (“CCF”) which were subsequently presented for approval to the Change Control Board (“CCB”).¹⁰⁰ Following approvals of trends, Bechtel would update material quantities and associated hours in the Scorecard.¹⁰¹

In October 2018, WEC provided revised quantities for bulk mechanical and electrical commodities following efforts to “integrate lessons learned from China and other optimization efforts into the design

⁹⁷ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, pages 96-97.

⁹⁸ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, pages 96-97.

⁹⁹ Bechtel Trend Log dated February 23, 2023. Reference CCA Between the Owners and Bechtel dated October 23, 2017, Exhibit L – Trend Program, for an overview of the Project’s Trend Program.

¹⁰⁰ SNC Change Control Procedure, Version 2.0 approved December 22, 2017, pages 4-5 and CCA Between the Owners and Bechtel dated October 23, 2017, Exhibit L – Trend Program. Per discussion with SNC personnel, HKA understands trends under \$250,000 did not require explicit approval from the CCB and could be aggregated in a CCF alongside notification to the CCB.

¹⁰¹ Per discussion with SNC personnel.

model.” WEC’s revisions were subsequently validated by Bechtel.¹⁰² Per discussion with SNC personnel, HKA understands around this time SNC and Bechtel identified discrepancies between the physical status of Unit 3 construction and the progress represented in the Scorecard and QURR. For example, by November 4, 2018, the QURR indicated the Project team had installed a significant amount of the rebar for the walls of the Unit 3 Auxiliary Building. However, while the QURR indicated that rebar in the Auxiliary Building was nearing completion, yet no walls were complete above elevation 135’3” in early November 2018, almost 20’ to 50’ below the final elevation of the Auxiliary Building.¹⁰³ It was apparent to the Project team by the fall of 2018 that realignment of the project controls tools was necessary. Shortly thereafter, in December 2018, Project personnel initiated Forecast 1.¹⁰⁴

6.2.3.2 FORECAST 1

Forecast 1 was an effort by Bechtel to assess the status of construction on the Project, including a detailed evaluation of to-go quantities and direct hours, along with an associated evaluation of the to-go Project schedule. Bechtel described the effort in its December 2018 Monthly Status Report, “The project will be evaluating quantities and direct job hours and evaluating schedule viability of achieving the contract early completion dates. Updated quantities are being collected from WEC and from quantity take-offs from field engineering.”¹⁰⁵

SNC and Bechtel performed a detailed and comprehensive evaluation of to-go quantities and direct hours upon realization of the deviation between the baseline material quantities described in Section 6.2.2 and the status of construction in late 2018. SNC identified the following desired outcomes from Forecast 1:

- Plan work more efficiently,
- Provide better visibility on cost and schedule,
- Lower the risk for surprises (good and bad ones),
- A key step in the +21 and +29 schedule scenarios, and
- Allow for better adjustment of future craft labor needs.¹⁰⁶

Forecast 1A was completed in April 2019 and “provides the basis of bulk quantities and associated direct hire hours.” The Forecast 1A bulk quantity and direct hire hours were incorporated into the Scorecard as of the week ending April 21, 2019.¹⁰⁷ Forecast 1A primarily utilized quantity take offs and the design model to determine the commodity quantities and associated direct hire hours. Previously much of the

¹⁰² November 2018 SNC Monthly Project Review Meeting Presentation, slide 5.

¹⁰³ SNC Project Metrics Weekly Update, dated November 5, 2018, page 11, and Drawing Number APP-1000-P2-901, Nuclear Island General Arrangement.

¹⁰⁴ Bechtel Monthly Status Report for December 2018, page 2.

¹⁰⁵ Bechtel Monthly Status Report for December 2018, page 2.

¹⁰⁶ November 2018 SNC Monthly Project Review Meeting Presentation, slide 7.

¹⁰⁷ Vogtle Units 3&4 Construction Completion Forecast 1B 2019 Client Presentation, page 1. Forecast 1B followed Forecast 1A and, “utilizes the results of the bulk quantity analysis to indirects, field non-manual and home office support impacts.”

commodity quantities had been supplied by engineering. The design model and quantity take offs from the design provided a more accurate basis for estimation than the engineering estimates relied upon in development of the Project baseline quantities described in Section 6.4.1 above.¹⁰⁸ Fine tuning of direct hours and quantities associated with Forecast 1 efforts continued to result in alterations to the Scorecard into August 2019.¹⁰⁹

HKA's review of the "civil quantity increases" associated with Forecast 1 identified scope growth in the Unit 3 Auxiliary Building civil commodities, including the amount of rebar, embedments, and formwork which contributed to the Project delay experienced from VCM 17 through early 2019.¹¹⁰ Table 6-1 illustrates the absolute and percentage growth of select Unit 3 Auxiliary Building civil commodities through the latest QURR dated May 28, 2023.¹¹¹

Table 6-1: Summary Of Select Unit 3 Auxiliary Building Civil Commodity Scope Growth

<u>Commodity</u>	<u>Unit Of Measure</u>	<u>March 4, 2018 Quantity</u>	<u>May 28, 2023 Quantity</u>	<u>Difference</u>	<u>Percentage Difference</u>
Rebar	TN	Redacted			63%
Formwork	SF				62%
Embeds	LB				43%

Figure 6-3 illustrates an example of the considerable rebar required for reinforcement of the plant's concrete walls.

Figure 6-3: Unit 3 Reinforced Concrete Wall As Of February 2019¹¹²



¹⁰⁸ Vogtle Units 3&4 Construction Completion Forecast 1B 2019 Client Presentation, page 4.

¹⁰⁹ Per discussion with SNC personnel. Reference Change Order 6 dated November 8, 2019.

¹¹⁰ During this period of time, civil commodity installation in the Auxiliary building was generally on the critical path for the Project.

¹¹¹ Attachment F – Unit 3 Auxiliary Building Civil Scope.

¹¹² Georgia Power Company's Construction Photos Archive For February 2019.

6.2.3.3 FORECAST 1 TO COMMERCIAL OPERATION

Despite the efforts of Bechtel and SNC to accurately estimate the remaining scope of work during the development of Forecast 1, scope growth continued to occur on the Project following the incorporation of Forecast 1 into the project controls tools in April 2019. HKA identified trends in Bechtel's trend log which identified additional scope growth in Unit 3 electrical commodities after spring 2019:¹¹³

1.

Redacted

2.

Redacted

3.

Redacted

4.

Redacted

As described above, SNC approval was required to adjust the Project scope in Bechtel's Scorecard. Therefore, implementation of additional direct hire hours into Bechtel's Scorecard indicated acknowledgement by SNC that the scope of work required more hours to earn. Continued scope growth encountered after the implementation of Forecast 1 in April 2019 contributed to Project delay experienced after spring 2019.

6.2.4 ADDED SCOPE SUMMARY

As described above, the discovery of added scope on the Project contributed to Project delay. The difficulty of estimating the total scope of work for an in progress FOAK megaproject was compounded by WEC's bankruptcy in the spring of 2017 and the transition away from an EPC contract structure to an Owner managed cost-plus fee arrangement. Faced with these challenges, and working on an expedited timeline, SNC and Bechtel prepared an estimate of the remaining scope of work and associated schedule for presentation to the commission in VCM 17. As construction progressed and assumptions of the initial estimate were challenged, SNC and Bechtel reassessed the to-go quantity of work and incorporated the

¹¹³ During this period of time, electrical construction in the Auxiliary and/or Containment buildings was generally on the critical path for the Project.

¹¹⁴ Bechtel Trend Log dated February 23, 2023.

revised information into the project controls tools. The additional scope realized after VCM 17 required additional direct hire hours to complete and played a role in the delay experienced on the Project.

6.3 REWORK

SNC and Bechtel encountered the need to perform rework, above what could have been reasonably anticipated, which contributed to the delay experienced on the Project.¹¹⁵ Previously, under the EPC Agreement, the risk of rework was largely borne by the Contractor. Following WEC's bankruptcy, the risk of rework was then largely borne by the Owners.¹¹⁶

Georgia Power discussed risk to the Project in its filings as part of VCM 17, specifically drawing attention to two rework associated risks. One of the risks identified was that "the labor force and craft will be unable to maintain their productivity improvements." Georgia Power stated that "this risk also encompasses higher than anticipated rates of rework." The second risk was that of "unidentified scope" which would include added scope to perform rework.¹¹⁷

Despite SNC's acknowledgement of risk due to rework in VCM 17, the extent of rework encountered on the Project exceeded SNC's expectations. HKA analyzed Bechtel's Unit 3 weekly scorecard review files, which categorized and quantified spent direct hire hours, and determined approximately 57% of Unit 3 spent hours from September 26, 2021 through September 25, 2022 were expended on "Constr Rework / Emergent Scope."¹¹⁸ Figure 6-4 below illustrates the percentage of spent hours Bechtel categorized as construction rework/emergent scope during this period on a weekly basis.

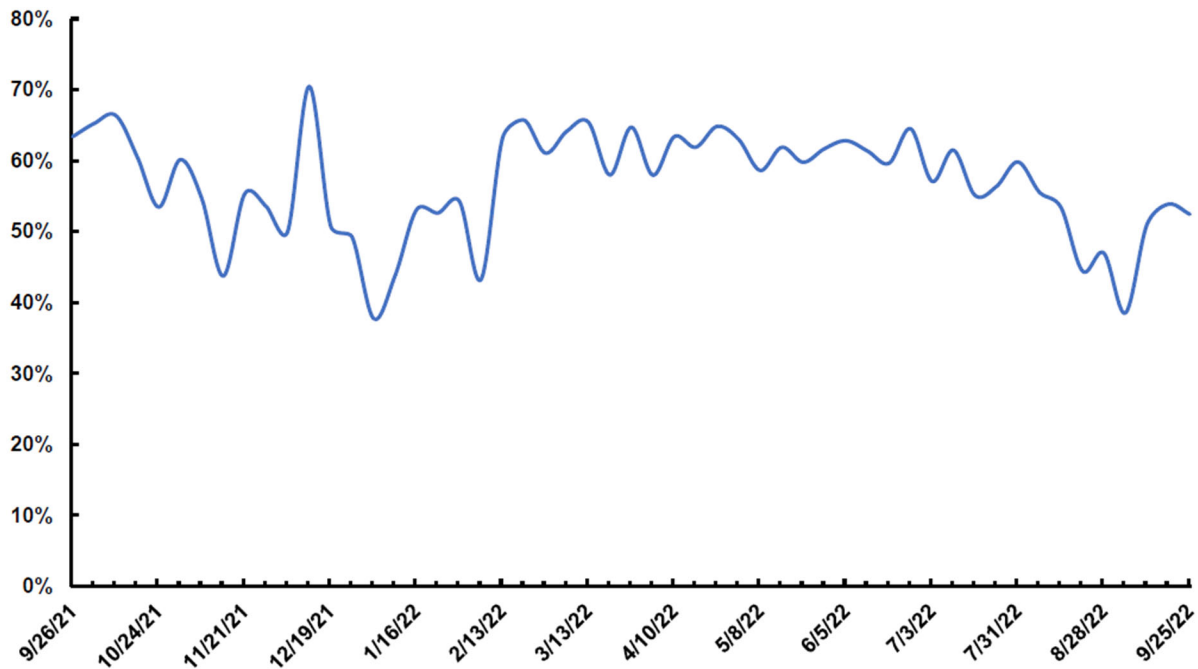
¹¹⁵ Along with the rework, there was the need for associated additional documentation regarding the rework identified and performed. For example, additional work orders had to be issued and incorporated into the appropriate work package.

¹¹⁶ The CCA identifies that certain corrective work that meets the definition of a "Significant Construction Defect" will be Bechtel's responsibility (i.e., a Non-Reimbursable Costs).

¹¹⁷ Georgia Power Company's Seventeenth Semi-Annual Construction Monitoring Report for Vogtle Units 3 and 4 dated August 31, 2017, pages 94 and 96.

¹¹⁸ Attachment G – Bechtel Categorized Rework Hours.

**Figure 6-4: Percentage Of Unit 3 Spent Hours Categorized By Bechtel
As Construction Rework/Emergent Scope¹¹⁹**



HKA reviewed Project documentation in the period from the end of Unit 3 HFT in July 2021 to Unit 3 Fuel Load in October 2022 and identified rework issues that contributed to the Project delay, including electrical commodity installation deficiencies and other discrete issues which are discussed in detail in the sections below.

6.3.1 ELECTRICAL COMMODITY INSTALLATION DEFICIENCIES

The Project team encountered difficulties during installation of electrical commodities which resulted in quality failures and rework. SNC became aware of the extent of electrical quality issues in late 2020. On December 22, 2020, Condition Report (“CR”) 50072803 reported “several Unit 3 cable separation issues and other electrical installation quality conditions” that were memorialized in 57 CRs generated in November and December 2020. A Root Cause Determination (“RCD”) was initiated on January 25, 2021 in response to additional electrical quality issues identified in CR 50075757. The RCD Problem Statement is illustrated in Figure 6-5 below.¹²⁰

¹¹⁹ Attachment G – Bechtel Categorized Rework Hours.

¹²⁰ Root Cause Determination Report (Corrective Action Record 80004436) dated April 28, 2021, pages 3-4.

Figure 6-5: Root Cause Determination (Corrective Action Record 80004436) Problem Statement

Redacted

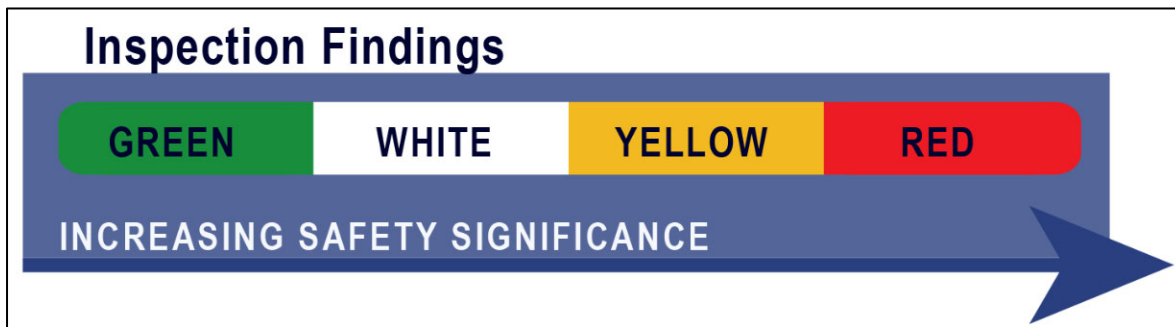
The root cause was identified as “inadequate enforcement of construction standards and behaviors related to electrical installations.”¹²¹ As part of its efforts to correct this behavior, SNC performed a sitewide stand down on March 17, 2021 in order to “recommit to quality and nuclear standards.”¹²²

On June 1, 2021, the NRC authorized a special inspection to “assess the circumstances surrounding the electrical cable separation nonconformances related to Institute of Electrical and Electronics Engineers (IEEE) Standard 384-1981 and the extent of condition (EOC) of seismic/structural issues.”¹²³ NRC inspection findings are rated in order of increasing severity, as illustrated in Figure 6-6.

¹²¹ Root Cause Determination Report (Corrective Action Record 80004436) dated April 28, 2021, page 4.

¹²² March 2021 SNC Monthly Project Review Meeting Presentation, slide 2.

¹²³ NRC Special Inspection Reports 05200025/2021010, 05200026/2021010 dated August 26, 2021, page 4.

Figure 6-6: NRC Reactor Oversight Action Matrix Performance Indicators¹²⁴

The findings of the NRC's special inspection related to the failure to comply with design requirements and constituted minor to moderate safety significance. The NRC inspection resulted in three findings:

1. "Failure to Promptly Identify and Correct IEEE 384 Cable Separation and Seismic/Structural Nonconformances", a "Preliminary White" finding,
2. "Failure to Accomplish Separation for Class 1E System Field Installations in Accordance with Applicable Instructions, Procedures, and Drawings", a "Preliminary Greater than Green" finding, and
3. "Failure to Install Electrical Raceways and Connections in Accordance with Applicable Instructions, Procedures, and Drawings", a "Green" finding.¹²⁵

On September 28, 2021, SNC chartered an RCD in response to the NRC findings which determined the scope of the initial Extent Of Condition ("EOC") of electrical quality issues was too narrow and recommended the following areas be added to the EOC review as shown in Figure 6-7 below.¹²⁶

**Figure 6-7: Root Cause Determination (Corrective Action Record 80006298)
Recommended EOC Additions**

Redacted

¹²⁴ Reactor Oversight Action Matrix Performance Indicators from the "NRC Infographics" webpage on the NRC website.

¹²⁵ NRC Special Inspection Reports 05200025/2021010, 05200026/2021010 dated August 26, 2021, pages 2-3.

¹²⁶ Root Cause Determination Report (Corrective Action Record 80006298) dated October 21, 2021, pages 13,28, 65-66.

The electrical quality issues encountered on the Project contributed to Project delay following the completion of Unit 3 HFT in July 2021. HKA reviewed Project documentation and identified electrical rework issues that contributed to Project delay including IEEE-384 violations and inadequate Inspection Records (“IR”).

6.3.1.1 IEEE-384 CABLE SEPARATION

IEEE publishes standards for installation of electrical scopes of work on construction projects. IEEE standards have been incorporated by the NRC as part of the design requirements for new nuclear power plants within the United States. Compliance with applicable IEEE standards was a requirement for Units 3 and 4 to receive regulatory approval for Fuel Load, also known as the 103(g) finding (“103(g)").¹²⁷ One of the numerous IEEE standards applicable to the Project was IEEE-384, defined as, “The independence requirements of the circuits and equipment comprising or associated with Class 1E systems.”¹²⁸

Independence requirements include both physical separation and electrical isolation.¹²⁹ HKA understands the IEEE-384 deficiencies encountered on the Project were generally related to the physical separation requirement of cables that were either enclosed in raceways and cabinets or free hanging.¹³⁰

In early 2018, Bechtel’s trend log first referenced IEEE-384, specifically in trend NI4-0034 that explicitly called out design considerations related to IEEE-384.¹³¹ Throughout 2018, 2019, and 2020, a limited number of Engineering and Design Coordination Reports (“E&DCRs”) related to IEEE-384 were issued by WEC engineering, some of which were initiated by Engineering Services Requests (“ESRs”) from Bechtel field personnel. Examples of approved IEEE-384 related E&DCRs, of the approximately 14,000 E&DCRs approved from 2018-2020,¹³² are provided in Table 6-2 below.

Table 6-2: Select Examples Of IEEE-384 Related E&DCRs

E&DCR Number	Description	Approval Date
Redacted		

¹²⁷ NRC Regulatory Guide 1.75, Revision 3, February 2005, page 3.

¹²⁸ IEEE Standards Association webpage for IEEE 384-2018. Class 1E systems are those essential to safe operation of the nuclear reactor, including emergency shutdown, containment isolation, and reactor heat removal.

¹²⁹ NRC Regulatory Guide 1.75 Revision 3, February 2005, page 3.

¹³⁰ Quality Advisory for Electrical IEEE Requirements dated March 23, 2022. Detailed discussion of the IEEE-384 requirements and deficiencies discovered on the Project can be found in the expert report of HKA expert Timothy Chitester.

¹³¹ Bechtel Monthly Status Report for January 2019, attachment “Monthly Trend Report,” page 21. Trend NI4-0034 was approved by the Change Control Board in April 2019. Reference Bechtel Trend Log dated February 23, 2023.

¹³² Attachment H – E&DCRs Approved From 2018-2020.

Beginning in December 2020, SNC performed an extent of condition (“EOC”) walkdown in Unit 3 which, “identified approximately 550 issues requiring correction/evaluation which were captured in an additional 64 condition reports entered on a room-by-room basis.”¹³³ SNC trend number SNC-444, dated January 20, 2021, indicated 591 IEEE-384 violations were discovered “since November 2020 documenting these adverse conditions.”¹³⁴

In response to the discovery of IEEE violations, the Project Execution team established an additional training program for IEEE-384 requirements for field personnel, which were tracked in Bechtel’s Project Action Item List (“PAIL”). For example, action number 1632 was opened on January 4, 2021 and was described as, “Establish recurring training for Supt/GF/FM and FE’s on IEEE-384 cable separation issues.”¹³⁵

In the February 2021 Monthly Project Review presentation, SNC acknowledged that “Challenges associated with PMS [Protection and Safety Monitoring System] cabinet work have been resolved.”¹³⁶ HKA understands the referenced “challenges” were in part related to IEEE-384 cable separation deficiencies.¹³⁷ At that time, the PMS system completion was required to achieve HFT for Unit 3.

On April 12, 2021, Bechtel added a new action to its PAIL described as, “provide additional IEEE training for cable separation.”¹³⁸ By April 2021, SNC began identifying the extent of the IEEE-384 issue and recognized the risk posed to the Project schedule due to the required rework. HKA understands the majority of rework associated with IEEE-384 required remediating the nonconforming work. In some cases, engineering approved alternative remediation solutions, including sheet metal barriers and handcuffs, to meet cable separation requirements.¹³⁹

Bechtel performed additional investigations in August and September 2021 to further define the scope of rework required to address IEEE-384 violations.¹⁴⁰ Throughout the fall of 2021 and into 2022, Bechtel continued to work on resolution of IEEE-384 issues. Bechtel’s Monthly Status Reports during this period consistently listed, “Continue with IEEE electrical scope” in the Unit 3 Auxiliary Building under the heading, “Key Work Planned for Next Month.”¹⁴¹ Additionally, Bechtel recognized discovery of additional work during IR closure in this period as one of the “Key Schedule Issues.”¹⁴² By April 2022, “IEEE-384

¹³³ Root Cause Determination Report (Corrective Action Record 80004436) dated April 28, 2021, page 5.

¹³⁴ SNC Trend Log dated March 31, 2022.

¹³⁵ Bechtel Monthly Status Report for January 2021, attachment “Critical Action Items Report,” page 4.

¹³⁶ February 2021 SNC Monthly Project Review Meeting Presentation, slide 9.

¹³⁷ Per discussion with SNC personnel.

¹³⁸ Bechtel Monthly Status Report for April 2021, attachment “Critical Action Items Report,” page 3.

¹³⁹ Per discussion with SNC personnel. For example, see Work Order 1274265 from Work Package SV3-1120-ERW-1158534 for an example of separation barriers.

¹⁴⁰ Bechtel Monthly Status Report for August 2021, page 26 and for September 2021, page 24.

¹⁴¹ Reference, for example, Bechtel Monthly Status Report for October 2021, page 43 and for January 2022, page 43.

¹⁴² Bechtel Monthly Status Report for January 2022, pages 54-55.

Close Out” was added to the “Unit 3 Focus & Challenge Areas,” where it remained through submittal of the 103(g) letter to the NRC in July 2022.¹⁴³

As described above, by the completion of HFT in July 2021, SNC and Bechtel identified rework associated with IEEE-384 as a risk to regulatory approval. From that point, completion of IEEE-384 rework impacted the Project and remained a focus through the receipt of the NRC’s 103(g) finding in the summer of 2022.

6.3.1.2 INSPECTION RECORDS

In the fourth quarter of 2021, SNC discovered incomplete, inadequate, and untimely signatures in IRs which resulted in impacts to work package closure and contributed to delay on the Project.¹⁴⁴ Bechtel defined IRs in its Construction Quality Verification Program as illustrated in Figure 6-8 below.

Figure 6-8: IR Definition¹⁴⁵

3.6 Inspection Record (IR)

A record used to control verification activities performed during receiving, construction, or fabrication and installation including surveillance of the onsite verification activities performed by subcontractors.

The first known documented reference to Bechtel IR issues was CR 10483814, reported in April 2018, which identified a “Improper Bechtel Nuclear Work Process Procedure (NWPP) Inspection Record.”¹⁴⁶ CRs related to IRs continued to be generated intermittently throughout 2018 and 2019. In October 2019, Bechtel’s quality assurance surveillance program (“QA Surveillance”) discovered that closed work packages included some unsatisfactory items such as failing to include revision numbers and quality control documentation errors.¹⁴⁷ In 2020, Bechtel’s QA Surveillances continued to identify issues with documentation errors, including with the IRs. For instance, a QA Surveillance performed in February 2020 identified, “compliance issues for work package documentation, inspection records, and signature timelines for work completion and closure.”¹⁴⁸ As part of its due diligence, Bechtel’s QA Surveillances and audits continued to identify issues with IRs throughout 2020.

In September 2020, a Bechtel Independent Oversight team conducted a limited scope audit that documented additional deficiencies in regards to quality assurance procedures in the areas of document control and quality assurance records.¹⁴⁹ Resolution of these audit deficiencies was documented in

¹⁴³ Reference, for example, April 2022 SNC Monthly Project Review Meeting Presentation, slide 8 and July 2022 SNC Monthly Project Review Meeting Presentation, slide 4.

¹⁴⁴ GPC Data Request Responses August 2019, Response 225-2-a, page 3795.

¹⁴⁵ Bechtel Construction Quality Verification Program Revision 10, page 2.

¹⁴⁶ CR Worklog data through August 8, 2023.

¹⁴⁷ Bechtel Monthly Status Report for October 2019, page 17. Bechtel’s QA Surveillances served as “verification of overall implementation of the Project Nuclear Quality Assurance Manual.”

¹⁴⁸ Bechtel Monthly Status Report for February 2020, page 15.

¹⁴⁹ Bechtel Monthly Status Report for September 2020, page 20.

Bechtel's PAIL as action numbers 1599-1603 in December 2020 with the description, "Audit Deficiency not resolved within 90 days."¹⁵⁰ By February 2021, Bechtel identified the risk posed by IR and work package closure in the Project Risk Register as a "Priority 1" risk with consequences including "Delay to the schedule of Fuel Load and Operations."¹⁵¹ QA Surveillances continued to identify IR issues throughout 2021. For example, in May 2021, multiple unsatisfactory findings related to IR and work package documentation were referenced in Bechtel's Monthly Status Report including:

- "Inadequate / Incomplete Inspection Record,"
- "Inspections Performed with Uncertified QCE Inspectors,"
- "Bypassed QCE Hold Point," and
- "Unit 3 Containment Electrical Supports -Required Documentation Missing."¹⁵²

In September 2021, SNC identified "Non-manual resource gaps are impacting work completion and have caused the bow wave of documents to close to continually increase." SNC worked to resolve the issue by transferring resources from Unit 4 to Unit 3 and bringing in additional field engineers.¹⁵³

By the fourth quarter of 2021, SNC became aware that "Bechtel had not completed IRs as [the] room turnover scope was completed in real time." Prior to this discovery, SNC was not tracking IRs separately from associated work packages.¹⁵⁴ By October 2021, Bechtel started to recognize "Discovery of scope during IR closure" as a schedule risk.¹⁵⁵ In November 2021, SNC estimated approximately 25,000 components related to Unit 3 nuclear island electrical IRs were remaining that were required for regulatory approval.¹⁵⁶ The following month, SNC listed "Nuclear island electrical inspection record completion" as a critical path schedule risk.¹⁵⁷ As of December 2021, the risk posed to the Project schedule by incomplete IRs was realized and became a point of emphasis for the Project team, evidenced by inclusion in the SNC Project Metrics Weekly Update and Monthly Project Review presentations. In January 2022, SNC implemented an IR improvement initiative to improve the rate of IR closure. Around this time, SNC identified "final quality inspections driving additional rework" as a threat to 103(g) and FL.¹⁵⁸ Successful implementation of the IR initiative resulted in the rate of IR closure

¹⁵⁰ Bechtel Monthly Status Report for December 2020, attachment "Critical Action Items Report," pages 4-5. Item 1602 is described as "Audit Finding not resolved in 90 days."

¹⁵¹ Bechtel Monthly Status Report for February 2021, page 14.

¹⁵² Bechtel Monthly Status Report for May 2021, page 22.

¹⁵³ September 2021 SNC Monthly Project Review Meeting Presentation, slide 7.

¹⁵⁴ GPC Data Request Responses August 2019, Response 225-2-a and 225-2-b, page 3795.

¹⁵⁵ Bechtel Monthly Status Report for October 2021, page 56.

¹⁵⁶ November 2021 SNC Monthly Project Review Meeting Presentation, slide 10. SNC estimated an average of 8-10 hours for each IR in February 2022 based on, "current and expected installation rates." Reference GPC Data Request Responses August 2019, Response 225-2-g, page 3795.

¹⁵⁷ December 2021 SNC Monthly Project Review Meeting Presentation, slide 7.

¹⁵⁸ January 2022 SNC Monthly Project Review Meeting Presentation, slides 11 and 15.

improving in February and March 2022.¹⁵⁹ IR closure remained a focus of the Project team throughout the spring and, by June 2022, only 23 IRs required for regulatory approval remained.¹⁶⁰ SNC's actions to address the backlog of IRs through additional resources and improvement initiatives resulted in improved IR closure rates.

As described above, by November 2021 the Project team began tracking incomplete IRs and identified rework associated with IR closure as a risk to regulatory approval. From then on, closure of IRs and associated rework impacted the Project and remained a focus through the receipt of the NRC's 103(g) finding in the summer of 2022.

6.3.2 OTHER REWORK

In addition to the significant rework related to IEEE-384 violations and incomplete IRs described above, SNC and Bechtel experienced quality issues throughout the Project which necessitated rework and resulted in delay. HKA's review of Project documentation identified additional rework events which were discovered and/or ongoing after the completion of Unit 3 HFT, including:

1. Spent Fuel Pool ("SFP") repair - By March 2021, the Project team identified leakage in the SFP.¹⁶¹ Initial attempts to identify the location of the leaks exacerbated the issue. Remediation required the Project team to remove and replace steel floor plates, along with repair of welds on the SFP walls.¹⁶² The SFP leak was resolved by October 2021.¹⁶³
2. Main Control Room ("MCR") - By March 2021, SNC identified issues with the air balancing in the MCR while preparing for HFT.¹⁶⁴ To support HFT, a temporary solution was implemented by May 2021.¹⁶⁵ In November 2021, SNC listed the MCR under "Critical path schedule risks" due to outstanding electrical remediation and ventilation testing.¹⁶⁶ Work in the MCR was recognized as a schedule risk through installation of the raised plenum floor in January 2022.¹⁶⁷

The period from Unit 3 HFT to Unit 3 Fuel Load was impacted by various rework issues and technical challenges consistent with completing construction and achieving operation of a FOAK nuclear power plant. FOAK issues are discussed further in the expert report of HKA expert Timothy Chitester.

¹⁵⁹ February 2022 SNC Monthly Project Review Meeting Presentation, slide 22.

¹⁶⁰ June 2022 SNC Monthly Project Review Meeting Presentation, slide 23.

¹⁶¹ Bechtel Monthly Status Report for March 2021, page 52.

¹⁶² August 2021 SNC Monthly Project Review Meeting Presentation, slide 6.

¹⁶³ October 2021 SNC Monthly Project Review Meeting Presentation, slide 2.

¹⁶⁴ Bechtel Monthly Status Report for March 2021, page 52.

¹⁶⁵ Bechtel Monthly Status Report for May 2021, page 27.

¹⁶⁶ November 2021 SNC Monthly Project Review Meeting Presentation, slide 7.

¹⁶⁷ Bechtel Monthly Status Report for January 2022, page 39.

6.3.3 SNC MITIGATION

SNC's Project Execution Plan provides a detailed description of its Quality Assurance and Compliance Monitoring programs. These programs were responsible for the audit and surveillance of SNC and contractor processes and procedures and facilitating identification and resolution of quality failures.¹⁶⁸ An example of SNC mitigation actions in response to quality issues is illustrated by SNC's refinements to its Corrective Action Program ("CAP"), which served to ensure regulatory compliance and to "achieve and sustain continuous improvement."¹⁶⁹ In July 2018, SNC added language to the CAP, which allowed Construction to make minor corrections to documentation and in process work without initiating a CR. As a result, by November 2018, SNC realized Construction was not properly identifying nonconformance items by generating CRs and issued a Level 3 Finding.¹⁷⁰ In June 2019, SNC removed the language related to "in-process" work in the CAP in an effort to address this issue. Despite the removal of the "in-process" language, Construction generated ESRs (instead of CRs through the CAP) to capture nonconformance items throughout 2020. Upon discovery, SNC worked to revise the ESR process to ensure Conditions Adverse to Quality would not bypass the CAP.¹⁷¹

Ultimately, through these programs, SNC was able to demonstrate that the Project had been constructed in accordance with the approved design, and SNC was provided with the 103(g) finding from the NRC. As a result of the issues identified through the quality and compliance programs, SNC conducted multiple site wide stand downs to emphasize the importance of quality, including stand downs in July 2018 and March 2021.¹⁷² In instances where procedural deficiencies were located, SNC worked with Bechtel to update procedural requirements to ensure resolution of quality issues. However, despite SNC's efforts to ensure first time quality on the Project, rework contributed to the delay experienced to Commercial Operation of Units 3 and 4.

6.4 INABILITY TO ACHIEVE PLANNED PRODUCTION RATES

In VCM 17, SNC identified several risks that the Commission should consider when evaluating the continuation of the Project. SNC identified a "project execution" risk that "the labor force and craft will be unable to maintain their productivity improvements" and described this risk more simply by stating that the risk included the Project execution team's potential inability "to execute with the resources or in the timeframe that is accounted for by the current projections."¹⁷³ In other words, this risk highlighted the

¹⁶⁸ Vogtle Project Execution Plan Version 8.1 From April 2018, pages 24-26.

¹⁶⁹ Corrective Action Program Version 32 dated April 1, 2022, page 4.

¹⁷⁰ Root Cause Determination Report (Corrective Action Record 80006298) dated October 21, 2021, pages 119-125. SNC's 2022 Internal Auditing Procedure Manual, page 26, describes a Level 3 Finding as a "noncompliance or condition that poses a risk to the Company."

¹⁷¹ Root Cause Determination Report (Corrective Action Record 80006298) dated October 21, 2021, pages 119-125.

¹⁷² August 2018 SNC Monthly Project Review Meeting Presentation, slide 4 and March 2021 SNC Monthly Project Review Meeting Presentation, slide 2.

¹⁷³ GPC's 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 94.

possibility of the team being unable to achieve the planned production rates or sustain the productivity rates incorporated in the SNC ETC. Ultimately, this risk turned out to be a reality for the Project as the Project team was unable to achieve its planned production rates due to low productivity, challenged craft staffing, inexperienced craft, and work package planning challenges, among other items. SNC, however, proactively attempted to mitigate and address these performance concerns throughout the course of the Project. The below sections detail these performance initiatives implemented on the entire Project but largely focus on measures put in place on Unit 3 to combat poor production.

6.4.1 THIS PROJECT EXECUTION RISK WAS ACKNOWLEDGED IN VCM 17

As described in Section 4.1 above, the VCM 17 schedule forecast analyses conducted by SNC, Kenrich, and Bechtel were robust. These analyses described that if any assumptions were incorrect or certain risks were realized (such as the inability to achieve productivity or craft unavailability), then the COD could be later than forecast. For example, although SNC's ETC analysis identified the Outer Bound schedule (corresponding to March 2022 and March 2023 for Unit 3 and Unit 4 CODs, respectively) as its bounding range, the VCM 17 testimony of David McKinney (SNC) and Jeremiah Haswell (GPC) specifically noted that "the bounding range depends on the assumptions that underlie this analysis. If these assumptions are incorrect or if unanticipated circumstances occur, a delay beyond thirty-three months is possible."¹⁷⁴ The Kenrich analysis also considered performance in its schedule forecast analysis.¹⁷⁵

The SNC and Bechtel VCM 17 testimony provided additional information on how the Project team planned to manage the risk of being unable to achieve the forecast production and productivity rates (referred to as the "Project Execution Risk"). The SNC project organizational structure developed a Project Execution Plan to align the Project through the phases of building, testing, startup, and operation while prioritizing schedule fidelity, craft staffing and productivity, and planning.¹⁷⁶ To focus on ensuring craft field success, leadership and accountability measures were used to drive daily performance in the field. For example, management conducted weekly performance meetings to compare expected and actual performance to hold construction area managers accountable for performance to meet goals. SNC also established construction teams responsible for schedule and performance plans by area. Additional functional changes included control of design engineering, WEC activity oversight, a robust change control process, a planning organization to ensure quality, streamlined work plans, and controlling legacy

¹⁷⁴ Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC's 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 24.

¹⁷⁵ GPC's 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 4 – Kenrich Plant Vogtle Units 3 & 4 Analysis of Project Estimate-To-Complete, pages 10-11.

¹⁷⁶ Direct Testimony of Mark D. Rauckhorst (SNC), Joseph B. Klecha (SNC), and Tyrone P. Troutman (Bechtel) in Support of GPC's 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, pages 4-5.

work package close out.¹⁷⁷ SNC also established a level three construction schedule to allow the team to set weekly and monthly performance goals.¹⁷⁸ Project CPI and Schedule Performance Index (“SPI”) metrics in July through October 2017 indicated SNC’s implementation of these strategies and management was effective to improve Project performance over the period it directly managed the construction work on the Project (i.e., before the execution of the CCA with Bechtel). SNC management anticipated improving performance through continued leadership and implementation of other efficiencies on the Project.¹⁷⁹ Additional actions to improve performance included “finalization of the integrated project schedule, further refinement of key project metrics / reports, completion of site design, ensuring constructability of that design, and the development of the site planning organization” in addition to prioritizing leadership driving behaviors around continuous performance improvement, focusing on the work front, and timely decision making.¹⁸⁰ As of the timing of VCM 17 testimony, SNC had maintained a positive and productive relationship with the building trades, supplied the necessary craft workers to the Project, and committed to meeting craft labor needs moving forward.¹⁸¹

As noted in the sections below, despite SNC’s efforts, and despite the positive changes the Project had identified around the time of VCM 17, Unit 3 ultimately experienced lower than planned productivity rates and, at times, suffered from an inability to find and retain key trades, among other items, which affected the ability of the team to achieve the planned production rates.

6.4.2 CRAFT PRODUCTIVITY & LOW PRODUCTION LEVELS

One of the reasons why the Project was unable to achieve planned production levels was lower than planned productivity. Production is a measure of output (i.e., cubic yards of concrete installed) whereas productivity is a measure of efficiency (i.e., cubic yards of concrete installed per labor hour). Lower than planned productivity can lead to lower than planned production if additional resources are not utilized.

Lower than planned productivity and production stemmed from various issues throughout the course of the Project. For example, congestion levels and craft headcount (described in Section 6.4.3 below) affected productivity and were further exacerbated by COVID-19. In particular, electrical-related productivity was challenged. Generally, management attempted to proactively mitigate and manage

¹⁷⁷ Direct Testimony of Mark D. Rauckhorst (SNC), Joseph B. Klecha (SNC), and Tyrone P. Troutman (Bechtel) in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 7.

¹⁷⁸ Direct Testimony of Mark D. Rauckhorst (SNC), Joseph B. Klecha (SNC), and Tyrone P. Troutman (Bechtel) in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 11.

¹⁷⁹ Direct Testimony of Mark D. Rauckhorst (SNC), Joseph B. Klecha (SNC), and Tyrone P. Troutman (Bechtel) in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, pages 8 and 10-11.

¹⁸⁰ Direct Testimony of Mark D. Rauckhorst (SNC), Joseph B. Klecha (SNC), and Tyrone P. Troutman (Bechtel) in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, page 11.

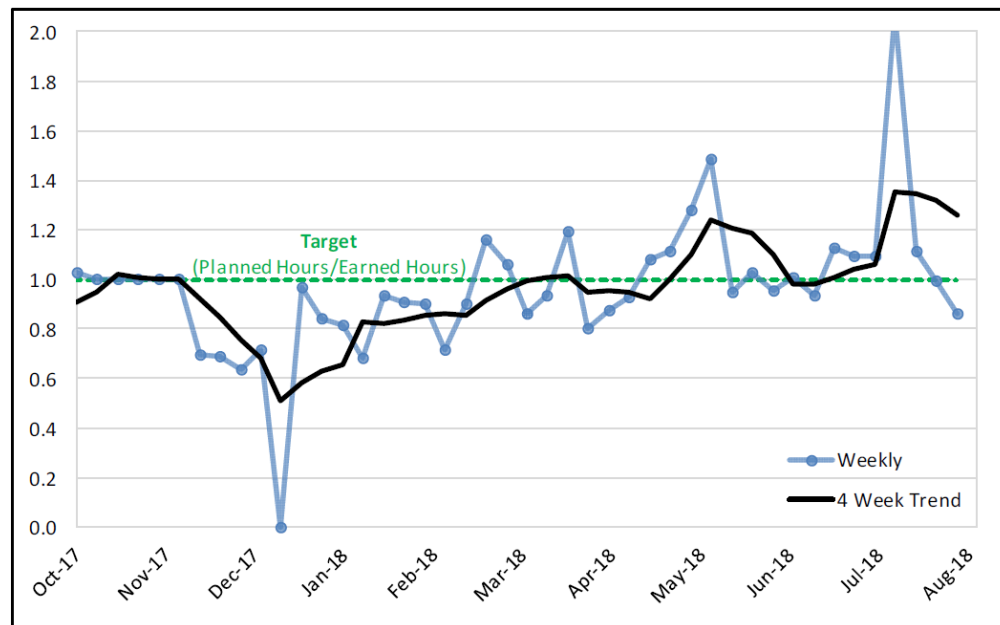
¹⁸¹ Direct Testimony of Mark D. Rauckhorst (SNC), Joseph B. Klecha (SNC), and Tyrone P. Troutman (Bechtel) in Support of GPC’s 17th Semi-Annual VCM Report for Reporting Period January 2017 through June 2017, pages 16-17.

lower than planned productivity by increasing supervision and oversight, increasing night shift staffing, creating specialized teams, and optimizing crew sizing.

6.4.2.1 2017 THROUGH MID-2018 TIME PERIOD

After SNC took over Project Management responsibilities, productivity had either stabilized or improved through late 2017.¹⁸² However, the Project anticipated the need to increase productivity to meet production levels in the coming months, for example, by providing adequate field leadership and locating and attracting craft labor.¹⁸³ The Owners implemented a new Site Oversight organization responsible for overseeing performance and schedule adherence in anticipation of this risk. This dedicated on-site GPC organization allowed for continual monitoring and analysis of Project performance including monitoring critical path adherence and ensuring that schedule fidelity improvements were occurring.¹⁸⁴ Through mid-2018, the Project continued to acknowledge this risk and indicated that craft productivity was beginning to challenge the Project cost and schedule.¹⁸⁵ As shown in Figure 6-9 and Figure 6-10, the SPI and CPI generally had an upward trend through mid-2018.

Figure 6-9: SPI In October 2017 Through August 2018¹⁸⁶



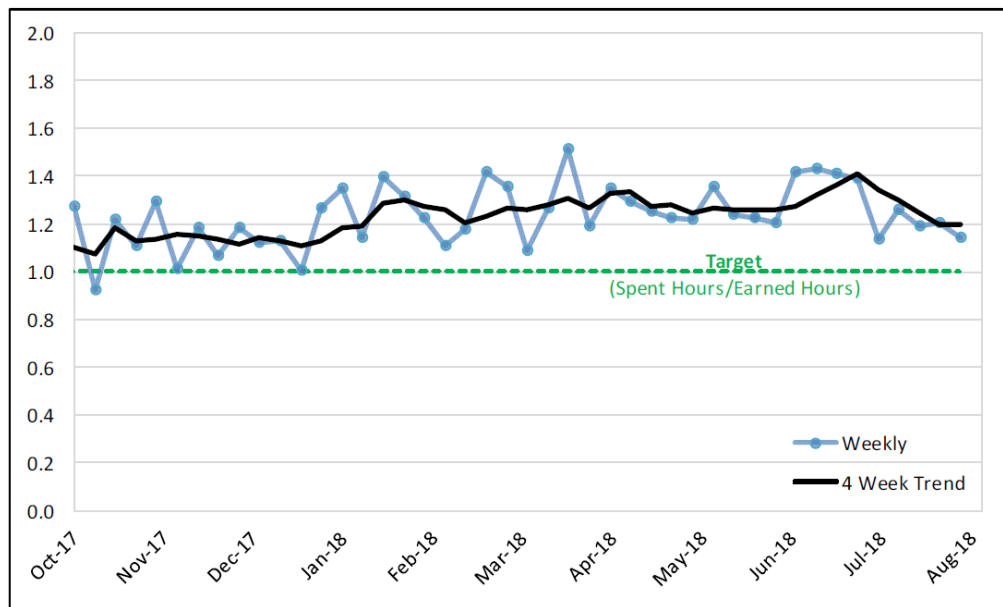
¹⁸² Direct Testimony of David L. McKinney, Jeremiah C. Haswell, and Stephen E. Kuczynski in Support of GPC's 18th Semi-Annual VCM Report for Reporting Period July 2017 through December 2017, page 18.

¹⁸³ Direct Testimony of David L. McKinney, Jeremiah C. Haswell, and Stephen E. Kuczynski in Support of GPC's 18th Semi-Annual VCM Report for Reporting Period July 2017 through December 2017, pages 15 and 18.

¹⁸⁴ Direct Testimony of David L. McKinney, Jeremiah C. Haswell, and Stephen E. Kuczynski in Support of GPC's 18th Semi-Annual VCM Report for Reporting Period July 2017 through December 2017, pages 16-17.

¹⁸⁵ Reference, for example, GPC's 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, page 6 and Bechtel Monthly Status Report for June 2018, page 8.

¹⁸⁶ GPC's 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, page 19.

Figure 6-10: CPI In October 2017 Through August 2018¹⁸⁷

In early January 2018, the Project team conducted a productivity study and found that ^{Redacted} of the craft time was spent on productive activities such as performing the work or preparing for the work, while ^{Redacted} of craft time was spent on non-productive activities like waiting or travelling to the work area. In comparison, Bechtel and nuclear historical activity figures were typically ^{Redacted} productive and ^{Redacted} non-productive. The Project execution team took actions to address these findings, including working to control late starts and early quits, addressing site organization, and clarifying goals and expectations for craft.¹⁸⁸ Beginning in May 2018, Bechtel implemented various productivity improvement initiatives including, for example: supervision at the work front during critical times; compliments and concerns meetings to get improvement ideas from craft; using four-week rolling manpower planning and real-time right sizing of crews and relocation or reduction of specific trades; evaluating foremen and general foremen; and increasing the workable backlog.¹⁸⁹ Furthermore, to improve production and efficiency of work, the Project team worked to implement a “new day” mentality removing inefficiencies, increasing a sense of urgency and intolerance towards wasted time and efforts.¹⁹⁰ Around this time, Bechtel appointed discipline superintendents to manage craft distribution and centralize craft under a four-week manpower schedule to optimize craft numbers at each location.¹⁹¹

¹⁸⁷ GPC’s 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, page 20.

¹⁸⁸ February 2018 SNC Monthly Project Review Meeting Presentation, slide 12.

¹⁸⁹ Bechtel Monthly Status Report for May 2018, page 6.

¹⁹⁰ May 2018 SNC Monthly Project Review Meeting Presentation, slide 7.

¹⁹¹ May 2018 SNC Monthly Project Review Meeting Presentation, slide 8.

Despite these initiatives, through mid-2018 the Project continued to see SPI and CPI values above the target performance of 1.0.¹⁹² In direct response to the continued SPI variance from the target, the Project team held a sitewide stand down (or reset) in late July 2018. The purpose of the stand down was to “clarify and reinforce standards and expectations for Project performance, site safety, and personnel behaviors necessary to complete the Project efficiently and safely.”¹⁹³ Activities to address performance issues included, for example, integrating SNC personnel into field operations, resetting leadership to improve accountability and production, eliminating activities that were costing the job while adding little value, engaging and energizing subcontractors into construction completion, and developing action plans for improvements by area with input from all personnel and leadership.¹⁹⁴ The reset resulted in a significant culture change as well as some craft and field non-manual employee departures.¹⁹⁵ As the Project execution team had hoped, the reset resulted in improvements to earned hours (increasing from 80,000-90,000 per week to more than 100,000 per week), schedule performance, and cost performance.¹⁹⁶ Despite the Project team’s mitigation strategies implemented in this timeframe to increase performance (generally through increased supervision and oversight, craft labor incentives, and a sitewide reset), the Project’s ability to achieve planned production rates continued to be challenged.¹⁹⁷

6.4.2.2 MID-2018 THROUGH 2019 TIME PERIOD

Between mid-2018 and late 2019, work on Unit 3 was transitioning from civil completion to mechanical and electrical bulk construction to support system turnovers for testing.¹⁹⁸ With this transition, the Project team identified that higher levels of productivity were needed to support the aggressive site working schedule.¹⁹⁹ Project management and Bechtel regularly monitored this risk through the Scorecards, the Integrated Project Schedule, and other resources at their disposal.²⁰⁰ The Project contemporaneously indicated that craft productivity (and the inability to achieve planned production rates) was continuing to challenge the Project cost and schedule during this timeframe.²⁰¹ The Project team conducted another productivity study in August 2018, which identified that rebar crews were the best performers (but were

¹⁹² GPC’s 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, page 19.

¹⁹³ GPC’s 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, page 19.

¹⁹⁴ Bechtel Monthly Status Report for July 2018, page 2 and August 2018 SNC Monthly Project Review Meeting Presentation, slide 4.

¹⁹⁵ Bechtel Monthly Status Report for September 2018, page 10 and August 2018 SNC Monthly Project Review Meeting Presentation, slide 4.

¹⁹⁶ September 2018 SNC Monthly Project Review Meeting Presentation, slides 2 and 4-5.

¹⁹⁷ GPC’s 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, page 19.

¹⁹⁸ GPC’s 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 6 and GPC’s 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, pages 19 and 29.

¹⁹⁹ GPC’s 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 6 and Direct Testimony of Stephen E. Kuczynski and Aaron P. Abramovitz in Support of GPC’s 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, page 14.

²⁰⁰ GPC’s 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 22 and GPC’s 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, page 25.

²⁰¹ Reference, for example, Bechtel Monthly Status Report for November 2018, page 10; for March 2019, page 9; and for October 2019, page 9.

performing below expectations) and that electricians and pipefitters were under performing.²⁰² During this period of the Project, Unit 3 had largely transitioned from primarily civil commodities to mechanical and electrical commodities, and with that transition, the Project's CPI reflected a decline in performance.²⁰³ The Project team was particularly focused on the performance of the critical electrical scope as it was the main driver for the negative trend in Unit 3 productivity.²⁰⁴ There were a variety of challenges impacting production, in addition to productivity in this time frame. As shown in Figure 6-11 and Figure 6-12, the SPI and CPI generally had an upward trend through the April 2019 re-baseline effort where SPI and CPI metrics were "reset."²⁰⁵

Figure 6-11: SPI In June 2018 Through July 2019²⁰⁶

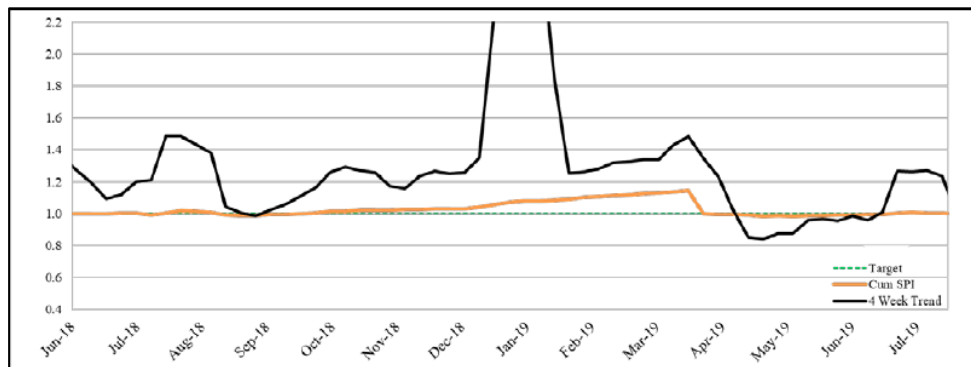
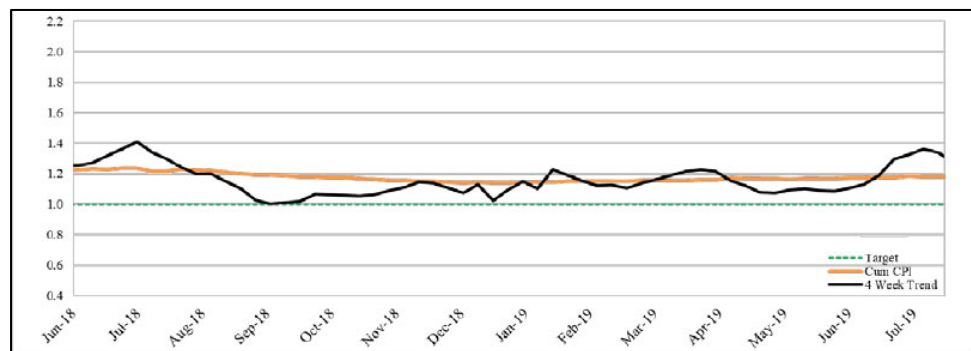


Figure 6-12: CPI In June 2018 Through July 2019²⁰⁷



²⁰² August 2018 SNC Monthly Project Review Meeting Presentation, slide 9.

²⁰³ Direct Testimony of Stephen E. Kuczynski and Aaron P. Abramovitz in Support of GPC's 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 7.

²⁰⁴ May 2019 SNC Monthly Project Review Meeting Presentation, slide 2 and Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC's 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 10.

²⁰⁵ GPC's 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 15 and GPC's 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, pages 19-20 (reference Figures E and F).

²⁰⁶ GPC's 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 16. The SPI spike in January 2019 was due to the Christmas and New Years holiday weeks. Reference January 2019 SNC Monthly Project Review Meeting Presentation, slide 11.

²⁰⁷ GPC's 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 17.

From mid-2018 through the end of 2019, the Project team implemented specific measures focused on improving productivity and performance on the Project. For example, Bechtel developed an Electrical Productivity Improvement Plan to reduce the electrical earnings backlog.²⁰⁸ In addition, the Project team implemented the following changes to alleviate roadblocks that could impact productivity and allow better tracking of crew performance:²⁰⁹

- Created specialized teams to focus on mechanical piping, electrical, and instrumentation and controls commodities installation,
- Increased night staffing,
- Performed walkdown of systems to be turned over to identify and address issues in advance,
- Increased field non-manual support,
- Increased supervision,
- Added dedicated crane and scaffold coordinators,
- Established Task Managers at critical areas such as the Main Control Room,
- Used task-specific electrical crews, and
- Created system completion crews to focus on construction and installation of remaining system commodities for near-term system turnover.

In August 2018, the Project team attempted to reduce non-productive time such as travel and wait time. In addition, they moved piping and electrical resources from Unit 4 to Unit 3 to better support select system turnovers and increase Unit 3 earned hours.²¹⁰ In early 2019, the Project implemented initiatives targeted towards setting crew expectations and optimizing crew sizing. This included the utilization of electrical commodity expectation sheets by foreman by crew to ensure the foreman understood weekly expectations, embedding new hires into experienced crews before moving them to night shift (“right sizing of crews”), monitoring start and stop times, and conducting training for conduit and electrical penetration assembly termination crews.²¹¹ In addition, the Project team attempted to improve electrical conduit installation production by setting up multiple cutting and bending stations, adding dedicated crews, adding welders for support installation, and adding craft resources to both day and night shifts.²¹² Electrical and piping production and productivity improvement workshops were conducted in late 2019, which addressed the areas of engineering, procurement, process, project controls, construction craft, and field

²⁰⁸ GPC’s 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, page 20.

²⁰⁹ Reference, for example, GPC’s 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, pages 16-17 and Direct Testimony of Stephen E. Kuczynski and Aaron P. Abramovitz in Support of GPC’s 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 11.

Reference also, for example, GPC’s 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, page 20.

²¹⁰ Bechtel Monthly Status Report for August 2018, page 6.

²¹¹ Reference, for example, Bechtel Monthly Status Report for January 2019, page 5, for March 2019, page 5, and for May 2019, page 6; and January 2019 SNC Monthly Project Review Meeting Presentation, slide 10.

²¹² Reference, for example, June 2019 SNC Monthly Project Review Meeting Presentation, slide 16 and July 2019 SNC Monthly Project Review Meeting Presentation, slide 11.

non-manuals.²¹³ Near the end of 2019, as Unit 3 moved further towards system turnovers, performance improvement initiatives focused on analyzing congestion problems, continued night shift staffing, conducting daily system turnover meetings, and coordination between groups such as Initial Testing Program (“ITP”) and Construction Test and Flush (“CTF”).²¹⁴

6.4.2.3 2020 THROUGH 2022 TIME PERIOD

From early 2020 through 2022, Unit 3 construction work was focused on the scope to support testing and system turnovers prior to receipt of the 103(g) finding from the NRC in August 2022.²¹⁵ In this period, reduced productivity and performance on the Project was primarily attributed to impacts due to COVID-19 and remediation work. As described in Section 6.1 above, the Project experienced high levels of absenteeism and implemented virus transmission mitigation and isolation measures to protect field personnel. This included, for example, the reduction of the site workforce by 20%. In addition to the impacts from COVID-19 and remediation-related challenges, Project performance, specifically for electrical commodity installations and subcontract work, continued to be a challenge, in part due to the increasing complexity of the work.²¹⁶ For example, lower than planned productivity and earnings for electrical work contributed to lower than planned system turnovers and led to a CPI ranging from 1.3 to 1.5 from early 2020 through mid-2022.²¹⁷ Furthermore, Unit 3 performance suffered from congestion in multiple areas and rooms in key buildings due to work progressing simultaneously on various work fronts.²¹⁸ Project management and Bechtel regularly monitored this risk through the Scorecards, the Integrated Project Schedule, and other resources, and used productivity studies to identify and then address underperforming areas of the Project.²¹⁹

Although Unit 3 productivity challenged the ability to meet planned production following VCM 17 through receipt of its 103(g) finding in August 2022, the Project team proactively identified and implemented

²¹³ Reference, for example, Bechtel Monthly Status Report for October 2019, page 6.

²¹⁴ Reference, for example, Bechtel Monthly Status Report for December 2019, page 6.

²¹⁵ GPC’s 23rd Semi-Annual VCM Report for Reporting Period January 2020 through June 2020, page 7; GPC’s 26th Semi-Annual VCM Report for Reporting Period July 2021 through December 2021, page 28; and GPC’s 27th Semi-Annual VCM Report for Reporting Period January 2022 through June 2022, page 24.

²¹⁶ Reference, for example, GPC’s 23rd Semi-Annual VCM Report for Reporting Period January 2020 through June 2020, pages 7 and 23; GPC’s 24th Semi-Annual VCM Report for Reporting Period July 2020 through December 2020, page 7; GPC’s 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, page 6; and Direct Testimony of Stephen E. Kuczynski and Aaron P. Abramovitz in Support of GPC’s 24th Semi-Annual VCM Report for Reporting Period July 2020 through December 2020, page 10,

²¹⁷ Reference, for example, GPC’s 23rd Semi-Annual VCM Report for Reporting Period January 2020 through June 2020, page 7; GPC’s 24th Semi-Annual VCM Report for Reporting Period July 2020 through December 2020, pages 7 and 22; Direct Testimony of Stephen E. Kuczynski and Aaron P. Abramovitz in Support of GPC’s 24th Semi-Annual VCM Report for Reporting Period July 2020 through December 2020, page 10; GPC’s 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, pages 6 and 20; GPC’s 26th Semi-Annual VCM Report for Reporting Period July 2021 through December 2021, pages 5 and 19; and GPC’s 27th Semi-Annual VCM Report for Reporting Period January 2022 through June 2022, page 16.

²¹⁸ Reference, for example, Bechtel Monthly Status Report for June 2020, pages 10, 58, and 60 and for September 2020, pages 12 and 59-60.

²¹⁹ GPC’s 23rd Semi-Annual VCM Report for Reporting Period January 2020 through June 2020, pages 28 and 30.

mitigation measures in Unit 3 and applied the lessons learned in Unit 4 (as described in the expert report of HKA expert Timothy Chitester).

6.4.3 CRAFT HEADCOUNT

One of the reasons why the Project was unable to achieve planned production levels was its inability to hire and retain sufficient craft labor resources for key trades. This challenge was prominent for Unit 3 through early 2019 and then was further exacerbated by the COVID-19 pandemic in 2020. Unit 4 craft headcount was also challenged beginning in early 2020 as resources were diverted to critical work fronts on Unit 3 due to COVID-19. Generally, management attempted to proactively mitigate and manage craft headcount by offering pay incentives, working with labor unions, and other recruitment and retention initiatives.

6.4.3.1 2017 THROUGH 2019 TIME PERIOD

Following VCM 17, the Project continued to identify that it was critical to success to locate and attract the necessary craft labor to meet production levels.²²⁰ In the early to mid-2018 timeframe, the Project team specifically started to identify the need for additional electricians and pipefitters in order to address the upcoming transition of construction from civil completion to mechanical and electrical work.²²¹ Despite recognition of these risks, in mid-2017 through mid-to-late 2019, the Project team indicated that above-normal craft absenteeism and limited craft availability were negatively impacting the Project cost and schedule due to an inability to 1) fully staff activities and work areas and 2) effectively plan and execute work.²²² For example, in August 2017 the Project's absenteeism rate was between 10 to 15% which was above a normal rate of absenteeism of 8%.²²³ In addition, throughout the early 2018 period, the Project team contemporaneously documented its shortfalls in electrician staffing as a critical issue.²²⁴ In mid-2018, the Project team anticipated a "steep ramp up" of electrician and pipefitter trades, forecasting the need to increase levels by December 2018 and peak in early 2019.²²⁵

In order to address challenges associated with craft availability and absenteeism, the Project team implemented various mitigation measures. Beginning in mid-2017, the Project team undertook various efforts to recruit specialized craft (electricians and pipefitters) and address craft absenteeism and retention to meet staffing demands. Some of these measures were formalized in a Craft Incentive

²²⁰ Direct Testimony of David L. McKinney, Jeremiah C. Haswell and Stephen. E. Kuczynski in Support of GPC's 18th Semi-Annual VCM Report for Reporting Period July 2017 through December 2017, pages 14-15.

²²¹ GPC's 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, pages 6 and 25.

²²² Reference, for example, Bechtel Monthly Status Report for May 2018, page 8; for September 2018, page 10; for April 2019, page 10; for June 2019, page 10; and for December 2019, page 11.

²²³ August 2017 SNC Monthly Project Review Meeting Presentation, slide 26.

²²⁴ Reference, for example, Bechtel Monthly Status Report for February 2018, page 4 and for May 2018, page 5.

²²⁵ Reference, for example, Bechtel Monthly Status Report for June 2018, page 5; for August 2018, page 5; and for October 2018, page 5.

Program implemented by Bechtel and approved by the Owners in mid-2018.²²⁶ These efforts and the Craft Incentive Program included, for example:

- Conducting various job and career fairs in targeted areas of the southeastern United States,²²⁷
- Continuing discussions with labor unions to attract craft,²²⁸
- Engaging with the Department of Labor to secure H2B visas²²⁹ to recruit talent internationally from Canada and Puerto Rico,²³⁰ and
- Implementing a per-diem based incentive program (\$450 per week for workers living more than 50 miles from the Project) and attendance bonus financial incentives.²³¹

From mid-2018 through early 2019, various other initiatives and efforts were performed to improve craft staffing challenges on the Project. These efforts included the implementation of a helping hands program which brought in help from other trades,²³² a Craft Referral/Retention Program,²³³ and utilizing message blasts for recruiting craft.²³⁴ Previous incentive programs were also improved by increasing hourly compensation for electricians and pipefitters, increasing per diem rates, and adding sign on and referral bonuses.²³⁵

²²⁶ Letter No. 26139-000-TC-GAM-00042 from Bechtel to Owners with subject “Notice: REVISED Craft Incentive Program Response” dated April 18, 2018 and Letter No. ND-18-0781 from Georgia Power to Bechtel with subject “Craft Incentive Program Approval” dated June 1, 2018.

²²⁷ GPC’s 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, pages 25-26.

²²⁸ GPC’s 18th Semi-Annual VCM Report for Reporting Period July 2017 through December 2017, page 6 and GPC’s 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, page 26.

²²⁹ Ultimately, all attempted H2B visa applications and appeals received denials. The Project decided not to pursue further actions. Reference, for example, Bechtel Monthly Status Report for February 2019, page 4.

²³⁰ Reference, for example, GPC’s 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, page 26; and Bechtel Monthly Status Report for March 2018, page 5; for May 2018, page 5; and for June 2018, page 5.

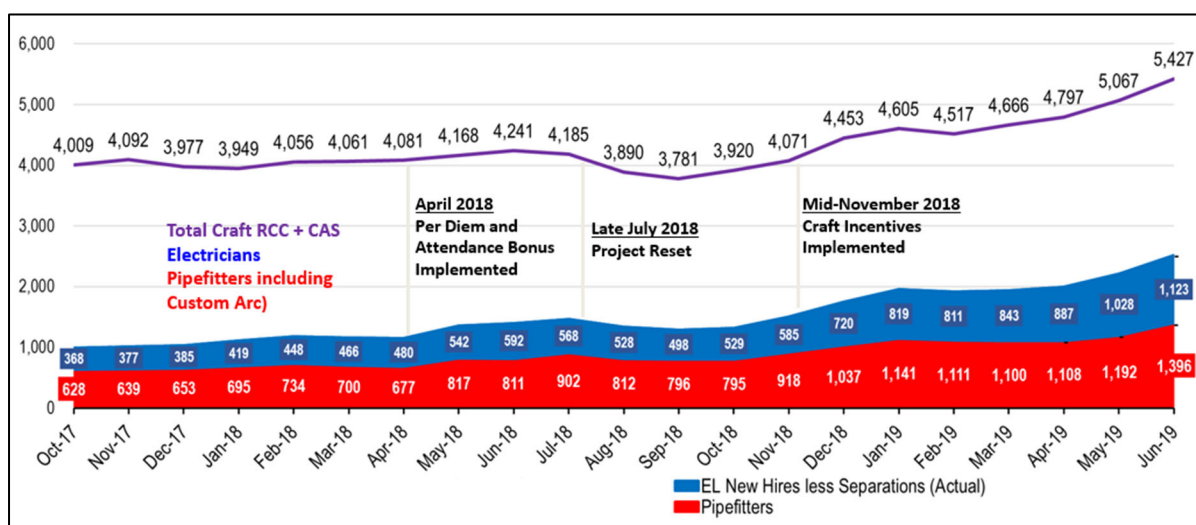
²³¹ Letter No. 26139-000-TC-GAM-00042 from Bechtel to Owners with subject “Notice: REVISED Craft Incentive Program Response” dated April 18, 2018 and Letter No. ND-18-0781 from Georgia Power to Bechtel with subject “Craft Incentive Program Approval” dated June 1, 2018.

²³² Reference, for example, Bechtel Monthly Status Report for September 2018, page 5 and for November 2018, pages 5 and 10.

²³³ Bechtel Monthly Status Report for November 2018, page 5.

²³⁴ Reference, for example, October 2018 SNC Monthly Project Review Meeting Presentation, slide 6 and November 2018 SNC Monthly Project Review Meeting Presentation, slide 8.

²³⁵ November 2018 SNC Monthly Project Review Meeting Presentation, slide 9.

Figure 6-13: Craft Headcount From October 2017 Through June 2019²³⁶

As shown in Figure 6-13 in the first half of 2019, the Project found success in its hiring efforts and increased the labor force of key trades.²³⁷ This was a result of the Project team's efforts to recruit craft and the incentive programs targeted towards reducing absenteeism and increasing retention on the site. As a result of these successes, and in an attempt to balance the need for production and productivity, in early 2019 the Project began to slow down its requests for additional electricians and pipefitters in comparison to the prior requests.²³⁸ In mid-to-late 2019, the Project team began shifting some experienced craft from Unit 3 to Unit 4 in an effort to transfer lessons learned and increase Unit 4 production in advance of testing milestones.²³⁹

6.4.3.2 2020 ONWARD TIME PERIOD

Through its VCM 22 testimony in April 2020, despite being outside of the VCM reporting period, GPC/SNC personnel acknowledged the potential impact on craft staffing due to the onset of the COVID-19 pandemic.²⁴⁰ As described in Section 6.1 above, the impacts from the COVID-19 pandemic contributed to the inability to meet planned production levels with high levels of absenteeism, difficulties in retaining craft, and impacts to the available labor pool, further constraining the supply of qualified electricians. In response, the Project team implemented various virus mitigation measures and made changes to staffing levels, including reductions in workforce and the transition of resources from Unit 4 to Unit 3 to support critical work.

²³⁶ June 2019 SNC Monthly Project Review Meeting Presentation, slide 17.

²³⁷ GPC's 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, page 5.

²³⁸ Reference, for example, Bechtel Monthly Status Report for January 2019, page 4 and for February 2019, page 4.

²³⁹ Reference, for example, GPC's 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, pages 6 and 19.

²⁴⁰ Direct Testimony of Stephen E. Kuczynski and Aaron P. Abramovitz in Support of GPC's 22nd Semi-Annual VCM Report for Reporting Period July 2019 through December 2019, page 5.

The Project execution team took steps to try to safely increase the number of craft to support both Unit 3 and Unit 4 scopes of work despite available labor pool challenges.²⁴¹ In early to mid-2021, Unit 4 suffered from manpower availability issues and as a result suffered from electrical installation production challenges.²⁴² Unit 4 manpower availability improved through August 2021 but projected the need to continue to increase resources to reach the full amounts needed.²⁴³ Electrical resource availability continued to have impacts on current work fronts on Unit 4 in 2022.²⁴⁴ Despite this, as the transition of craft continued from Unit 3, Unit 4 electrical work was maintaining its forecasted production by late 2021 and maintained or increased its electrical commodity installation pace through mid-2022.²⁴⁵ In late 2022 and early 2023, although the Project continued to be impacted by absenteeism, manpower resource constraints in Unit 4 were limited to one-off discrete scopes of work.²⁴⁶ Throughout this timeframe, SNC attempted to increase Unit 4 production by adding craft labor (particularly pipefitters and electricians) and field non-manual resources.²⁴⁷ To do this, SNC and Bechtel continued to work with labor unions and organizations to identify and bring quality craft to the Project.²⁴⁸ In addition, compensation packages for electricians were increased to draw the additional craft necessary and to retain the existing workforce.²⁴⁹

6.4.4 INEXPERIENCED CRAFT WORKFORCE

Contemporaneous documents indicate production levels were also challenged, at times, by inexperienced craft on the Project. Bechtel's Cost and Schedule Assessment prepared for VCM 17 assumed the craft

²⁴¹ Reference, for example, Bechtel Monthly Status Reports for January 2021, page 56 and for June 2021, page 58; and GPC's 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, pages 25-26.

²⁴² Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC's 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, page 9.

²⁴³ Bechtel Monthly Status Report for August 2021, page 57.

²⁴⁴ Reference, for example, Bechtel Monthly Status Report for April 2022, page 53 and for September 2022, page 47.

²⁴⁵ Reference, for example, Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC's 27th Semi-Annual VCM Report for Reporting Period January 2022 through June 2022, page 8; Direct Testimony of Stephen E. Kuczynski and John B. Williams in Support of GPC's 27th Semi-Annual VCM Report for Reporting Period January 2022 through June 2022, page 6; and Bechtel Monthly Status Report for November 2022, page 44.

²⁴⁶ Reference, for example, Bechtel Monthly Status Report for December 2022, pages 15 and 46; for February 2023, pages 15 and 43; and for May 2023, pages 12 and 30.

²⁴⁷ Direct Testimony of Stephen E. Kuczynski in Support of GPC's 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, page 7; Direct Testimony of Stephen E. Kuczynski and John B. Williams in Support of GPC's 26th Semi-Annual VCM Report for Reporting Period July 2021 through December 2021, page 8; Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC's 27th Semi-Annual VCM Report for Reporting Period January 2022 through June 2022, page 8; and Direct Testimony of John B. Williams and Jeremiah C. Haswell in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, page 8.

²⁴⁸ June 2020 SNC Monthly Project Review Presentation, slide 8; GPC's 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, page 26; and GPC's 26th Semi-Annual VCM Report for Reporting Period July 2021 through December 2021, page 24.

²⁴⁹ Reference, for example, June 2021 SNC Monthly Project Review Presentation, slide 11; and Bechtel Monthly Status Report for July 2022, page 16 and for May 2023, page 12.

mix per crew would include 10% apprentices and 90% journeymen.²⁵⁰ As shown in Figure 6-14 below, the apprentice to journeyman ratio craft mix for RCC²⁵¹ was typically above 10% between late 2017 and mid-2019.

Figure 6-14: RCC Apprentice To Journeyman Ratio In October 2017 Through June 2023²⁵²



Low electrical productivity was partially attributed to craft skill levels.²⁵³ Electricians, in particular, had a high number of apprentices which resulted in installation quality challenges.²⁵⁴ Bechtel Monthly Status Reports in early 2020 and from early 2021 through early 2023 indicated “inexperienced” and “new” craft contributed to the need to perform installation rework.²⁵⁵ Further compounding the inexperience of craft, the Project experienced high attrition rates of experienced craft. The COVID-19 pandemic affected the already-constrained electrician availability on the Project, as the supply of qualified electricians was

²⁵⁰ GPC’s 17th VCM Report for Reporting Period January 2017 through June 2017, Exhibit 11 – Bechtel Cost and Schedule Assessment for the Completion of Construction for Southern Nuclear Operating Company’s Vogtle Units 3 & 4, page 13 (Section 3.2).

²⁵¹ RCC was Bechtel’s principal construction execution Subcontractor. Reference the CCA between the Owners and Bechtel dated October 23, 2017, page 29.

²⁵² Attachment I – RCC Apprentice Ratio.

²⁵³ Per discussion with SNC personnel.

²⁵⁴ Per discussion with SNC personnel.

²⁵⁵ Reference, for example, Bechtel Monthly Status Report for February 2020, page 9; for June 2021, page 14; for July 2022, page 17; and for January 2023, page 15.

reduced.²⁵⁶ Unit 4 electrical and pipefitter manpower was specifically affected by attrition in mid-2021, for example.²⁵⁷

The Project team attempted to retain experienced craft using many of the initiatives outlined in Section 6.4.3, such as the incentive program. As a result of absenteeism caused by the pandemic, the Project evaluated the skill mix and reprioritized crews based on available skills.²⁵⁸ The Project also implemented other mitigation measures to improve craft skill levels (and thereby, productivity and production) including upskilling the superintendent workforce,²⁵⁹ increasing supervision (as noted in Section 6.4.2 above), and implementing task specific training,²⁶⁰ setting up a training center to improve electrical skills, transferring field engineers from Unit 3 to Unit 4 and increasing electrical termination skills,²⁶¹ and hiring fully qualified terminators.²⁶²

6.4.5 WORK PACKAGE PLANNING AND CLOSURE

Contemporaneous documents indicate production levels were also challenged by work package planning and closure issues on the Project, including the lack of a sufficient work package backlog. The Project team created work packages which provided craft and supervision Redacted

and how to document the completion (or closure) of the scope.²⁶³ The release of work packages, for example, is necessary to support the planned work activities in the field.²⁶⁴ Then, the work package closure for a system or partial system allowed the work to be turned over to the ITP organization for testing.²⁶⁵

The Project team consistently tracked the status of work packages and identified it in certain months as a risk to the cost and schedule.²⁶⁶ The result of a low work package backlog could be crews constrained in the field and exposed to “just in time” packages (with approximately one to four weeks of work package

²⁵⁶ GPC's 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, pages 26.

²⁵⁷ Reference, for example, Bechtel Monthly Status Report for April 2021, pages 53-54, and June 2021, pages 58-59.

²⁵⁸ Reference, for example, Bechtel Monthly Status Report for January 2021, page 54 and for March 2021, page 51.

²⁵⁹ Reference, for example, February 2019 SNC Monthly Project Review Presentation, slide 9 and March 2019 SNC Monthly Project Review Presentation, slide 9.

²⁶⁰ Reference, for example, Bechtel Monthly Status Report for February 2020, page 9; for June 2021, page 14; for July 2022, page 17; and for January 2023, page 15.

²⁶¹ Reference, for example, July 2022 SNC Monthly Project Review Presentation, slide 13 and August 2022 SNC Monthly Project Review Presentation, slide 14.

²⁶² Reference, for example, Bechtel Monthly Status Report for August 2022, page 15; for December 2022, page 14; and for April 2023, page 12.

²⁶³ Construction Implementation and Closing of Work Packages, 26139-000-4MP-T81C-N1204 Rev. 23, page 7.

²⁶⁴ Reference, for example, Bechtel Monthly Status Report for May 2018, pages 34-35.

²⁶⁵ GPC's 24th Semi-Annual VCM Report for Reporting Period July 2020 through December 2020, page 28

²⁶⁶ Reference, for example, Bechtel Monthly Status Report for November 2018, pages 6 and 10 and for November 2019, pages 6 and 9.

backlog).²⁶⁷ The Project was also challenged by the timely closure of work packages.²⁶⁸ The inability to close work packages affected construction system completion and was a challenge for ITP, pre-startup testing, and operations.²⁶⁹ Unit 4 also suffered from work package closure challenges throughout 2021 due to resources being diverted to support Unit 3 work.²⁷⁰

Throughout the Project timeframe, the team implemented various mitigation efforts to improve work package production and closure rates. The Project team proactively attempted to clear roadblocks to productivity and improve performance, which included instituting programs to increase work package backlogs.²⁷¹ For example, an integrated SNC-Bechtel team was established to improve sequence planning and the accuracy and fidelity of the plan beyond 12 weeks. A team was also established to review legacy work packages to identify engineering and procurement constraints and properly time-phase the work package in the schedule.²⁷² The Project team increased field engineers for generating work packages and material engineers to develop take-offs prior to work package development to get ahead of long lead procurement items.²⁷³ To improve work package closure efficiency, the Project implemented a “sign as you go” approach.²⁷⁴ Additional field non-manual craft were added for closing out remaining work packages and senior leadership was added to drive work package closure in the field.²⁷⁵ SNC assembled a “High Impact Team” comprised of experienced SNC personnel to verify the actual status of Balance of Plant (“BOP”) work packages and added dedicated SNC resources to facilitate the closure process.²⁷⁶ Additionally, site personnel were trained for work package closures.²⁷⁷

²⁶⁷ Reference, for example, Bechtel Monthly Status Report for July 2018, page 7; for October 2018, page 6; and for January 2019, page 6.

²⁶⁸ Reference, for example, August 2017 SNC Monthly Project Review Presentation, slide 17; May 2019 SNC Monthly Project Review Presentation, slide 11; and GPC’s 24th Semi-Annual VCM Report for Reporting Period July 2020 through December 2020, page 30.

²⁶⁹ GPC’s 24th Semi-Annual VCM Report for Reporting Period July 2020 through December 2020, page 28; Direct Testimony of Stephen E. Kuczynski and Aaron P. Abramovitz in Support of GPC’s 24th Semi-Annual VCM Report for Reporting Period July 2020 through December 2020, page 19; and Direct Testimony of Stephen E. Kuczynski in Support of GPC’s 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, pages 15-16.

²⁷⁰ Direct Testimony of David L. McKinney and Jeremiah C. Haswell in Support of GPC’s 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, page 9.

²⁷¹ GPC’s 19th Semi-Annual VCM Report for Reporting Period January 2018 through June 2018, pages 24-25 and GPC’s 20th/21st Semi-Annual VCM Report for Reporting Period July 2018 through June 2019, pages 17 and 23.

²⁷² Reference, for example, Bechtel Monthly Status Report for August 2018, pages 6-7 and for October 2018, pages 6-7.

²⁷³ Bechtel Monthly Status Report for October 2019, page 6.

²⁷⁴ Direct Testimony of Stephen E. Kuczynski in Support of GPC’s 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, pages 16-17.

²⁷⁵ Direct Testimony of Stephen E. Kuczynski in Support of GPC’s 25th Semi-Annual VCM Report for Reporting Period January 2021 through June 2021, page 7 and Bechtel Monthly Status Report for January 2021, page 7.

²⁷⁶ Reference, for example, September 2020 SNC Monthly Project Review Presentation, slide 21.

²⁷⁷ Reference, for example, Bechtel Monthly Report for September 2018, page 6 and for November 2018, page 6.

6.4.6 FOAK CONSTRUCTABILITY ISSUES

The Project experienced production difficulties inherent with a First Of A Kind (“FOAK”) project. No AP1000 reactors had been commissioned in the United States prior to Units 3 and 4. Concurrent construction of four AP1000 units in China allowed for implementation of some lessons learned, but design differences, including a different secondary plant design, complicated transfer of knowledge from China to Vogtle.²⁷⁸ Because it was a FOAK project, there were no previously built projects to assess the constructability of the new design. While construction of VC Summer Units 2 and 3 was started, the units were not completed, and often construction at Vogtle was ahead of construction at VC Summer. Despite efforts to foresee issues and avoid impacting construction progress, many issues encountered in the field had to be solved “on the fly.” Furthermore, the absence of new nuclear construction within the United States for over 30 years resulted in a work force inexperienced in the unique challenges and requirements associated with nuclear construction. The expert report of HKA expert Timothy Chitester further details specific technical challenges encountered during construction of the Project which impacted production.

6.5 UNIT 3 TESTING & STARTUP ISSUES

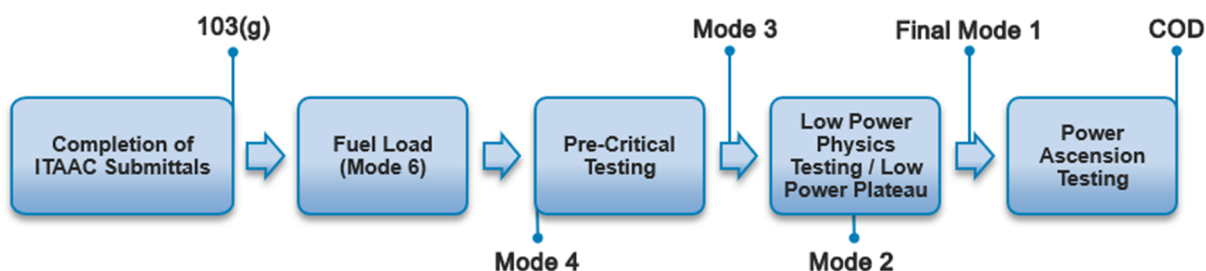
Unit 3 Initial Fuel Load was achieved on October 13, 2022.²⁷⁹ After Fuel Load (or Mode 6) was complete, intermediate Modes of Operation milestones were required to be met to reach COD. These milestones included Cold Shutdown (“Mode 5”), Safe Shutdown (“Mode 4”), Hot Standby (“Mode 3”), Startup (“Mode 2”), and Power Operation (“Mode 1”). During Mode 2, another intermediate milestone referred to as “Initial Criticality Testing” is conducted. During Mode 1, “Sync to Grid” and “Initial 100% Power” are other intermediate milestones required.²⁸⁰ Upon successful completion of Mode 1, Unit 3 declared Commercial Operation.²⁸¹ Figure 6-15 below illustrates the intermediate milestones necessary to reach COD.

²⁷⁸ Direct Testimony of Steven D. Roetger and William R. Jacobs, Jr., PhD. in Support of GPC’s 27th Semi-Annual VCM Report for Reporting Period January 2022 through June 2022, page 14. Secondary plant refers to the portions of the plant used to convert steam generated by the nuclear reactor into electricity.

²⁷⁹ October 2022 SNC Monthly Project Review Presentation, slide 4.

²⁸⁰ October 2022 SNC Monthly Project Review Presentation, slides 4 and 8.

²⁸¹ GPC’s 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, page 26.

Figure 6-15: Steps From Unit 3 103(g) to COD²⁸²

Shortly after Fuel Load, the Project team indicated that the risk adjusted schedule COD was set as March 31, 2023.²⁸³ However, following Fuel Load there were several impacts that delayed intermediate milestones and ultimately, delayed Unit 3 COD until July 31, 2023.²⁸⁴

6.5.1 ADS PIPE SUPPORT VIBRATION ISSUE

During January 2023, Unit 3 was close to reaching Initial Criticality Testing when it was returned to Mode 5 to correct pipe supports for the Automatic Depressurization System (“ADS”).²⁸⁵ During testing the team identified that there was vibration in the ADS lines. During HFT, the test results of the pipes were acceptable with some vibration observed, but over time, the Project team observed an increase and difference in vibration.²⁸⁶ To correct this issue, the Project team had to cool down the Unit and correct the ADS supports.²⁸⁷ The procedure to fix the issue was based on the same process used at the China plants,²⁸⁸ and involved “refloating” or adjusting the pipe support system to reasonably achieve the deadweight loadings at cold design conditions.²⁸⁹ The ADS piping system and supports are shown in Figure 6-16 below.

²⁸² October 2021 SNC Monthly Project Review Presentation, slide 11.

²⁸³ November 2022 SNC Monthly Project Review Presentation, slide 4.

²⁸⁴ Georgia Power article “Vogtle Unit 3 goes into operation”, dated July 31, 2023.

²⁸⁵ January 2023 SNC Monthly Project Review Presentation, slides 2,6,7,18.

²⁸⁶ December 2022 Update to Westinghouse Status Report, page 7; January 2023 Update to Westinghouse Status Report, page 7; February 2023 Update to Westinghouse Status Report, page 6.

²⁸⁷ January 2023 SNC Monthly Project Review Presentation, slides 7,18.

²⁸⁸ Letter number SVP_SV0_230010 from WEC to SNC with subject “Vogtle Unit 3 AP1000, ADS-4 Procedure to Complete the Refloat Process and Re-Install the Design Supports” dated January 13, 2023.

²⁸⁹ WEC’s Vogtle Unit 3 AP1000, ADS-4 Procedure to Complete the Refloat Process and Re-Install the Design Supports, page 3.

Figure 6-16: ADS-4 Supports²⁹⁰

Redacted

At this time, rework of the pipe supports became necessary to achieve Initial Criticality Testing and ultimately COD.²⁹¹ By February 2023, the Project team indicated that the ADS vibration issue was resolved, and Initial Criticality Testing was achieved on March 6, 2023.²⁹²

6.5.2 REACTOR & TURBINE TRIPS

Following Initial Criticality Testing, which was achieved on March 6, 2023, the Project experienced several reactor and turbine trips that delayed completion of intermediate milestones needed to achieve COD. On March 15, 2023, Unit 3 experienced its first reactor and turbine trip while it was in Mode 1 preparing to Sync to Grid. The reactor was shut down due to the loss of two reactor coolant pumps, which was caused by a relay failure on the electrical bus that was supplying power to the two pumps. After investigation of the incident, the Project team determined that the current transformers needed modifications. The appropriate corrective actions were completed, and Unit 3 returned to Mode 1 and successfully synced to grid on April 1, 2023.²⁹³

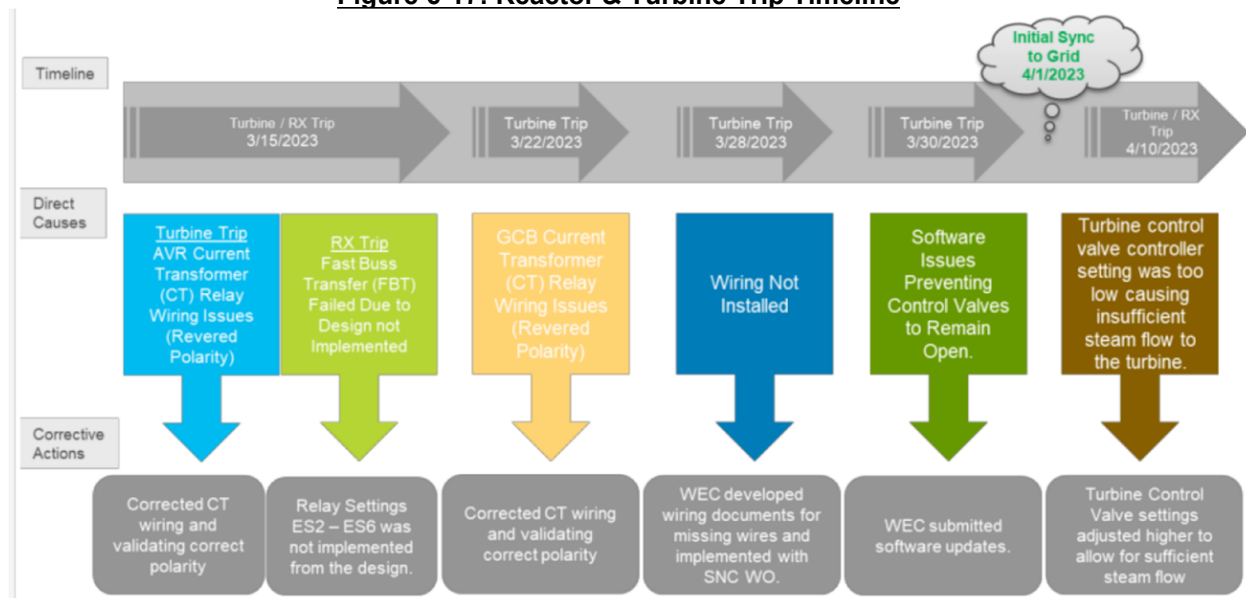
Figure 6-17 below illustrates additional turbine trips causes and actions that occurred during March and April 2023.

²⁹⁰ WEC's Vogtle Unit 3 AP1000, ADS-4 Procedure to Complete the Refloat Process and Re-Install the Design Supports, page 13.

²⁹¹ January 2023 SNC Monthly Project Review Presentation, slides 2,6,18.

²⁹² March 2023 SNC Monthly Project Review Presentation, slide 4; February 2023 Update to Westinghouse Status Report, page 6.

²⁹³ Direct Testimony of John B. Williams and Jeremiah C. Haswell in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, pages 9 and 10.

Figure 6-17: Reactor & Turbine Trip Timeline²⁹⁴

On May 2, 2023, Unit 3 experienced another reactor and turbine trip. While at 75% power, there was a loss of two strings of feedwater heaters which caused an automatic turbine trip. This resulted in a loss of suction pressure.²⁹⁵ The operators then decided to manually trip the reactor.²⁹⁶ After investigation of the trip, it was determined that condenser shipping flanges were not removed which caused the turbine to trip.²⁹⁷ The Project team took the corrective actions of removing the shipping flanges and cleaning the strainers to correct the issue.²⁹⁸

Most recently, on July 9, 2023, there was another reactor and turbine trip. This was caused by high moisture separator reheater shell levels and low Reactor Coolant System flows. To correct this, software and logic updates were implemented in two phases.²⁹⁹ The various reactor and turbine trips that occurred during startup and testing have caused delay to reaching intermediate milestones and ultimately achieving COD in Unit 3.

²⁹⁴ April 2023 SNC Monthly Project Review Presentation, slide 5 and Direct Testimony of Steven D. Roetger and William R. Jacobs, Jr., PhD. in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, page 9.

²⁹⁵ Direct Testimony of John B. Williams and Jeremiah C. Haswell in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, pages 9-11.

²⁹⁶ Direct Testimony of Steven D. Roetger and William R. Jacobs, Jr., PhD. in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, page 9.

²⁹⁷ Direct Testimony of Steven D. Roetger and William R. Jacobs, Jr., PhD. in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, page 9.

²⁹⁸ May 2023 SNC Monthly Project Review Presentation, slide 5.

²⁹⁹ July 2023 SNC Monthly Project Review Presentation, slides 3-5.

6.5.3 HYDROGEN LEAK & PLANNED MAINTENANCE OUTAGE

During the planned 100% Load Rejection Test on June 10, 2023, there was a turbine trip while the reactor was still in Mode 1. Following the trip, SNC's operating personnel identified a hydrogen leak in the main generator.³⁰⁰ The leak was caused by foreign material in the seal. To correct the leak, the Project team inspected tanks within the Hydrogen Seal Oil System, reopened and reinspected the tanks, and installed new hydrogen seals.³⁰¹ Following this incident, the Project team also decided to trip the reactor and begin the planned maintenance outage ("PMO") where, for example, temporary test equipment is removed and filters are replaced.³⁰²

In June 2023, the PMO for Unit 3 occurred for 10 days and allowed SNC to perform maintenance and address other issues that were identified during testing.³⁰³ During this time, the unit was taken to less than 200 degrees Fahrenheit, causing it to enter back into Mode 5. The scheduled work included test reconfiguration, repairing, and upgrading various parts of the system and conducting additional testing.³⁰⁴ Upon completion, SNC returned Unit 3 back to 100% power to conduct the Load Rejection Test and the Loss of Offsite Power Test.³⁰⁵

After Fuel Load in Unit 3, there was a sequence of intermediate milestones required to achieve Commercial Operation. During this time, SNC experienced delays due to a variety of issues, including reactor and turbine trips and a hydrogen leak in the main generator, that caused delay. Ultimately, SNC took the necessary precautions to safely reach Commercial Operation on July 31, 2023.

7. THE PLANNED SCHEDULE WAS REASONABLE

Although the Project was impacted by a variety of issues, including those described above, there were instances when the Project team completed work between key milestones in shorter durations than planned in the June 2018 schedule. Considering the analysis of the to-go schedule described in Section 4 above, and that, at times, the Project team demonstrated it could achieve or perform better than the planned schedule, the schedule was reasonable. See Table 7-1 below for examples of activity durations on both Units 3 and 4 that showed improved as-built durations when compared to the plan despite the challenges the Project team faced throughout the Project.

³⁰⁰ Direct Testimony of Steven D. Roetger and William R. Jacobs, Jr., PhD. in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, pages 9 and 10.

³⁰¹ June 2023 SNC Monthly Project Review Presentation, slide 5.

³⁰² Direct Testimony of Steven D. Roetger and William R. Jacobs, Jr., PhD. in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, pages 9-10 and May 2023 SNC Monthly Project Review Presentation, slide 7.

³⁰³ Direct Testimony of Steven D. Roetger and William R. Jacobs, Jr., PhD. in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, page 7.

³⁰⁴ May 2023 SNC Monthly Project Review Presentation, slide 7.

³⁰⁵ Direct Testimony of Steven D. Roetger and William R. Jacobs, Jr., PhD. in Support of GPC's 28th Semi-Annual VCM Report for Reporting Period July 2022 through December 2022, page 7.

Table 7-1: Schedule Durations Comparison Summary³⁰⁶

Description	Duration (Days)		
	As-Planned	As-Built	Variance
Unit 3 Integrated Flush Start to Unit 3 OVT Start	126	111	(15)
Unit 3 Fuel Load to Unit 4 CHT Finish	114	54	(60)
Unit 4 HFT Duration	101	42	(59)

8. CONCLUSION

As described above, several of the risks and uncertainties identified in VCM 17 ultimately have impacted the achievement of Commercial Operation for the units. In addition, the Project team encountered and worked through the challenges presented by the COVID-19 worldwide pandemic. As a result of the challenges the Project team encountered, Units 3 and 4 achieved and are forecast to achieve Commercial Operation 20 and 13 months later, respectively, than the Commission approved dates of November 2021 and November 2022.

HKA has reviewed and analyzed certain Project data and identified that the most significant causes of delay to the Project include:

1. The challenges presented by the COVID-19 pandemic,
2. The identification of additional scope required to complete the Project that was not reasonably ascertainable at the time of the cost and schedule estimate to complete as presented at VCM 17,
3. The need for more rework than planned, including the need to rework the cable separation and segregation issues for IEEE 384,
4. The inability of the construction completion contractor, Bechtel, to achieve production rates necessary to timely complete its work, and
5. Greater than expected testing and startup challenges experienced on Unit 3 after Fuel Load was achieved.

³⁰⁶ Attachment C – As-Planned v. As-Built Schedule Analysis.

Attachments

CURRICULUM VITAE

MARK GENTRY

PARTNER

QUALIFICATIONS

BS, Civil Engineering, University of Illinois, Urbana/Champaign
 Executive Education Finance Course, University of Chicago – Booth School of Business
 Registered Professional Engineer, Minnesota
 LEED AP
 OSHA 10 and 30

PROFILE

Mark Gentry specializes in the investigation and resolution of business disputes, primarily related to the construction industry. He has consulted on a variety of projects including casinos, schools, military barracks, refineries, apartments, single-family homes, hotels, distribution centers, power plants, pipelines, sports stadiums, airports, water treatment facilities, highways, light rail lines and tunnels.

In addition, Mark has analyzed manufacturing and termination issues for government contracts. He has lead teams analyzing critical path method schedules, productivity, cost increases and contract issues.

Mark has testified as an expert in arbitration and court proceedings as well as presented damage and schedule delay analysis during settlement negotiations. He has also consulted with, and presented to, companies on scheduling methods and procedures, costs tracking and means to track the impact of project issues.

Prior to working for HKA, Mark worked as a project manager for JE Dunn Construction, an *Engineering News-Record* “top 25” contractor. His project management experience included condominiums, retail facilities, office buildings, parking lots and casinos. In addition, he has provided pre-construction services for hotels and recreational facilities.

SELECT EXPERIENCE

CONSTRUCTION

Nuclear Power Plant Decontamination and Decommissioning

Assisted a large international contractor dispute a termination for cause related to a contract for decontamination and decommissioning a nuclear power plant. The analysis included a review of the contractor's project controls compared to the contractual requirements. Additionally, assisted counsel to understand the major cost overruns, reasons for the overruns and provided assistance at a Federal Energy Regulatory Commission trial.

AP1000 Nuclear Power Plants

Assisted counsel and the owner with project issues on both of the new AP1000 nuclear power plants that are or were under construction in the United States.

Steam Generator Replacement Project

Assisted the owner of an existing nuclear power plant evaluate the schedule and risk associated with a planned steam generator replacement project.

Natural Gas Pipeline

Retained on behalf of a contractor working on portions of the construction of an approximately 29-mile 20" inch natural gas pipeline to evaluate how construction crews were impacted by delay issues out of its control. HKA performed a cost and delay analysis quantifying the contractor's claims that were included in its expert report.

60-inch Microtunneling Project

Retained by the general contractor for a tunneling project to install a 48-inch water main under the Mississippi River in Minneapolis, Minnesota. The general contractor retained a subcontractor to complete the microtunneling and install a 60-inch steel casing below the river. While microtunneling, the subcontractor encountered many operational issues and only completed approximately 8% of the total footage before being terminated. The general contractor then self-performed the microtunneling and steel casing installation. Submitted three expert reports quantifying the economic damages incurred by the general contractor as well as rebutting the microtunneling subcontractor's claims. This matter is ongoing.

West Virginia Pipeline

Retained by counsel for a pipeline contractor to review and evaluate claims submitted by a clearing and grubbing subcontractor. The subcontractor alleged productivity loss and increased costs associated with changed right of way conditions, standby due to permitting issues, and additional hand felling in lieu of mechanical clearing. Used the subcontractor's accounting records, unit rates, status reports, and other project records to calculate an alternative damages amount. Provided arbitration testimony including a rebuttal of the subcontractor's claim methodology and presentation of a revised damages model.

Multi-Site 100-MW Alternating Current Solar Power Project

Led a consulting team on behalf of an international solar electric system design and construction firm related to a multi-site 100 MW alternating current power project. Assisted with claims preparation related to cost overruns and schedule delays, investigated how early procurement and design validation delays caused critical work to be re-sequenced, which resulted in disruption and costly acceleration efforts to complete the project on time. Provided deposition testimony as well as affirmative and rebuttal testimony during the arbitration proceeding.

600 MW Pulverized Coal Plant

Retained by counsel for a national utility company to analyze schedule delay and damages for a new 600 MW pulverized coal plant. The contractor alleged delays and increased costs from abnormally severe weather as well as re-sequencing of owner installed work. Analyzed the should-have-been anticipated weather, productivity impacts, time related costs and performed a critical path method schedule analysis to rebut claims from the contractor. In addition, prepared a counterclaim quantifying the utility's impacts as a result of contractor responsible issues. The matter settled favorably for our client shortly after the depositions of HKA personnel.

University Hospital Remodel

Evaluated delays experienced during the remodel of a state university hospital. The project necessitated significant planning, coordination and infectious controls procedures because while construction was occurring on certain floors other floors were operational. Our analysis included the analysis of monthly schedule updates, meeting minutes, daily reports and other contemporaneous records as well as interviews with the project execution team. We presented our analysis through a formal report as well as during a presentation at mediation.

Natural Gas Pipeline

Retained to assist a utility in defending against claims put forth by the contractor alleging a loss of greater than \$100 million for work on a natural gas pipeline between Pennsylvania and West Virginia. Our work included rebuttal of lost productivity claims alleged by the contractor and the quantification of the damages incurred by the utility as a result of contractor responsible issues.

200 MW Wind Farm

Retained by counsel to assist a civil subcontractor quantify claims associated with the construction of a wind farm near the Gulf Coast of the United States. HKA prepared an expert report analyzing delay damages and increased costs incurred by the subcontractor. The increased costs were a result of different site conditions than contracted for, including additional and harder rock. In addition, the prime contractor restricted the subcontractors means and methods of installation. Finally, the work was also impacted by force majeure rains. This matter settled favorably for our client shortly after the submission of our expert report.

71-mile, 36" Pipeline

Assisted a midstream energy company evaluate claims for compensable delay and additional compensation that were submitted by the pipeline contractor. The contractor alleged it was impacted by a late start, unusual weather, and unanticipated foreign line crossings during construction of the 71-mile, 36" pipeline constructed utilizing mainline construction techniques. The energy company utilized our evaluation to assist with settlement negotiations which were successful.

Natural Gas Pipeline

Assisting an independent midstream energy company with the evaluation of claims submitted by the pipeline contractor. The claims include allegations of impacts to horizontal directional drilling due to congested working space and the need for multiple pulls, abnormal weather, and other issues. Our work analyzing these claims is currently ongoing.

Below-Grade Piping Installation

Retained to assist a contractor with developing claims due to impacts by its subcontractor related to the installation of approximately 22,000 lineal feet of below grade piping. The impacts included a late start, increased dewatering, unplanned moves and defective work.

Tulsa-Holly Interconnecting Pipeline Project

Retained by counsel for a contractor to assess the economic damages alleged by the piping subcontractor on the Tulsa-Holly Interconnecting Pipeline Project. The Project consisted of the installation of pipelines between two existing refineries. Evaluated the piping subcontractor's claim for direct costs and lost productivity. Prepared a mediation presentation as well as attended mediation proceedings.

Multifamily Construction Lumber Supply Issue, Minnesota

Retained by counsel for a material supplier and framing subcontractor to analyze cost and schedule claims related to allegedly deficient wood framing material. The general contractor halted construction and facilitated repair work due to the allegedly deficient material on three apartment projects in the Minneapolis area. HKA submitted a total of four expert reports related to the three construction projects and testified at trial. The trial was a total defense victory and the jury did not award any of the general contractor's claimed damages.

Light Rail Project, Washington DC

Retained by a general contractor in connection with a light rail project in Washington D.C. Assisted in the preparation of time impact analyses (change orders) which were presented to the owner. Analyzed project documents, including project schedules to develop the time impact analyses. Performed a review of the critical paths of the project schedules and offered opinions on potential concurrent delay. Also reviewed and offered opinions during the development of a recovery schedule.

Light Rail Transit System

Prepared a detailed productivity analysis related to new light rail transit system for a large design/build firm. The analysis focused on disruptions during construction of new stations and bridges and installation of additional track. The analysis was prepared to assist with the explanation of cost overruns and as support for change orders.

Gas Conditioning Facility, Marcellus Shale Region

Assisted an industrial contractor with evaluating a claim to be submitted to the owner related to changed conditions on a gas conditioning facility in the Marcellus shale region. The changed conditions included a late construction start, increased quantities, and changed quality control standards. After the contractor incorporated HKA's suggested changes to the claim pricing and presentation, the contractor was able to successfully settle the claim with the owner.

Light Rail Construction, Metropolitan Transit Authority

Prepared and presented a delay claim for the signaling contractor on a new light rail construction project to the Metropolitan Transit Authority. The delay claim analysis focused on the late delivery of light rail vehicles and the resulting impacts to the signaling contractor.

100 MW Wind Farm

Retained by counsel on behalf of an EPC contractor to assist with quantifying claims associated with the construction of a 100 megawatt wind farm in the Midwest. Our work included analyzing delay damages and increased costs incurred by the EPC contractor, as well as rebutting Owner liquidated damage and demurrage claims.

520 MW Wind Farm

Retained by the balance of plant (BOP) engineering, procurement and construction contractor for a 520 megawatt wind farm to assist with preparation of claims to be submitted to the owner. The owner supplied the wind turbine generators (WTGs) which arrived late and out of sequence. The contractor was requested to accelerate its installation after the WTGs were delivered. The contractor experienced increased costs associated with the impacts. We assisted with preparing the claims which the owner accepted.

Hotel, Mall of America, Minnesota

Assisted the owner of a hotel constructed near the Mall of America in Minnesota conduct an audit of the contractor's project records. The owner believed the general contractor's record keeping and accounting practices resulted in additional billings to the owner. HKA issued multiple expert reports related to the issues identified in the audit as well as calculated damages due to the delay in converting to permanent financing.

Utility Construction Project

Assisted a utility installation contractor develop and implement a method to contemporaneously track impacts experienced as a result of differing site conditions during the course of a utility construction project. Pricing the changes utilizing the method recommended by HKA, the contractor was able to settle the claim favorably with the owner without the need for litigation.

Multifamily Construction Schedule Review, Minneapolis

Analyzed a general contractor's project schedules in an ongoing and as-needed basis. HKA reviewed project schedules for compliance with contractual specification and industry best practices. HKA's reviews were used to improve baseline and schedule updates and request additional contract time.

Highway Reconstruction Project, Minnesota

Retained on behalf of a county in southwest Minnesota regarding a 2.4 mile highway reconstruction project. During the project the general contractor requested a time extension to the contractual completion date alleging excusable weather and utility relocation delays. After the contractor's request for a time extension was denied, the contractor submitted a claim for constructive acceleration costs and later hired an expert to perform a schedule analysis requesting relief from liquidated damages. HKA's rebuttal to these claims consisted of a weather analysis based on historical weather data and a schedule analysis based, in part, on project daily and weekly reports. Additionally, HKA analyzed the contractor's cost and labor reports to correct methodological errors in the contractor's

constructive acceleration claim. The case settled shortly after HKA's rebuttal report was issued, prior to expert depositions or trial.

Highway Reconstruction and Realignment, South Dakota

Retained by counsel for a Wyoming based general contractor to assist with the development of a Request for Equitable Adjustment (REA) to be submitted to the Federal Highway Administration. The project was the reconstruction and realignment of two sections of highway in South Dakota. The reconstruction effort included building two new Mechanically Stabilized Earth (MSE) walls and changing the grade of the roadway sections.

Hotel Project

A large commercial construction company built a new hotel that was found to contain mold in the guestrooms shortly after the completion of construction. Counsel for the construction company hired HKA to review the damages claimed by the hotel owner related to the mold remediation effort. HKA determined that many of the claimed damages were betterments, were design related, were unrelated to the remediation work or were otherwise inappropriate. Through our work, the damage claim was reduced by almost 75%. This matter settled favorably for our client shortly after HKA's deposition.

Parking Lot Reconstruction, Target, Minnesota

Retained by Target Corporation to analyze its costs incurred to rework its parking lot configuration as a result of a condemnation of portions of its property by the Minnesota Department of Transportation. As a result of the condemnation, Target performed some work in its parking lot directly as a result of the condemnation but also performed some betterments. HKA personnel analyzed and segregated the costs to determine which costs were caused by the condemnation. This matter settled shortly before the hearing.

Iowa-Based Bridge Constructor

Retained by counsel for an Iowa based bridge constructor to assist with claims against the Iowa Department of Transportation. The contractor had previously retained a different consultant but was not having success with reaching a resolution regarding its claims. Evaluated the contractor's damages and found that certain claims it was pursuing were valid, other claims were not valid, and that there were additional damages incurred by the contractor. Shortly after the contractor presented HKA's revised claims evaluation, the contractor and the Iowa Department of Transportation reached a successful settlement.

Residential Project

Retained by counsel for a ready-mix supplier to evaluate the management of a large residential project in comparison to a typical construction project. The Owner alleged that the concrete was not mixed properly and that the Helix, an additive to strengthen the concrete mix, was not included in the concrete mix at the specified rate. Reviewed the Owner's oversight and management of the Project including how/if contracts were executed, preparation of project schedules, and establishment of a quality control program. We prepared an expert report, and Mark was deposed. The matter settled before going to trial.

Meat Slicing and Packaging Plant

Retained on behalf of a construction manager of a meat slicing and packaging plant to evaluate claims submitted by its subcontractor for alleged productivity impacts and time related costs. The subcontractor alleged excessive change orders, the need for additional manpower, the lack of an overall Project schedule and an excessive punchlist were the causes of the subcontractor's increased costs. We responded to the claims and issued an expert report rebutting nearly 95% of the claimed damage value. The matter settled favorably for our client shortly after the issuance of our expert report.

Circulating Fluidized Bed (CFB) Power Generation Facility

Prepared a detailed cost, productivity and schedule delay analysis of a Circulating Fluidized Bed (CFB) power generation facility for an international design/build firm. The analysis was focused around an economic force majeure and delays caused by an international equipment supplier. Quantity, cost and craft hour databases were utilized to determine the magnitude of various impacts to the site productivity at various levels of detail. Operations logs, Distributed Control System (DCS) data, and interviews with site personnel were used to determine and quantify delays during plant startup. The analysis was presented during a successful mediation.

Combined Cycle Natural Gas Fired Plant, Mexico

Prepared a delay claim relating to a 750 MW combined cycle natural gas fired plant in Mexico for a large international construction and engineering company. The schedule analysis focused on delays during plant startup. Delay issues included plant and turbine trips, corrective work and export power restrictions. Operations logs and schedules, Primavera schedules, export power restriction curves, and interviews with key startup and planning personnel were all used to help support the analysis.

Major League Baseball Park

Developed an as-planned v. as-built schedule analysis for a steel fabricator working on a new major league baseball park. Drawing logs, piece logs and interviews with key project personnel were utilized to determine the duration and causes of delays.

Chlorination and Dechlorination Facility

Supervised and prepared cost and schedule analyses for a chlorination and dechlorination facility. The facility was built to treat waste water before it was released into the final effluent. The work for the designer involved the quantification and allocation of over 700 days of delay for each facility. We also evaluated the contractor's claims totaling over twenty million dollars.

Steam Generator Replacement

Reviewed another consultant's critical path schedule analysis of a steam generator replacement project. The analysis focused on increased security requirements and the ripple effect early delays had on the project due to extremely confined spaces. The review focused on proper methodology, accuracy, and reasonableness.

Combined Cycle Power Plant

Performed a detailed critical path methodology (CPM) schedule analysis to determine the causes and duration of delays caused by an international equipment supplier for a global design/build firm on the construction of a combined cycle power plant. The analysis involved the review of monthly progress reports, contemporaneous correspondence, and interviews with key project personnel. A time-impact schedule analysis was developed utilizing Primavera P3 scheduling software. Work included the preparation of an extensive multimedia presentation presented at client settlement negotiations.

Wal-Marts, Twin Cities

Authored an expert report related to changes and impacts to an electrical contractor's work during the construction of two new Wal-Marts in the Twin Cities. The general contractor had declared bankruptcy and the electrical contractor was seeking recovery from the surety. Assisted with successful negotiations of the damages before arbitration began.

540 MW Combined Cycle Power Plant

Developed claims relating to a 540 MW combined cycle power plant for an international contractor. The claims were to recover accident related damages due to an equipment collapse and for damages caused by the contractor's consortium partner. Performed a detailed critical path method schedule analysis using Primavera

schedules, interviews with site personnel, progress reports, daily and weekly site reports, and craft hour databases. Work included the preparation of a mediation presentation.

Circulating Fluidized-Bed Boiler Systems

Investigated design and construction issues related to the pipe support system for two new circulating fluidized-bed boiler systems. Reviewed project correspondence, installation instructions for the pipe supports, specifications, photographs, compliance submittals of the supports and project drawings. Presented the findings via a written report.

Late and Damaged Equipment

Assisted a large international contractor develop claims related to late and damaged equipment. Performed a summary level schedule analysis of mechanical erection, assisted with quantification of productivity related impacts and provided litigation support.

Retired Army Chemical Warfare Manufacturing Facility

Prepared two change orders for an international contractor related to the remediation of a retired army chemical warfare manufacturing facility. Preparation of the change orders required a detailed analysis of equipment, labor and distributable costs.

Distribution Center

Assisted a small electrical contractor prepare for a potential claim situation related to the construction of a 400,000 square foot distribution center. The contractor was experiencing delays and disruptions caused by out of sequence and late concrete pours. We assisted the contractor understand his current cost and schedule position and develop monitoring tools so he could better understand when the impacts were starting to impact profitability.

Riverboat Casino

Assisted a large general contractor with the calculation of certain claims related to the construction of a new riverboat casino. The owner of the facility instituted an optional Owner-Controlled Insurance Program (OCIP). Assisted the contractor with the quantification of the disputed credit that was due the owner for instituting the OCIP.

Design Build Firm Seminars

Prepared and presented multiple seminars to an international design-build firm regarding claims. The seminars focused on what individual executives, project managers and cost and schedule engineers could be doing better in the event claimable situations arise on the project. The seminars were tailored based on experience with the firm's internal cost and schedule records.

GOVERNMENT CONTRACTS

Aircraft Manufacturer

Assisted a large aircraft manufacturer in reviewing the opposing side's workpapers and performing a rebuttal schedule analysis. The analysis was used to help support the reason for contract termination, the duration of delays in the manufacturing process, and the forecasted date of project completion.

Termination Settlement Proposal (TSP) and Request for Equitable Adjustment (REA)

Assisted a rocket development and manufacturing company with its Termination Settlement Proposal (TSP) and Request for Equitable Adjustment (REA) submissions to the programs prime contractor for a terminated NASA program. HKA personnel developed the fee quantification methodology, assisted with settlement of subcontractor Termination Settlement Proposals, and assisted with drafting the contractor's TSP and REA.

Aircraft Manufacturer

Prepared claims for a government contractor that was terminated during full scale engineering production of a stealth aircraft. Issues included: engineering and production progress at termination; ability of the contractor to produce parts; and duration to complete remaining work.

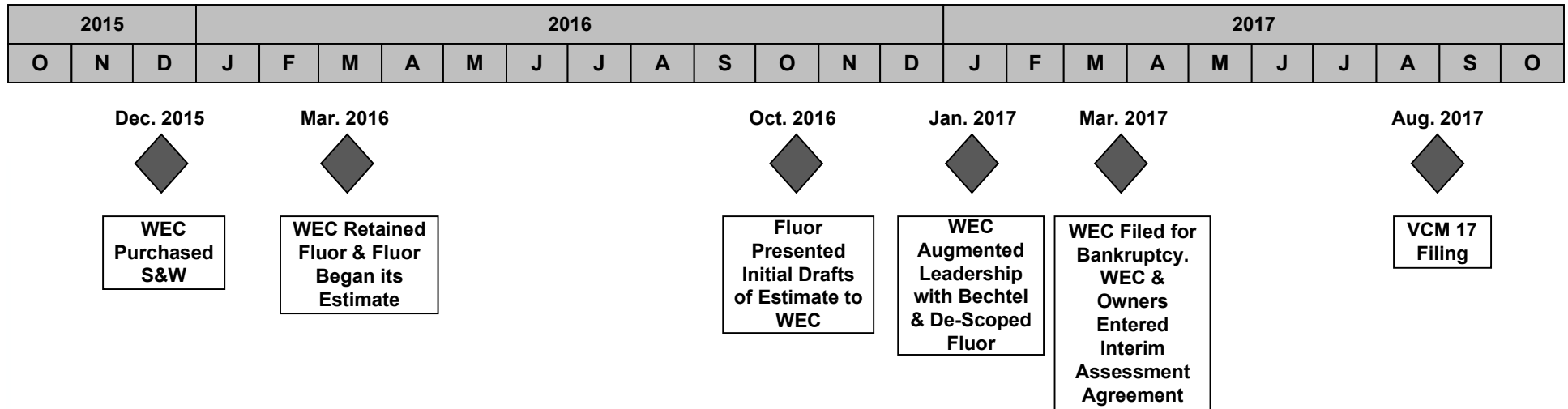
INSURANCE/ENVIRONMENTAL**Damages to Insurance Policies and Coverage Blocks**

Assisted in developing models used to allocate damages to various insurance policies and coverage blocks using a variety of trigger theories and allocation methodologies.

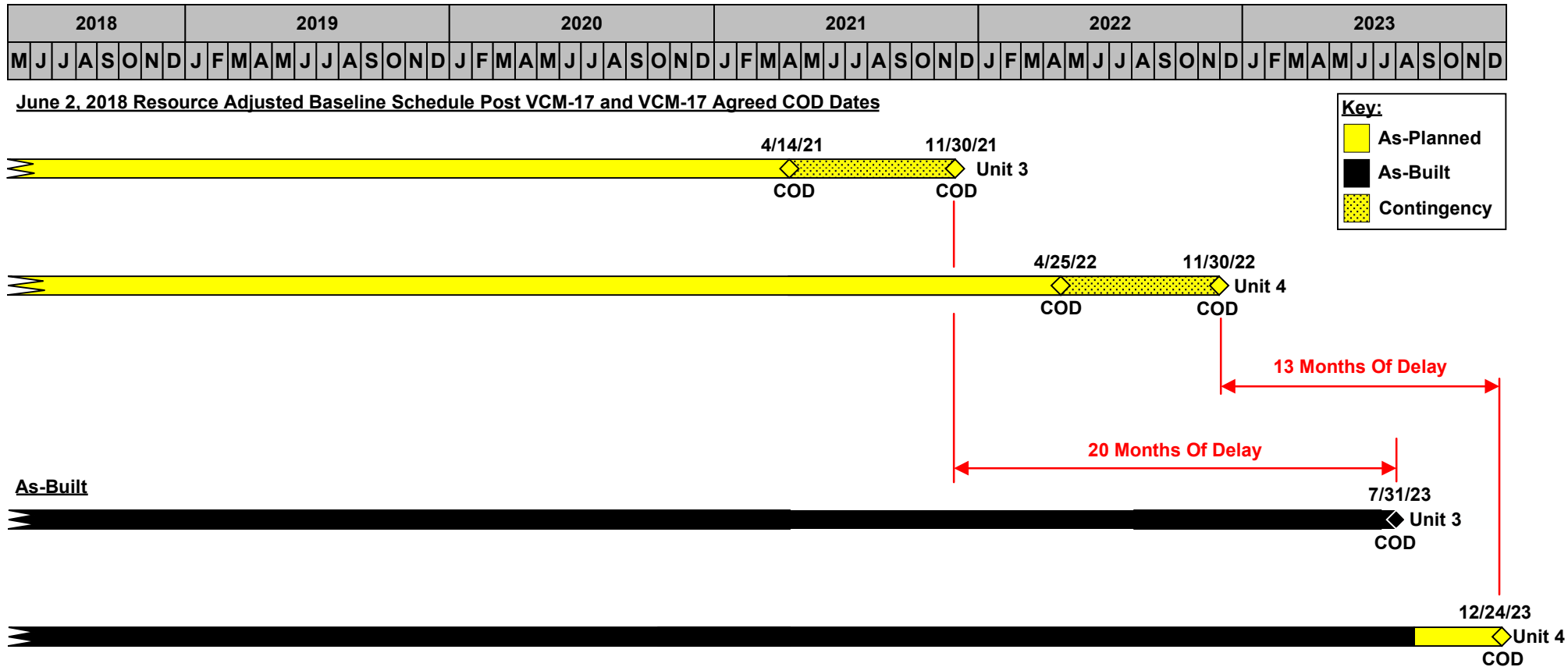
EPA Landfill Site

Performed a total cost analysis for an EPA landfill site to aid four large national manufacturing companies in settlement negotiations.

**Vogtle Units 3 & 4
Prudence Review & Analysis
Timeline From Fall 2015 Through VCM 17 Filing**

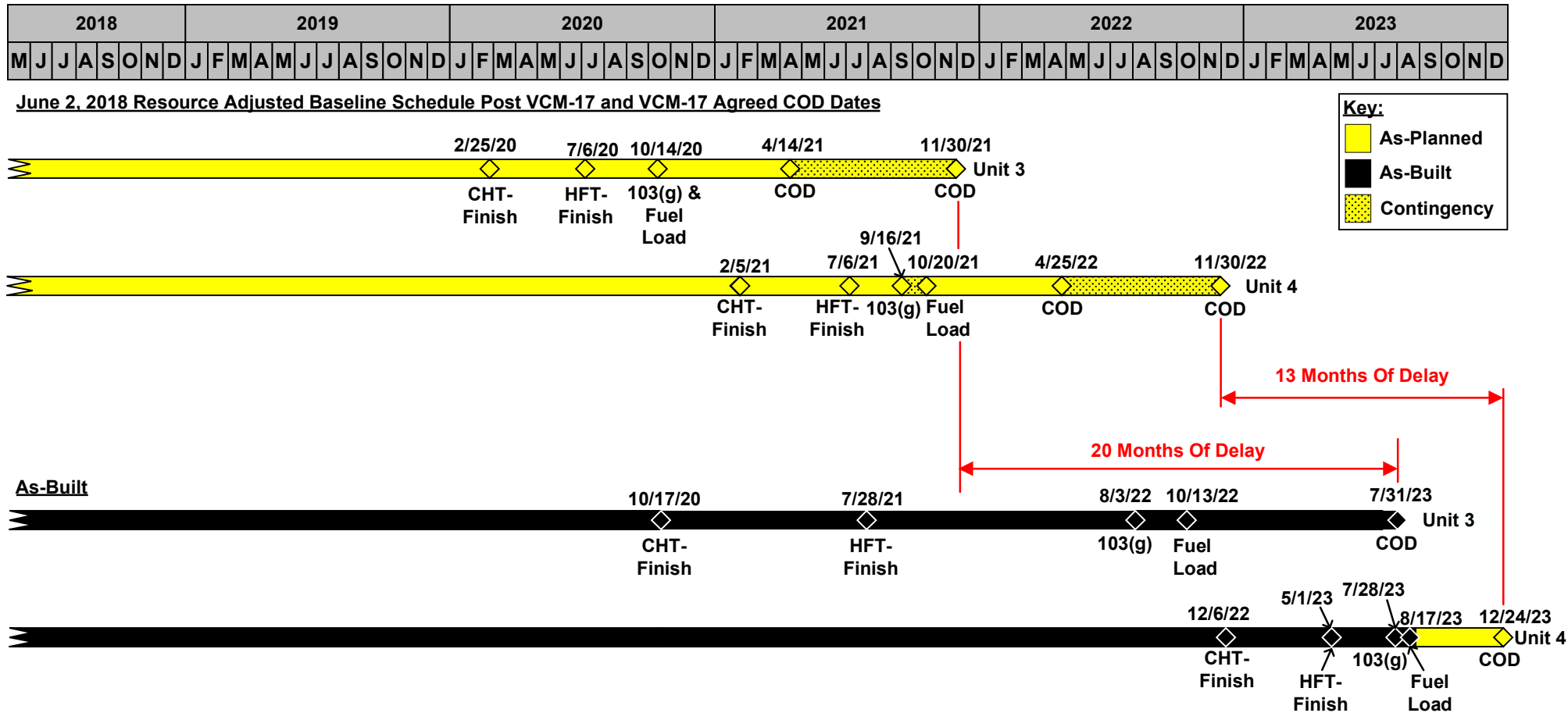


**Vogtle Units 3 & 4
Prudence Review & Analysis
As-Planned v. As-Built Project Summary**

**Sources:**

HKA workpapers "Unit 3 As-Planned v. As-Built Dates"; "Unit 4 As-Planned v. As-Built Dates."

**Vogtle Units 3 & 4
Prudence Review & Analysis
As-Planned v. As-Built For Select Milestones**

**Sources:**

HKA workpapers "Unit 3 As-Planned v. As-Built Dates"; "Unit 4 As-Planned v. As-Built Dates."

**Vogtle Unit 3 & 4
Prudence Review & Analysis
Unit 3 & 4 Commercial Operation Date Delay**

Milestone	VCM-17 Approved	(a) (1) Actual/ Forecasted	(b) Delay Days	Delay Months
Unit 3 Commercial Operation	11/30/21	07/31/23 A	608	20
Unit 4 Commercial Operation	11/30/22	12/24/23	389	13

Sources:

(a) GPC's 17th VCM Report for Reporting Period January 2017 through June 2017.

(b) GPC article "Vogtle Unit 3 goes into operation"; SNC Project Metrics Weekly Update, dated August 22, 2023.

Note:

(1) HKA understands that the November 2021 and November 2022 dates referenced in VCM-17 correspond with November 30, 2021 and November 30, 2022 for Unit 3 and Unit 4 COD, respectively.

Vogtle Units 3 & 4
Prudence Review & Analysis
As-Planned v. As-Built Schedule Durations Comparison

Attachment C

Description	As-Planned			As-Built			Var
	Start	Finish	Dur	Start	Finish	Dur	
Unit 3 Integrated Flush Start to Unit 3 OVT Start	07/23/19	11/26/19	126	08/05/19 A	11/24/19 A	111	(15)
Unit 3 Fuel Load to Unit 4 CHT	10/14/20	02/05/21	114	10/13/22 A	12/06/22 A	54	(60)
Unit 4 HFT Duration	03/27/21	07/06/21	101	03/20/23 A	05/01/23 A	42	(59)

Sources:

HKA workpaper "Unit 3 As-Planned v. As-Built Dates."

HKA workpaper "Unit 4 As-Planned v. As-Built Dates."

Vogtle Units 3 & 4
Prudence Review & Analysis
Unit 3 As-Planned v. As-Built Dates

Attachment C

Activity ID	HKA Activity Description	[A]	[B]	[C=B-A]	[D]	[E=D-B]
		As-Planned ^(a)		Float	As-Built Date ^(b)	
		Date	Late Date			Delay
SV3RCSFS64 / SV3RCSFS76	Integrated Flush - Start	07/17/19	07/23/19	6	08/05/19 A	13
SV3RCPM00128 / SV3OVTBGN	Open Vessel Testing - Start	10/27/19	11/26/19	30	11/24/19 A	(2)
SV3MILPM00050	Cold Hydro Testing - Start	02/09/20	02/09/20	-	10/16/20 A	250
SV3MILPM00052	Cold Hydro Testing - Finish	02/25/20	02/25/20	-	10/17/20 A	235
SV3MILPM00065	Hot Functional Testing - Start	03/31/20	03/31/20	-	04/25/21 A	390
SV3MILPM00076	Hot Functional Testing - Finish	06/16/20	07/06/20	20	07/28/21 A	387
E0OITAC1070-G / 3E0OITAC1070-G	103g Receipt From NRC	09/25/20	10/14/20	19	08/03/22 A	658
SV3MILPM10810	Initial Fuel Load	10/14/20	10/14/20	-	10/13/22 A	729
SV3CSPTHHR110	Commercial Operation Date	04/14/21	11/30/21 ^{(c)(1)}	230	07/31/23 A	608

Sources:

(a) June 2, 2018 Schedule.

(b) May 26, 2023 Schedule; GPC article "Vogtle Unit 3 goes into operation."

(c) GPC's 17th VCM Report for Reporting Period January 2017 through June 2017.

Note:

(1) HKA understands that the November 2021 date referenced in VCM-17 corresponds with November 30, 2021 for Unit 3 COD.

Vogtle Units 3 & 4
Prudence Review & Analysis
Unit 4 As-Planned v. As-Built Dates

Attachment C

Activity ID	HKA Activity Description	[A]	[B]	[C=B-A]	[D]	[E=D-B]
		As-Planned^(a)	As-Built			
		Date	Late Date	Float	Date^(b)	Delay
SV4RCPM00128 / SV4OVTBGN	Open Vessel Testing - Start	09/30/20	11/04/20	35	12/19/21 A	410
SV4MILPM00050	Cold Hydro Testing - Start	01/18/21	01/18/21	-	12/05/22 A	686
SV4MILPM00052	Cold Hydro Testing - Finish	02/04/21	02/05/21	1	12/06/22 A	669
SV4MILPM00065	Hot Functional Testing - Start	03/27/21	03/27/21	-	03/20/23 A	723
SV4MILPM00076	Hot Functional Testing - Finish	06/22/21	07/06/21	14	05/01/23 A	664
E0OITAC1070-G / 4E0OITAC1070-G	103g Receipt From NRC	09/16/21	10/20/21	34	07/28/23 A	646
SV4MILPM10810	Initial Fuel Load	10/20/21	10/20/21	-	08/17/23 A	666
SV4CSPTHHR110	Commercial Operation Date	04/25/22	11/30/22 ^{(c)(1)}	219	12/24/23	389

Sources:

(a) June 2, 2018 Schedule.

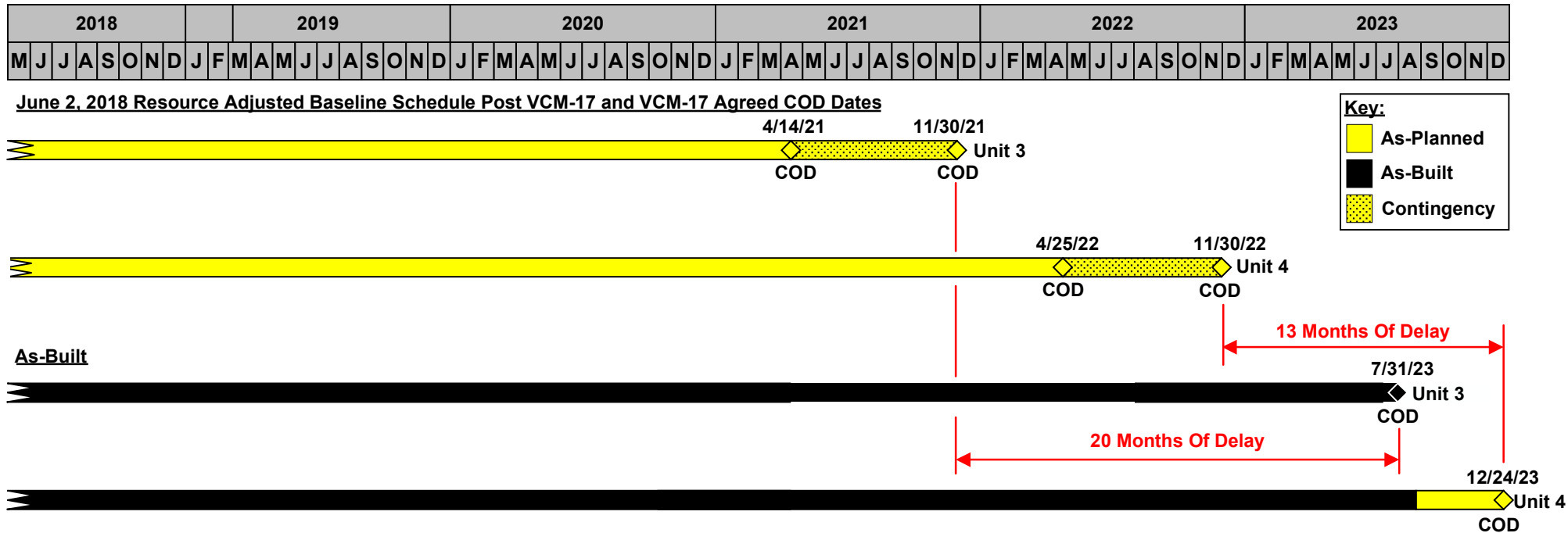
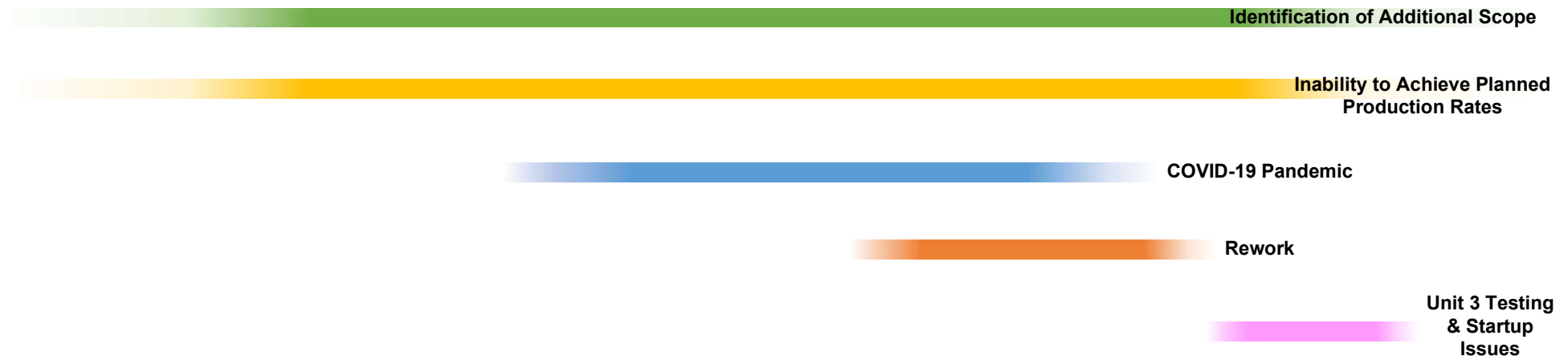
(b) May 26, 2023 Schedule; GPC article "Vogtle Unit 4 has received the 103(g) finding from the Nuclear Regulatory Commission"; SNC Project Metrics Weekly Update, dated August 22, 2023.

(c) GPC's 17th VCM Report for Reporting Period January 2017 through June 2017.

Note:

(1) HKA understands that the November 2022 date referenced in VCM-17 corresponds with November 30, 2022 for Unit 4 COD.

**Vogtle Units 3 & 4
Prudence Review & Analysis
As-Planned v. As-Built Project Impacts**

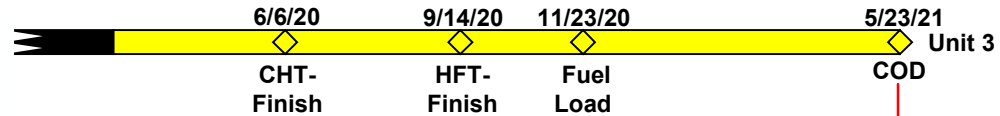
**Impacts****Sources:**

HKA workpapers "Unit 3 As-Planned v. As-Built Dates"; "Unit 4 As-Planned v. As-Built Dates."

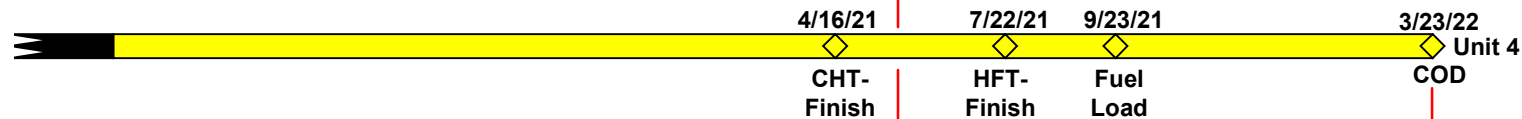
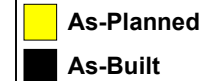
Vogtle Units 3 & 4
Prudence Review & Analysis
Pre-COVID-19 v. Post-COVID-19 Milestone Dates

2020												2021												2022											
J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D

February 29, 2020 Schedule



Key:



July 30, 2021 Schedule



General Note:

Milestone dates shown are Late Dates.

Vogtle Units 3 & 4
Prudence Review & Analysis
Unit 3 Pre-COVID-19 v. Post-COVID-19 Milestone Dates

Attachment E

Activity ID	HKA Activity Description	[A] Pre-COVID-19 As-Planned Date ^(a)	[B] Post-COVID-19 Date ^(b)	[C=B-A] Delay	
SV3MILPM00050	Cold Hydro Testing - Start	05/31/20	10/16/20	A	138
SV3MILPM00052	Cold Hydro Testing - Finish	06/06/20	10/17/20	A	133
SV3MILPM00065	Hot Functional Testing - Start	07/26/20	04/25/21	A	273
SV3MILPM00076	Hot Functional Testing - Finish	09/14/20	07/28/21	A	317
3E0OITAC1070-G	103g Receipt From NRC	11/23/20	11/18/21		360
SV3MILPM10810	Initial Fuel Load	11/23/20	11/18/21		360
SV3CSPTHHR110	Commercial Operation Date	05/23/21	03/28/22		309

Sources:

(a) February 29, 2020 Schedule.

(b) July 30, 2021 Schedule.

Vogtle Units 3 & 4
Prudence Review & Analysis
Unit 4 Pre-COVID-19 v. Post-COVID-19 Milestone Dates

Attachment E

Activity ID	HKA Activity Description	[A] Pre-COVID-19 As-Planned Date ^(a)	[B] Post-COVID-19 Date ^(b)	[C=B-A] Delay
SV4OVTBGN	Open Vessel Testing - Start	12/07/20	10/27/21	324
SV4MILPM00050	Cold Hydro Testing - Start	04/09/21	02/23/22	320
SV4MILPM00052	Cold Hydro Testing - Finish	04/16/21	03/02/22	320
SV4MILPM00065	Hot Functional Testing - Start	06/02/21	03/25/22	296
SV4MILPM00076	Hot Functional Testing - Finish	07/22/21	05/10/22	292
4E0OITAC1070-G	103g Receipt From NRC	09/22/21	07/02/22	283
SV4MILPM10810	Initial Fuel Load	09/23/21	07/02/22	282
SV4CSPTHHR110	Commercial Operation Date	03/23/22	11/09/22	231

General Note:

Milestone dates shown are Late Dates. Milestones generally had less than 10 days of Total Float.

Sources:

(a) February 29, 2020 Schedule.

(b) July 30, 2021 Schedule.

Vogle Units 3 & 4
Prudence Review & Analysis
Unit 3 Auxiliary Building Select Civil Commodity Scope Growth

Scorecard Commodity	Unit Of Measure	[A] March 4, 2018 Quantity	[B] May 28, 2023 Quantity	[C=B-A] Difference	[D=C/A] Percentage Difference
Rebar	TN	Redacted	Redacted	Redacted	63%
Formwork	SF				62%
Embeds	LB				43%

Source:

HKA workpaper, "Cost Account Detail Of Unit 3 Auxiliary Building Select Civil Commodities."

Vogle Units 3 & 4
Prudence Review & Analysis
Cost Account Detail Of Unit 3 Auxiliary Building Select Civil Commodities

Cost Account	May 2023 Cost Account Description	May 2023 Unit Of Measure	Scorecard Commodity	March 4, 2018 Quantity^(a)	May 28, 2023 Quantity^(b)	Difference
312.AA.12.32100	U3 Aux Bldg: Fcst 1 Adj for Rebar: Walls	TN	Rebar	N/A	-	-
312.AA.12.32200	U3 Aux Bldg: Fcst 1 Adj for Rebar: Elev. Slabs	TN	Rebar	N/A	-	-
312.ZZ.12.30000	U3 Aux Bldg: Rebar: Structural Concrete	TN	Rebar	-	-	-
312.ZZ.12.31000	U3 Aux Bldg: Rebar: Structural Fndns Walls & Columns & Slab	TN	Rebar	-	-	-
312.ZZ.12.31100	U3 Aux Bldg: Rebar: Building Fndns	TN	Rebar	-	-	-
312.ZZ.12.31200	U3 Aux Bldg: Rebar: Base or Mat Slabs	TN	Rebar	-	-	-
312.ZZ.12.31300	U3 Aux Bldg: Rebar: Equipment Fndns	TN	Rebar	-	-	-
312.ZZ.12.32000	U3 Aux Bldg: Rebar: Walls, Columns & Elevated Slabs	TN	Rebar	-	-	-
312.ZZ.12.32100	U3 Aux Bldg: Rebar: Walls	TN	Rebar	Redacted		
312.ZZ.12.32200	U3 Aux Bldg: Rebar: Elevated Slabs	TN	Rebar			
312.ZZ.12.35100	U3 Aux Bldg: Rebar: Precast	TN	Rebar	-	-	-
Subtotal - Rebar By Ton					Redacted	
312.ZZ.12.39110	U3 Aux Bldg: Rebar: Misc - Rebar Bearing Plate	EA	Rebar	N/A		Redacted
312.ZZ.12.39500	U3 Aux Bldg: Rebar, Couplers; Terminators; Form Savers; Cadwelds	EA	Rebar		Redacted	
Subtotal - Rebar By Each					Redacted	
312.AA.12.12100	U3 Aux Bldg: Fcst 1 Adj for Formwork: Walls	SF	Formwork	N/A	-	-
312.ZZ.12.10000	U3 Aux Bldg: Formwork: Structural Concrete	SF	Formwork	-	-	-
312.ZZ.12.11000	U3 Aux Bldg: Formwork: Fndns, Walls, Columns & Slabs	SF	Formwork	-	-	-
312.ZZ.12.11200	U3 Aux Bldg: Formwork: Base or Mat slabs	SF	Formwork	-	-	-
312.ZZ.12.12100	U3 Aux Bldg: Formwork: Walls	SF	Formwork	Redacted		
312.ZZ.12.12300	U3 Aux Bldg: Formwork: Elevated Slabs, with Shoring	SF	Formwork			
312.ZZ.12.15100	U3 Aux Bldg: Formwork: Precast	SF	Formwork	-	-	-
312.ZZ.12.17200	U3 Aux Bldg: Permanent Formwork Plates - Installation	SF	Formwork	N/A		Redacted
312.ZZ.12.19100	U3 Aux Bldg: Formwork: Misc Concrete	SF	Formwork	-	-	-
312.ZZ.12.19500	U3 Aux Bldg: Formwork: Shoring for Module Placements	SF	Formwork		Redacted	
312.ZZ.12.20000	U3 Aux Bldg: Metal Decking	SF	Formwork	N/A		Redacted
Subtotal - Formwork By Square Foot					Redacted	
312.ZZ.12.17100	U3 Aux Bldg: Permanent Formwork Plates - Unit Fabrication	LB	Formwork	N/A		Redacted
Subtotal - Formwork By Pound				-		Redacted

Vogle Units 3 & 4
Prudence Review & Analysis
Cost Account Detail Of Unit 3 Auxiliary Building Select Civil Commodities

Cost Account	May 2023 Cost Account Description	May 2023 Unit Of Measure	Scorecard Commodity	March 4, 2018 Quantity^(a)	May 28, 2023 Quantity^(b)	Difference
312.AA.12.40000	U3 Aux Bldg: Embeds: all placements	LB	Embeds			
312.ZZ.12.40000	U3 Aux Bldg: Embeds: all placements	LB	Embeds			
312.ZZ.12.41100	U3 Aux Bldg: Concrete Penetrations	LB	Embeds			
312.ZZ.12.45100	U3 Aux Bldg: Embeds: Precast	LB	Embeds			
Subtotal - Embeds By Pound				-	-	-
312.ZZ.12.40100	U3 Aux Bldg: Embeds: Anchor Bolts	EA	Embeds			
312.ZZ.12.40110	U3 Aux Bldg: Embeds: Post Installed Anchor Bolts	EA	Embeds	N/A	-	-
312.ZZ.12.40200	U3 Aux Bldg: Embeds, Post Installed Plates Due to Design Changes	EA	Embeds	N/A		
312.ZZ.12.46300	U3 Aux Bldg: HVAC/Electrical Thimbles Fabrication	EA	Embeds	N/A	Redacted	
312.ZZ.12.49150	U3 Aux Bldg: Penetration: Piping	EA	Embeds			
312.ZZ.12.49160	U3 Aux Bldg: Penetration: Elect	EA	Embeds			
312.ZZ.12.49170	U3 Aux Bldg: Penetration: Instrumentation	EA	Embeds			
312.ZZ.12.49270	U3 Aux Bldg: Penetration: HVAC	EA	Embeds			
Subtotal - Embeds By Each					Redacted	

Note:

January 7, 2018 is the first Scorecard and QURR aligned to Bechtel's scope of work and by extension the scope of work provided for commission review in VCM 17. Scorecard total scope hours remained unchanged from January 7, 2018 to March 4, 2018. Therefore, HKA has used the March 4, 2018 QURR for the baseline scope due to data availability. "N/A" entries indicate cost accounts not present at the time of the March 4, 2018 QURR.

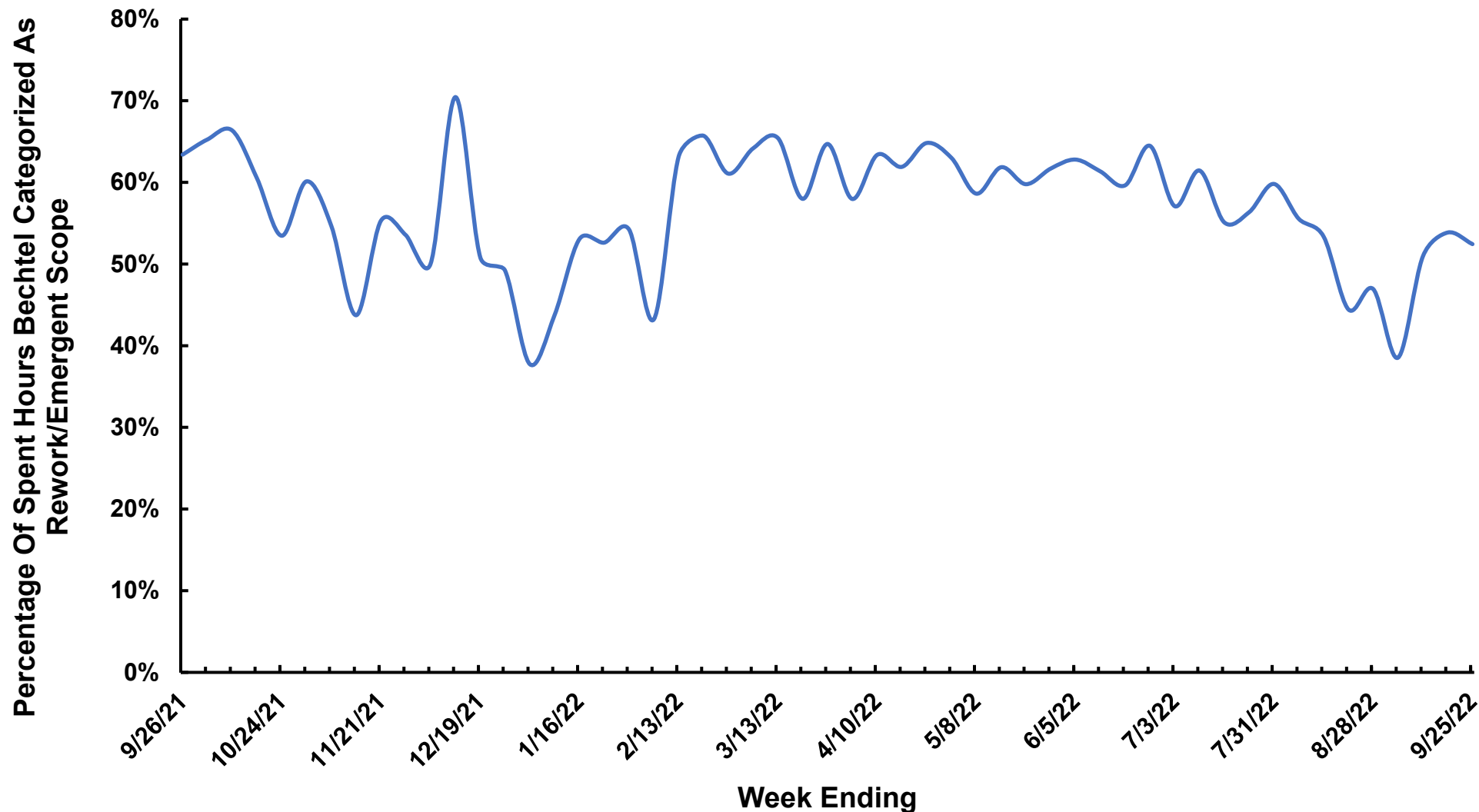
Sources:

(a) March 4, 2018 QURR.

(b) May 28, 2023 QURR.

Vogtle Units 3 & 4
Prudence Review & Analysis

Percentage Of Unit 3 Spent Hours Categorized By Bechtel As Construction Rework/Emergent Scope From 9/26/21 - 9/25/22



Source: HKA workpaper, "Unit 3 Spent Hours Categorized By Bechtel As Construction Rework/Emergent Scope From 9/26/21 - 9/25/22."

Vogle Units 3 & 4
Prudence Review & Analysis

Unit 3 Spent Hours Categorized By Bechtel As Construction Rework/Emergent Scope From 9/26/21 - 9/25/22

	[A]	[B]	[C=B/A]
Week	Spent	Construction	Construction
Ending⁽¹⁾	Hours^{(2)(a)}	Rework/Emergent	Rework/Emergent
		Scope Hours^{(2)(b)}	Scope Percentage
9/26/2021	44,710	28,346	63%
10/3/2021	43,160	28,165	65%
10/10/2021	41,312	27,416	66%
10/17/2021	40,944	24,778	61%
10/24/2021	41,194	22,024	53%
10/31/2021	40,274	24,218	60%
11/7/2021	40,748	22,276	55%
11/14/2021	42,376	18,537	44%
11/21/2021	45,524	25,181	55%
11/28/2021	22,897	12,260	54%
12/5/2021	42,790	21,401	50%
12/12/2021	42,276	29,784	70%
12/19/2021	42,084	21,391	51%
12/26/2021	24,256	11,938	49%
1/2/2022	21,711	8,193	38%
1/9/2022	35,211	15,408	44%
1/16/2022	36,292	19,259	53%
1/23/2022	38,767	20,401	53%
1/30/2022	42,927	23,280	54%
2/6/2022	45,258	19,569	43%
2/13/2022	41,928	26,475	63%
2/20/2022	40,408	26,558	66%
2/27/2022	41,419	25,298	61%
3/6/2022	39,763	25,513	64%
3/13/2022	38,311	25,066	65%
3/20/2022	37,880	21,967	58%
3/27/2022	35,909	23,235	65%
4/3/2022	34,863	20,210	58%
4/10/2022	34,305	21,740	63%
4/17/2022	31,226	19,331	62%
4/24/2022	32,407	21,012	65%
5/1/2022	33,842	21,316	63%
5/8/2022	29,753	17,443	59%
5/15/2022	28,811	17,825	62%
5/22/2022	28,537	17,061	60%
5/29/2022	26,890	16,591	62%
6/5/2022	25,057	15,736	63%
6/12/2022	27,154	16,658	61%
6/19/2022	26,636	15,886	60%
6/26/2022	27,263	17,582	64%
7/3/2022	25,684	14,664	57%

**Vogtle Units 3 & 4
Prudence Review & Analysis**

Unit 3 Spent Hours Categorized By Bechtel As Construction Rework/Emergent Scope From 9/26/21 - 9/25/22

	[A]	[B]	[C=B/A]
Week	Spent	Construction	Construction
Ending⁽¹⁾	Hours^{(2)(a)}	Rework/Emergent	Rework/Emergent
		Scope Hours^{(2)(b)}	Scope Percentage
7/10/2022	20,747	12,749	61%
7/17/2022	24,523	13,513	55%
7/24/2022	23,636	13,322	56%
7/31/2022	21,077	12,606	60%
8/7/2022	21,185	11,766	56%
8/14/2022	21,530	11,494	53%
8/21/2022	21,609	9,605	44%
8/28/2022	22,997	10,794	47%
9/4/2022	14,746	5,683	39%
9/11/2022	12,721	6,481	51%
9/18/2022	14,137	7,614	54%
9/25/2022	12,009	6,299	52%
Total	1,693,674	972,918	57%

Notes:

(1) Bechtel's Scorecard review information was consistently provided on a weekly basis for the period from 9/26/21 through 9/25/22. Therefore, HKA has utilized this time period for its analysis of rework hours.

(2) Unadjusted spent hours.

Sources:

(a) Scorecards for week ending 9/26/21 through week ending 9/25/22.

(b) HKA workpaper, "Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22."

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
9/26/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	1,022				Installation of specialty doors SV3- 12556-AD-D01/D03; Installation of door SV3-12405-AD-D01
9/26/2021	320.ZZ.14.61100-SCL - U3 Turbine Bldg: Fire Extinguisher Brackets				110	No budget for the Fire extinguisher brackets in any of the Buildings
9/26/2021	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	482				Rework / punchlist, Cable repulls/IEEE design change, Cable verification. Cable already claimed, Min qty to earn
9/26/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,649				Cable seperation/IEEE design change; Repulls
9/26/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	335				Cable seperation/IEEE design change; Repulls
9/26/2021	320.ZZ.16.60000-SCL - U3 Turbine Bldg: Unsch W & C, and Connections	363				Rework / Minimal qty to earn.
9/26/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,131	600			Cable tray closure/ IEEE barriers. Trend written for IEEE barriers (Site-0133), has not been approved by SNC yet
9/26/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	491				Rework driven by IEEE Barrier design changes
9/26/2021	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	258				Rework driven by IEEE Barrier design changes
9/26/2021	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	442				Room closure / Punchlist items
9/26/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,199				Added Scope - C13A support fab being evaluated for trends similar to NI3-0287 for conical roof & stairwells, FE needs to show what was missed; Emergent Scope - HFT/FL conduit completion with minimal qty; Rework driven by EFS-3
9/26/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,003				Rework driven by EFS-3
9/26/2021	312.ZZ.16.2215M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	1,004				Rework driven by EFS-3
9/26/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	4,753				Installation of lower elevation conduit with minimal remaining qty; Rework driven by EFS-3
9/26/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,463	300			IEEE Barriers rework/ EFS-3 rework
9/26/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,824				Rework driven by EFS-3
9/26/2021	311.ZZ.16.2215M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	239				Rework driven by EFS-3
9/26/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,225	400			Unscheduled raceway overages per drawings, FE tracking to get credit through trend; Rework driven by EFS-3
9/26/2021	320.ZZ.16.2211F-SCL - U3 Turbine Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	391				Punchlist/Room Closure
9/26/2021	320.ZZ.16.32100-SCL - U3 Turbine Bldg: Conduit, Unsch, AG, RGS	464	600			Heat Trace quantities caught up in Trend-0192B (Not Approved by SNC/ Not in budget yet). Total qty for trend being reavulated by FE; Room overages for Conduit, tracking done by FE
9/26/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	318				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements
9/26/2021	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	199				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements
9/26/2021	311.ZZ.17.32001-SCL - U3 Contmnt: Tubing Damage Rework	1,502				Design interferences
9/26/2021	312.ZZ.25.91400-SCL - U3 Aux Bldg: Monorail & Hoists	679				MH19 Bus Bar installation on upper/lower shield wall; no earnings
9/26/2021	311.ZZ.24.14100-SCL - U3 Contmnt: Other Tanks and Speres - Small Tanks < 1,500 Lbs		759			Installation of SV3-PCS-MT-04 (Water Collection Troughs) and SV3-PCS-MT- 03 (Water Distribution Bucket). To be trended, currently with estimating.
9/26/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter	395				SV3-PXS-MT-04C; Earned out in QURR
9/26/2021	311.ZZ.46.33100-SCL - U3 Contmnt: Control Rod Drive Modules and Misc Component - Screens - Containment Screens	54				Working on SV3-PXS-MY-Y02 A/B, minimal qty left to earn for both
9/26/2021	312.AG.15.71200-SCL - U3 Aux Bldg: AG SB Shop Fab Pipe, < 2.50" Pipe Fab & Install; Alloy (SS, P11, P22, P91) - All Sch.			162		Moving small bore pipe to accomadate vulcan to instal cabinets, potential mischarge to directs. Super looking at it further for correction
9/26/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	461				Minimal qty to earn for Air Baffles
9/26/2021	313.ZZ.13.M3000-SCL - U3 Shield Bldg: Misc Steel Mods – Design Change Modifications		265			Installation of steel pieces for CSM siding in 12701, NI3-0321 initiated and estimate complete.
9/26/2021 Total		28,346				
10/3/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	1,212				Door 12306-AD-D01; Problems with what is designed and what can be installed. Design continously going back and forth between the Vendor and Construction with drawing revisions.
10/3/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	461				Minimal qty to earn for Air Baffles
10/3/2021	313.ZZ.13.M3000-SCL - U3 Shield Bldg: Misc Steel Mods – Design Change Modifications		265			Installation of steel pieces for CSM siding in 12701, NI3-0321 initiated and estimate complete.
10/3/2021	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	337	200			Rework / punchlist, Cable repulls/IEEE rework, Cable verification. Cable already claimed, Min qty to earn; Heat trace qty's not in budget, trend still pending approval
10/3/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,725				Cable seperation/IEEE rework; Repulls
10/3/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	365				Cable seperation/IEEE rework; Repulls
10/3/2021	320.ZZ.16.60000-SCL - U3 Turbine Bldg: Unsch W & C, and Connections	253	150			Rework / Minimal qty to earn; Heat trace qty's not in budget, trend still pending approval

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
10/3/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,885	500			Cable tray closure/ IEEE barriers, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
10/3/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	600				IHP connection Panels / Tray closure
10/3/2021	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	319				IHP connection Panels / Tray closure
10/3/2021	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	310				Room closure / Punchlist items. 4 WP clsoed and 2 rooms turned over
10/3/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,966	492			Added Scope - C13C support fab, Trend NI3-0331; Emergent Scope - FL conduit completion with minimal qty to earn; Rework driven by EFS-3
10/3/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,261				Rework driven by EFS-3; Min Qty to earn
10/3/2021	312.ZZ.16.2215M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	562				Rework driven by EFS-3; Min Qty to earn
10/3/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	4,401				Installation of lower elevation conduit with minimal remaining qty; Rework driven by EFS-3
10/3/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,815				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, 70 items completed for the week, Min Qty to earn
10/3/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,258				Rework driven by EFS-3; Punchlist items for room closure, 70 items completed for the week, Min Qty to earn
10/3/2021	311.ZZ.16.2215M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	376				Rework driven by EFS-3; Punchlist items for room closure, 70 items completed for the week, Min Qty to earn
10/3/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,371				Unscheduled raceway overages per drawings, FE tracking by drawing; Rework driven by EFS-3, Min Qty to earn
10/3/2021	320.ZZ.16.2211F-SCL - U3 Turbine Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	181				Punchlist/Room Closure
10/3/2021	320.ZZ.16.32100-SCL - U3 Turbine Bldg: Conduit, Unsch, AG, RGS	863				Heat Trace quantities caught up in Trend-0192B (Not Approved yet/ Not in budget). Total qty for trend being reavulated by FE; Room overages for
10/3/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	280				Conduit, tracking done by FE; Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable
10/3/2021	311.ZZ.17.32001-SCL - U3 Contmnt: Tubing Damage Rework	1,238				rework, De-term and Re-term
10/3/2021	312.ZZ.25.91400-SCL - U3 Aux Bldg: Monorail & Hoists	651				Design interferences / Rework
10/3/2021	311.ZZ.24.14100-SCL - U3 Contmnt: Other Tanks and Speres - Small Tanks < 1,500 Lbs		733			MH19 Bus Bar installation on upper/lower shield wall; no earnings
10/3/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter	313				Installation of SV3-PCS-MT-04 (Water Collection Troughs) and SV3-PCS-MT- 03 (Water Distribution Bucket). To be trended, currently with estimating.
10/3/2021	312.AG.15.71200-SCL - U3 Aux Bldg: AG SB Shop Fab Pipe, < 2.50" Pipe Fab & Install; Alloy (SS, P11, P22, P91) - All Sch.	162				SV3-PXS-MT-04C; Earned out in QURR
10/3/2021 Total		28,165				Moving small bore pipe to accomadate vulcan to instal cabinets, potential mischarge to directs. Super looking at it further for correction
10/10/2021	340.ZZ.14.13000-SCL - U3 Annex Bldg: Doors	333				Working SV3-40357-AD-D04 specialty door, mischarge hours should be towards 340.ZZ.14.13700 (correction already sent); adding lifting lugs to set the door per sketch SV0-FSK-R-000087, No earnings
10/10/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	1,058				Problems with what is designed and what can be installed. Design continously going back and forth between the Vendor and Construction with drawing revisions.
10/10/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	438				Minimal qty to earn for Air Baffles
10/10/2021	320.ZZ.13.31000-SCL - U3 Turbine Bldg: Misc Steel	313				Working grating and handrail repairs
10/10/2021	312.ZZ.16.41000-SCL - U3 Aux Bldg: Sch W&C - 600/1000V #8 & Smaller	631				RMS & VBS sytem rework/repulls, Min Qty to earn
10/10/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	749		130		Cable seperation/IEEE rework; Repulls; Mischarge: 130 hours work done for Service Request that is still pending SNC signatures (VHX system remove/repulls)
10/10/2021	320.ZZ.16.60000-SCL - U3 Turbine Bldg: Unsch W & C, and Connections	228				Rework / Minimal qty to earn; Heat trace qty's not in budget, trend still pending approval
10/10/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,100				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
10/10/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	693				IHP connection Panels / Tray closure
10/10/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,200				Added Scope - C13C support fab, Trend NI3-0331; Emergent Scope - FL conduit completion with minimal qty to earn;
10/10/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,411				Rework driven by EFS-3
10/10/2021	312.ZZ.16.2215F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 2.5" - 6" (Field Run)	604				Rework driven by EFS-3; Min Qty to earn
10/10/2021	312.ZZ.16.2215M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	760				Rework driven by EFS-3; Min Qty to earn
10/10/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,400				Installation of lower elevation conduit with minimal remaining qty; Rework driven by EFS-3

Vogtle Units 3 & 4
Prudence Review & Analysis
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Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
10/10/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,700				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, 70 items completed for the week, Min Qty to earn
10/10/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,142				Rework driven by EFS-3; Punchlist items for room closure, Min Qty to earn
10/10/2021	311.ZZ.16.2215M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	411				Rework driven by EFS-3; Punchlist items for room closure, 70 items completed for the week, Min Qty to earn
10/10/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,000				Unscheduled raceway overages per drawings, FE tracking by drawing; Rework driven by EFS-3, Min Qty to earn
10/10/2021	320.ZZ.16.32100-SCL - U3 Turbine Bldg: Conduit, Unsch, AG, RGS	155	300			Heat Trace quantities caught up in Trend-0192B (Not Approved yet/ Not in budget). Total qty for trend being reavulated by FE; Room overages for Conduit, tracking done by FE;
10/10/2021	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	200				Rework driven by EFS-3
10/10/2021	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	918				Room closure/ Punchlist items, Min Qty to earn.
10/10/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,424				Room / Area closure & punchlist items, Min Qty left for recepticles installed.
10/10/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	451				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/10/2021	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	331				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/10/2021	311.ZZ.17.32001-SCL - U3 Contmnt: Tubing Damage Rework	725				Design interferences / Rework
10/10/2021	312.ZZ.25.91400-SCL - U3 Aux Bldg: Monorail & Hoists	395				MH19 Bus Bar installation on upper/lower shield wall; no earnings
10/10/2021	311.ZZ.24.14100-SCL - U3 Contmnt: Other Tanks and Speres - Small Tanks < 1,500 Lbs		499			Installation of SV3-PCS-MT-04 (Water Collection Troughs) and SV3-PCS-MT- 03 (Water Distribution Bucket). To be trended, currently with estimating.
10/10/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter	646				SV3-PXS-MT-04C; Min Qty to earn
10/10/2021 Total		27,416				
10/17/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	820				Problems with what is designed and what can be installed. Design continously going back and forth between the Vendor and Construction with drawing revisions.
10/17/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	206				Minimal qty to earn for Air Baffles
10/17/2021	320.ZZ.13.31000-SCL - U3 Turbine Bldg: Misc Steel	351				Working grating and handrail repairs
10/17/2021	312.ZZ.16.41000-SCL - U3 Aux Bldg: Sch W&C - 600/1000V #8 & Smaller					RMS & VBS sytem rework/repulls, Min Qty to earn
10/17/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	667				Cable seperation/IEEE rework; Repulls
10/17/2021	320.ZZ.16.60000-SCL - U3 Turbine Bldg: Unsch W & C, and Connections	175				Rework / Minimal qty to earn; Heat trace qty's not in budget, trend still pending approval
10/17/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,600	250			Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
10/17/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	450				IHP connection Panels / Tray closure; Punchlist items; Rework ofHorizontal IEEE barriers (ESR 50101748)
10/17/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	5,000				Emergent Scope - FL conduit completion with minimal qty to earn; Rework driven by EFS-3
10/17/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,200				Rework driven by EFS-3; Min Qty to earn
10/17/2021	312.ZZ.16.2215F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 2.5" - 6" (Field Run)	474				Rework driven by EFS-3; Min Qty to earn
10/17/2021	312.ZZ.16.2215M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	700				Rework driven by EFS-3; Min Qty to earn
10/17/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,200				FL conduit completion with minimal qty to earn; Rework driven by EFS-3
10/17/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,100				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, Min Qty to earn
10/17/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	923				Rework driven by EFS-3; Punchlist items for room closure, Min Qty to earn
10/17/2021	311.ZZ.16.2215M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	517				Rework driven by EFS-3; Punchlist items for room closure, 70 items completed for the week, Min Qty to earn
10/17/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,750	200			Unscheduled raceway overages per drawings, FE tracking by drawing; Rework driven by EFS-3, Min Qty to earn
10/17/2021	320.ZZ.16.32100-SCL - U3 Turbine Bldg: Conduit, Unsch, AG, RGS		200			Heat Trace quantities caught up in Trend-0192B (Not Approved yet/ Not in budget). Total qty for trend being reavulated by FE; Room overages for Conduit, tracking done by FE;
10/17/2021	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	261				Rework driven by EFS-3
10/17/2021	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	717				Room closure/ Punchlist items, Min Qty to earn; Rework caused by subcontractors
10/17/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,790				Room / Area closure & punchlist items, Min Qty left for recepticles installed.
10/17/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	388				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/17/2021	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	350				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/17/2021	311.ZZ.17.32001-SCL - U3 Contmnt: Tubing Damage Rework	177				Design interferences / Rework

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
10/17/2021	312.ZZ.25.91400-SCL - U3 Aux Bldg: Monorail & Hoists	221				MH19 Bus Bar installation on upper/lower shield wall; no earnings
10/17/2021	311.ZZ.24.14100-SCL - U3 Contmnt: Other Tanks and Speres - Small Tanks < 1,500 Lbs		131			Installation of SV3-PCS-MT-04 (Water Collection Troughs) and SV3-PCS-MT- 03 (Water Distribution Bucket). To be trended, currently with estimating.
10/17/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter	741				SV3-PXS-MT-04C; Min Qty to earn
10/17/2021 Total		24,778				
10/24/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	1,098				Problems with what is designed and what can be installed. Design continously going back and forth between the Vendor and Construction with drawing revisions.
10/24/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	235				Minimal qty to earn for Air Baffles
10/24/2021	313.ZZ.13.31910-SCL - U3 Shield Bldg: Misc Steel – Air Baffles	514				Min qty to earn for Air Baffles
10/24/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	833				Cable seperation/IEEE rework; Repulls
10/24/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	811				Cable seperation/IEEE rework; Repulls
10/24/2021	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	494				Cable seperation/IEEE rework; Repulls
10/24/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,619	200			Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
10/24/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	675				IHP connection Panels / Tray closure; Punchlist items; Rework of Horizontal IEEE barriers (ESR 50101748)
10/24/2021	311.ZZ.16.16100-SCL - U3 Contmnt: Cable Tray Sppts	109				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
10/24/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,100				Emergent Scope - FL conduit completion with minimal qty to earn; Rework driven by EFS-3
10/24/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,000				FL conduit completion with minimal qty to earn; Rework driven by EFS-3
10/24/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,135				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, Min Qty to earn
10/24/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,924	150			Unscheduled raceway overages per drawings, FE tracking by drawing; Rework driven by EFS-3, Min Qty to earn
10/24/2021	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	340				Rework driven by EFS-3
10/24/2021	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	601				Room closure/ Punchlist items, Min Qty to earn; Rework caused by subcontracters
10/24/2021	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	306				Punchlist items / Room Closure; Min qty left in WP to earn
10/24/2021	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	600				Punchlist items / Room Closure; Min qty left in WP to earn
10/24/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,300				Room / Area closure & punchlist items, Min Qty left for recepticles installed.
10/24/2021	340.ZZ.16.58000-SCL - U3 Annex Bldg: Sch Connections & Splices - Special	144				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/24/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	272				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/24/2021	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	334				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/24/2021	311.ZZ.16.58000-SCL - U3 Contmnt: Sched Connections & Splices - Special	142				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/24/2021	350.ZZ.16.58000-SCL - U3 Radwaste Bldg: Sch Connections & Splices - Special	136				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/24/2021	311.ZZ.17.20000-SCL - U3 Contmnt: Instruments	180				Rework / Min qty to earn
10/24/2021	311.ZZ.17.32001-SCL - U3 Contmnt: Tubing Damage Rework	122				Design interferences / Rework
10/24/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter					SV3-PXS-MT-04C; Min Qty to earn
10/24/2021 Total		22,024				
10/31/2021	313.ZZ.12.52100-SCL - U3 Shield Bldg: Concrete: Walls	206				Emergent Scope - Annulus Seal support
10/31/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	578				Minimal qty to earn for Air Baffles
10/31/2021	313.ZZ.13.31910-SCL - U3 Shield Bldg: Misc Steel – Air Baffles	378				Min qty to earn for Air Baffles
10/31/2021	313.ZZ.13.M3000-SCL - U3 Shield Bldg: Misc Steel Mods – Design Change Modifications		145			Misc Steel for CH 67 & 72 ; apart of trend NI3-0330
10/31/2021	312.ZZ.16.41000-SCL - U3 Aux Bldg: Sch W&C - 600/1000V #8 & Smaller	288				Room closure / Punchlist items; Min Qty to earn.
10/31/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,066				Cable seperation/IEEE rework; Repulls
10/31/2021	311.ZZ.16.41000-SCL - U3 Contmnt: Sch W&C - 600/1000V #8 & Smaller	305				Room / Area closure & punchlist items, Min Qty left to earn, RMS rework
10/31/2021	311.ZZ.16.46000-SCL - U3 Contmnt: Instrumentation / Electronic Cable	311				Room / Area closure & punchlist items, Min Qty left to earn, RMS rework
10/31/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	692				Cable seperation/IEEE rework; Repulls
10/31/2021	320.ZZ.16.60000-SCL - U3 Turbine Bldg: Unsch W & C, and Connections	259				Punchlist items / Room closure; Min Qty to earn in remaining items

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
10/31/2021	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	120				Cable seperation/IEEE rework; Repulls
10/31/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,900				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
10/31/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,000				IHP connection Panels / Tray closure; Punchlist items; Rework of Horizontal IEEE barriers (ESR 50101748)
10/31/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,000				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
10/31/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,500				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
10/31/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,000				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
10/31/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,000				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, Min Qty to earn
10/31/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	500				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, Min Qty to earn
10/31/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,744				Unscheduled raceway overages per drawings, FE tracking by drawing; Rework driven by EFS-3, Min Qty to earn
10/31/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,300				Room / Area closure & punchlist items, Min Qty left for recepticles installed.
10/31/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	173				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/31/2021	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	158				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/31/2021	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	176				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/31/2021	311.ZZ.16.58000-SCL - U3 Contmnt: Sched Connections & Splices - Special	170				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
10/31/2021	311.ZZ.17.20000-SCL - U3 Contmnt: Instruments	181				Rework - reworking supports for intruments, re-verifying torques on instruments and plates to close out loose end work packages
10/31/2021	311.ZZ.17.3200S-SCL - U3 Contmnt: Isometric Tubing	279				Rework - reworking supports for intruments, re-verifying torques on instruments and plates to close out loose end work packages
10/31/2021	320.ZZ.17.20000-SCL - U3 Turbine Bldg: Instruments	113				Rework - reworking supports for intruments, re-verifying torques on instruments and plates to close out loose end work packages
10/31/2021	312.ZZ.25.91400-SCL - U3 Aux Bldg: Monorail & Hoists	280				MH19 Bus Bar installation on upper/lower shield wall
10/31/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter	541				SV3-PXS-MT-04C; Min Qty to earn
10/31/2021 Total		24,218				
11/7/2021	313.ZZ.12.52100-SCL - U3 Shield Bldg: Concrete: Walls	161				Emergent Scope - Annulus Seal support
11/7/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	647				Minimal qty to earn for Air Baffles
11/7/2021	313.ZZ.13.11100-SCL - U3 Shield Bldg: Structural Steel: Light - Less than 18lbs per LF	512				Emergent Scope - AY73 front and rear angles
11/7/2021	313.ZZ.13.31910-SCL - U3 Shield Bldg: Misc Steel – Air Baffles	382				Min qty to earn for Air Baffles
11/7/2021	312.ZZ.16.41000-SCL - U3 Aux Bldg: Sch W&C - 600/1000V #8 & Smaller	650				Room closure / Punchlist items; Min Qty to earn.
11/7/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,010				Cable seperation/IEEE rework; Repulls
11/7/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	648				Cable seperation/IEEE rework; Repulls
11/7/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,500				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
11/7/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,000				IHP connection Panels / Tray closure; Punchlist items; Rework of Horizontal IEEE barriers (ESR 50101748)
11/7/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,800				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
11/7/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,500				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
11/7/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,800				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
11/7/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,500				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, Min Qty to earn
11/7/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,000				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, Min Qty to earn
11/7/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,500				Unscheduled raceway overages per drawings, FE tracking by drawing; Rework driven by EFS-3, Min Qty to earn
11/7/2021	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	601				Room / Area closure & punchlist items, Min Qty left to earn
11/7/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,200				Room / Area closure & punchlist items, Min Qty left for recepticles installed.

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
11/7/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	412				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/7/2021	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	166				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/7/2021	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	221				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/7/2021	311.ZZ.16.58000-SCL - U3 Contmnt: Sched Connections & Splices - Special	281				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/7/2021	311.ZZ.16.59100-SCL - U3 Contmnt: Sched Connections & Splices - EPA Splices	160				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/7/2021	311.ZZ.17.20000-SCL - U3 Contmnt: Instruments	225				Rework - reworking supports for intruments, re-verifying torques on instruments and plates to close out loose end work packages
11/7/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter	400				SV3-PXS-MT-04C; Min Qty to earn
11/7/2021 Total		22,276				
11/14/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	300				Problems with what is designed and what can be installed. Design continously going back and forth between the Vendor and Construction with drawing revisions.
11/14/2021	311.ZZ.14.13000-SCL - U3 Contmnt: Doors	120				Problems with what is designed and what can be installed. Design continously going back and forth between the Vendor and Construction with drawing revisions.
11/14/2021	313.ZZ.12.52100-SCL - U3 Shield Bldg: Concrete: Walls	152				Emergent Scope - Annulus Seal support. Min Qty to earn
11/14/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	402				Minimal qty to earn for Air Baffles
11/14/2021	313.ZZ.13.11100-SCL - U3 Shield Bldg: Structural Steel: Light - Less than 18lbs per LF	300				Emergent Scope - AY73 front and rear angles Min qty to earn
11/14/2021	313.ZZ.13.31910-SCL - U3 Shield Bldg: Misc Steel – Air Baffles	275				Min qty to earn for Air Baffles
11/14/2021	312.ZZ.16.41000-SCL - U3 Aux Bldg: Sch W&C - 600/1000V #8 & Smaller	400				Room closure / Punchlist items; Min Qty to earn.
11/14/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	752				Cable seperation/IEEE rework; Repulls
11/14/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	504				Cable seperation/IEEE rework; Repulls
11/14/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,000				Cable tray closure/ IEEE barriers; ESR 50114965, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
11/14/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,500				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
11/14/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	4,000				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
11/14/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,000				IEEE Barriers rework/ EFS-3 rework; Punchlist items for room closure, Min Qty to earn
11/14/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,800				Unscheduled raceway overages per drawings, FE tracking by drawing; Rework driven by EFS-3, Min Qty to earn
11/14/2021	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	465				Room / Area closure & punchlist items, Min Qty left to earn
11/14/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	2,000				Room / Area closure & punchlist items, Min Qty left for recepticles installed.
11/14/2021	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	75				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/14/2021	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	75				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/14/2021	311.ZZ.16.58000-SCL - U3 Contmnt: Sched Connections & Splices - Special	100				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/14/2021	311.ZZ.16.59100-SCL - U3 Contmnt: Sched Connections & Splices - EPA Splices	120				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn
11/14/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter	197				SV3-PXS-MT-04C; Min Qty to earn
11/14/2021 Total		18,537				
11/21/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	606				Problems with what is designed and what can be installed. Design continously going back and forth between the Vendor and Construction with drawing revisions.
11/21/2021	311.ZZ.14.13000-SCL - U3 Contmnt: Doors	241				Problems with what is designed and what can be installed. Design continously going back and forth between the Vendor and Construction with drawing revisions.
11/21/2021	313.ZZ.12.52200-SCL - U3 Shield Bldg: Concrete: Elevated Slabs	1,690				Concrete repair work on top off CB20 Roof
11/21/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	451				Minimal qty to earn for Air Baffles
11/21/2021	313.ZZ.13.11100-SCL - U3 Shield Bldg: Structural Steel: Light - Less than 18lbs per LF	120				Emergent Scope - AY73 front and rear angles

Vogle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
11/21/2021	313.ZZ.13.31910-SCL - U3 Shield Bldg: Misc Steel – Air Baffles	429				Min qty to earn for Air Baffles
11/21/2021	311.ZZ.42.22320-SCL - U3 Contmnt: Q6-01, RCS Stages 1, 2, 3 ADS Module Set/Post-Set	336				Installing Post installed plates for the handrail due to design change
11/21/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,511				Cable seperation/IEEE rework; Repulls
11/21/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	966				Cable seperation/IEEE rework; Repulls
11/21/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,000				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
11/21/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	800				Area / Room closure; Raceway buyoffs;
11/21/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,200				Main Control Room rework, conduit buyoffs, Min qty to earn
11/21/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,436				Main Control Room rework, conduit buyoffs, Min qty to earn
11/21/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,600				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
11/21/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,000				Area / Room closure; Raceway buyoffs;
11/21/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,000				Area / Room closure; Raceway buyoffs; Min qty to earn
11/21/2021	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	422				Area / Room closure; Raceway buyoffs;
11/21/2021	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.					Room / Area closure & punchlist items, Min Qty left to earn
11/21/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	2,634				Rework, Room / Area closure & punchlist items
11/21/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	325				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
11/21/2021	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	250				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
11/21/2021	311.ZZ.16.58000-SCL - U3 Contmnt: Sched Connections & Splices - Special	164				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
11/21/2021 Total		25,181				
11/28/2021	313.ZZ.12.52100-SCL - U3 Shield Bldg: Concrete: Walls	112				Concrete repair work on top off CB20 Roof
11/28/2021	313.ZZ.12.52200-SCL - U3 Shield Bldg: Concrete: Elevated Slabs	113				Concrete repair work on top off CB20 Roof
11/28/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	234				Minimal qty to earn for Air Baffles
11/28/2021	312.ZZ.13.76000-SCL - U3 Aux Bldg: Racks, Bars & Trash Racks, Sluice and Slide Gates, Weirs	100				Removal of Weir Dam Screens so painters could do touch up coatings
11/28/2021	313.ZZ.13.M3000-SCL - U3 Shield Bldg: Misc Steel Mods – Design Change Modifications	130				Design change issues in the Annulus Tunnel AY73
11/28/2021	311.ZZ.42.22320-SCL - U3 Contmnt: Q6-01, RCS Stages 1, 2, 3 ADS Module Set/Post-Set	133				Installing Post installed plates for the handrail due to design change
11/28/2021	312.ZZ.16.46000-SCL - U3 Aux Bldg: Instrumentation / Electronic Cable	500				CWA rework
11/28/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	850				Cable seperation/IEEE rework; Repulls
11/28/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	335				Cable seperation/IEEE rework; Repulls
11/28/2021	340.ZZ.16.11000-SCL - U3 Annex Bldg: Cable Tray Non Safety	219				Room / Area closure & punchlist items for ITAAC, Min Qty left to earn
11/28/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	800				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
11/28/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,500				Main Control Room rework, conduit buyoffs, Min qty to earn
11/28/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	600				Main Control Room rework, conduit buyoffs, Min qty to earn
11/28/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,600				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
11/28/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,544				Area / Room closure; Raceway buyoffs;
11/28/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,155				Area / Room closure; Raceway buyoffs; Min qty to earn
11/28/2021	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	245				Area / Room closure; Raceway buyoffs;
11/28/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,634				Rework, Room / Area closure & punchlist items
11/28/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	277				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
11/28/2021	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	179				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
11/28/2021 Total		12,260				
12/5/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	667				Minimal qty to earn for Air Baffles
12/5/2021	313.ZZ.13.31910-SCL - U3 Shield Bldg: Misc Steel – Air Baffles	338				Minimal qty to earn for Air Baffles
12/5/2021	311.ZZ.42.22320-SCL - U3 Contmnt: Q6-01, RCS Stages 1, 2, 3 ADS Module Set/Post-Set	174				Installing Post installed plates for the handrail due to design change
12/5/2021	312.ZZ.16.41000-SCL - U3 Aux Bldg: Sch W&C - 600/1000V #8 & Smaller	900				CWA / IEEE rework ; Reowrk for PCS system
12/5/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,480				Cable seperation/IEEE rework; Repulls
12/5/2021	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	946				Room / Area closure & punchlist items

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
12/5/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,200				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
12/5/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,000				Main Control Room rework, conduit buyoffs, Min qty to earn
12/5/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,400				Main Control Room rework, conduit buyoffs, Min qty to earn
12/5/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,500				Emergent Scope - FL conduit completion with minimal qty to earn; Room closeout / Punchlist
12/5/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,500				Area / Room closure; Raceway buyoffs;
12/5/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,000				Area / Room closure; Raceway buyoffs;
12/5/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,600				Area / Room closure; Raceway buyoffs; Min qty to earn
12/5/2021	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	600				Room / Area closure & punchlist items
12/5/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	3,314				Rework, Room / Area closure & punchlist items
12/5/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	307				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
12/5/2021	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	242				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
12/5/2021	312.ZZ.25.91400-SCL - U3 Aux Bldg: Monorail & Hoists				283	Working MH19 raceway and junction boxes
12/5/2021	312.ZZ.27.51000-SCL - U3 Aux Bldg: HVAC Eqpt & Ductwork - Equipment	233				Had to fabricate an elbow for a module and cut out a support from the module and install the elbow and then reinstall the support
12/5/2021 Total		21,401				
12/12/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	626				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
12/12/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	403				Minimal qty to earn for Air Baffles
12/12/2021	313.ZZ.13.11100-SCL - U3 Shield Bldg: Structural Steel: Light - Less than 18lbs per LF	455				Energeb scope - AY73 front and rear angles min qty to earn
12/12/2021	312.ZZ.16.41000-SCL - U3 Aux Bldg: Sch W&C - 600/1000V #8 & Smaller	435				CWA / IEEE rework ; Reowrk for PCS system
12/12/2021	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	750				Area / Room closure; Raceway buyoffs;
12/12/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,400				Cable seperation/IEEE rework; Repulls
12/12/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,500				Cable seperation/IEEE rework; Repulls
12/12/2021	340.ZZ.16.11000-SCL - U3 Annex Bldg: Cable Tray Non Safety	550				Room / Area closure & punchlist for ITAAC, Min Qty left to Earn
12/12/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,100				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
12/12/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	840				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
12/12/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,300				Area / Room closure; Raceway buyoffs;
12/12/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,850				Area / Room closure; Raceway buyoffs;
12/12/2021	312.ZZ.16.2215F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 2.5" - 6" (Field Run)	450				Area / Room closure; Raceway buyoffs;
12/12/2021	312.ZZ.16.2215M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 2.5" - 6" (Model)	520				Main Control Room rework, conduit buyoffs, Min qty to earn
12/12/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,400				Main Control Room rework, Lighting/Comms conduit buyoffs, Min qty to earn
12/12/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,500				Area / Room closure; Raceway buyoffs;
12/12/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,310				Area / Room closure; Raceway buyoffs;
12/12/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,455				Area / Room closure; Raceway buyoffs; Min Qty to Earn
12/12/2021 ⁽¹⁾		1,360				
12/12/2021 ⁽¹⁾		3,580				
12/12/2021 Total		29,784				
12/19/2021	340.ZZ.14.13000-SCL - U3 Annex Bldg: Doors	131				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
12/19/2021	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	600				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
12/19/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	573				Minimal qty to earn for Air Baffles
12/19/2021	313.ZZ.13.11100-SCL - U3 Shield Bldg: Structural Steel: Light - Less than 18lbs per LF	400				Emergent scope - AY73 front and rear angles min qty to earn
12/19/2021	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	350				Area / Room closure; Raceway buyoffs;
12/19/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,891				Cable seperation/IEEE rework; Repulls
12/19/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	810				Cable seperation/IEEE rework; Repulls
12/19/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,700				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
12/19/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	300				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
12/19/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,800				Area / Room closure; Raceway buyoffs;
12/19/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,200				Area / Room closure; Raceway buyoffs;
12/19/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,000				Main Control Room rework, Lighting/Comms conduit buyoffs, Min qty to earn
12/19/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,800				Area / Room closure; Raceway buyoffs;
12/19/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	900				Area / Room closure; Raceway buyoffs;
12/19/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	600				Area / Room closure; Raceway buyoffs; Min Qty to Earn
12/19/2021	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled					Rework, Room/Area closure & Punchlist items
12/19/2021	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	267				Rework, Room/Area closure & Punchlist items
12/19/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	3,069				Rework, Room/Area closure & Punchlist items
12/19/2021	312.ZZ.27.51000-SCL - U3 Aux Bldg: HVAC Eqpt & Ductwork - Equipment				164	Installation of MHS-MH-18 Hydraulic Lift Platform, time incorrectly charged, labor correction submitted
12/19/2021 Total		21,391				
12/26/2021	312.ZZ.14.13700-SCL - U3 Aux Bldg: Specialty Doors, Delay Gates & Hatches	100				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
12/26/2021	320.ZZ.14.78300-SCL - U3 Turbine Bldg: Blowout Panels	100				Cable closure brackets on the panel interfere with each other preventing full closure of panel (ESR 50120320 written for this)
12/26/2021	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	527				Minimal qty to earn for Air Baffles
12/26/2021	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	125				Area / Room closure; Raceway buyoffs;
12/26/2021	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,070				Cable separation/IEEE rework; Repulls
12/26/2021	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	430				Cable separation/IEEE rework; Repulls
12/26/2021	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	800				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
12/26/2021	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	250				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
12/26/2021	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,000				Area / Room closure; Raceway buyoffs;
12/26/2021	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	600				Area / Room closure; Raceway buyoffs;
12/26/2021	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,300				Main Control Room rework, Lighting/Comms conduit buyoffs, Min qty to earn
12/26/2021	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,100				Area / Room closure; Raceway buyoffs;
12/26/2021	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	350				Area / Room closure; Raceway buyoffs;
12/26/2021	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	600				Area / Room closure; Raceway buyoffs; Min Qty to Earn
12/26/2021	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	200				Rework, Room/Area closure & Punchlist items
12/26/2021	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	133				Rework, Room/Area closure & Punchlist items
12/26/2021	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,689				Rework, Room/Area closure & Punchlist items
12/26/2021	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	250				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
12/26/2021	311.ZZ.24.14510-SCL - U3 Contmnt: IRWST Gutter	314				Finishing up PXS-MT-04 gutter; Minimal Qty to earn
12/26/2021 Total		11,938				
1/2/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	100				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
1/2/2022	320.ZZ.14.78300-SCL - U3 Turbine Bldg: Blowout Panels	100				Cable closure brackets on the panel interfere with each other preventing full closure of panel (ESR 50120320 written for this)
1/2/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	573				Minimal qty to earn for Air Baffles
1/2/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	200				Area / Room closure; Raceway buyoffs;
1/2/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	798				Cable separation/IEEE rework; Repulls
1/2/2022	340.ZZ.16.11000-SCL - U3 Annex Bldg: Cable Tray Non Safety	350				Area/ Room Closure; Punchlist items
1/2/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	130				Area/ Room Closure; Punchlist items
1/2/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	450				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
1/2/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	150				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
1/2/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	500				Area/ Room Closure; Punchlist items
1/2/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)					Area / Room closure; Raceway buyoffs;
1/2/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	650				Area / Room closure; Raceway buyoffs;
1/2/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,200				Main Control Room rework, Lighting/Comms conduit buyoffs, Min qty to earn
1/2/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,100				Area / Room closure; Raceway buyoffs;

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
1/2/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	800				Area / Room closure; Raceway buyoffs; Min Qty to Earn
1/2/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	250				Rework, Room/Area closure & Punchlist items
1/2/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	737				Rework, Room/Area closure & Punchlist items
1/2/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	105				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
1/2/2022 Total		8,193				
1/9/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	250				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
1/9/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	537				Minimal qty to earn for Air Baffles
1/9/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	350				Area / Room closure; Raceway buyoffs;
1/9/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,729				Cable seperation/IEEE rework; Repulls
1/9/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,201				Cable seperation/IEEE rework; Repulls
1/9/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,200				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
1/9/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	300				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
1/9/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,200				Area / Room closure; Raceway buyoffs;
1/9/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	700				Area / Room closure; Raceway buyoffs;
1/9/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,700				Main Control Room rework, Lighting/Comms conduit buyoffs, Min qty to earn
1/9/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,600				Area / Room closure; Raceway buyoffs;
1/9/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,100				Area / Room closure; Raceway buyoffs; Min Qty to Earn
1/9/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	50				Rework, Room/Area closure & Punchlist items
1/9/2022	311.ZZ.16.39100-SCL - U3 Contmnt: Field Routed Conduit Support Fabrication (NI3-0287)	200				Area / Room closure; Punchlist items
1/9/2022	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	319				Area / Room closure; Punchlist items
1/9/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	150				Area / Room closure; Punchlist items
1/9/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	150				Area / Room closure; Punchlist items
1/9/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,322				Rework, Room/Area closure & Punchlist items
1/9/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	200				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
1/9/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	150				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
1/9/2022 Total		15,408				
1/16/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	200				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
1/16/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	407				Minimal qty to earn for Air Baffles
1/16/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	250				Area / Room closure; Raceway buyoffs;
1/16/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,956				Cable seperation/IEEE rework; Repulls
1/16/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,588				Cable seperation/IEEE rework; Repulls
1/16/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	415				Area / Room closure; Punchlist items
1/16/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,000				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
1/16/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	600				Cable tray closure/ IEEE barriers, Rework, Min qty to earn; Trend written for IEEE barriers (Site-0133), has not been approved yet
1/16/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	2,074				Area / Room closure; Punchlist items
1/16/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,500				Area / Room closure; Raceway buyoffs;
1/16/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	800				Area / Room closure; Raceway buyoffs;
1/16/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,000				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Min qty to earn
1/16/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,600				Area / Room closure; Raceway buyoffs;
1/16/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	400				Area / Room closure; Raceway buyoffs;
1/16/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,000				Area / Room closure; Raceway buyoffs; Min Qty to Earn
1/16/2022	311.ZZ.16.39100-SCL - U3 Contmnt: Field Routed Conduit Support Fabrication (NI3-0287)	144				Area / Room closure; Punchlist items
1/16/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	200				Area / Room closure; Punchlist items

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
1/16/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	200				Area / Room closure; Punchlist items
1/16/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,503				Rework, Room/Area closure & Punchlist items
1/16/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	247				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
1/16/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	175				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
1/16/2022 Total		19,259				
1/23/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	150				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
1/23/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	252				Minimal qty to earn for Air Baffles
1/23/2022	311.ZZ.42.22320-SCL - U3 Contmnt: Q6-01, RCS Stages 1, 2, 3 ADS Module Set/Post-Set	150				Grating for Q6-01
1/23/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	250				Area / Room closure; Raceway buyoffs;
1/23/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	3,005				Cable seperation/IEEE rework; Repulls
1/23/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	2,568				Cable seperation/IEEE rework; Repulls
1/23/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,000				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
1/23/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	600				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
1/23/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	1,500				Area / Room closure; Punchlist items
1/23/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,000				Area / Room closure; Raceway buyoffs;
1/23/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,100				Area / Room closure; Raceway buyoffs;
1/23/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,000				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Min qty to earn
1/23/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,300				Area / Room closure; Raceway buyoffs;
1/23/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	800				Area / Room closure; Raceway buyoffs;
1/23/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,500				Area / Room closure; Raceway buyoffs; Min Qty to Earn
1/23/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	120				Area / Room closure
1/23/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	100				Area / Room closure
1/23/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	150				Area / Room closure; Punchlist items
1/23/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	150				Area / Room closure; Punchlist items
1/23/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,570				Rework, Room/Area closure & Punchlist items
1/23/2022	340.ZZ.16.58000-SCL - U3 Annex Bldg: Sch Connections & Splices - Special	136				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
1/23/2022 Total		20,401				
1/30/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	150				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
1/30/2022	312.ZZ.14.13700-SCL - U3 Aux Bldg: Specialty Doors, Delay Gates & Hatches	100				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
1/30/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	396				Minimal qty to earn for Air Baffles
1/30/2022	312.ZZ.13.76000-SCL - U3 Aux Bldg: Racks, Bars & Trash Racks, Sluice and Slide Gates, Weirs	320				Reinstall of weirs on the top of Containment.
1/30/2022	311.ZZ.42.22320-SCL - U3 Contmnt: Q6-01, RCS Stages 1, 2, 3 ADS Module Set/Post-Set	175				Grating for Q6-01
1/30/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	400				Area / Room closure; Raceway buyoffs;
1/30/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,914				Cable seperation/IEEE rework; Repulls
1/30/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	2,108				Cable seperation/IEEE rework; Repulls
1/30/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,600				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
1/30/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,000				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
1/30/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	2,000				Area / Room closure; Punchlist items
1/30/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,200				Area / Room closure; Raceway buyoffs;
1/30/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	800				Area / Room closure; Raceway buyoffs;
1/30/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,200				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Min qty to earn
1/30/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,100				Area / Room closure; Raceway buyoffs;
1/30/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,300				Area / Room closure; Raceway buyoffs;
1/30/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,200				Area / Room closure; Raceway buyoffs; Min Qty to Earn
1/30/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	100				Area / Room closure

Vogtle Units 3 & 4
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Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
1/30/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	150				Area / Room closure
1/30/2022	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	250				Area / Room closure; Punchlist items
1/30/2022	312.ZZ.28.72000-SCL - U3 Aux Bldg: Lighting System: Panels	125				Area / Room closure; Punchlist items
1/30/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	200				Area / Room closure; Punchlist items
1/30/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	250				Area / Room closure; Punchlist items
1/30/2022	311.ZZ.28.74000-SCL - U3 Contmnt: Lighting Fixtures-Misc.	80				Area / Room closure; Punchlist items
1/30/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,162				Rework, Room/Area closure & Punchlist items
1/30/2022	312.ZZ.27.51000-SCL - U3 Aux Bldg: HVAC Eqpt & Ductwork - Equipment		200			Added duct supports in Room 12421
1/30/2022 Total		23,280				
2/6/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	120				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
						Minimal qty to earn for Air Baffles
2/6/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	608				Installation of Annulus Seal Enclosure
2/6/2022	313.ZZ.13.11200-SCL - U3 Shield Bldg: Structural Steel: Medium - 18lbs to 79lbs per LF	100				Grating for Q6-01
2/6/2022	311.ZZ.42.22320-SCL - U3 Contmnt: Q6-01, RCS Stages 1, 2, 3 ADS Module Set/Post-Set	125				Area / Room closure; Raceway buyoffs;
2/6/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	300				Cable seperation/IEEE rework; Repulls
2/6/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,206				Cable seperation/IEEE rework; Repulls
2/6/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,910				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
2/6/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,200				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
2/6/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	700				Area / Room closure; Punchlist items
2/6/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	800				Area / Room closure; Raceway buyoffs;
2/6/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,200				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Min qty to earn
2/6/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,400				Area / Room closure; Raceway buyoffs;
2/6/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,400				Area / Room closure; Raceway buyoffs;
2/6/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,000				Area / Room closure; Raceway buyoffs; Min Qty to Earn
2/6/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,000				Area / Room closure
2/6/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	400				Area / Room closure
2/6/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	500				Area / Room closure; Punchlist items
2/6/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	250				Rework, Room/Area closure & Punchlist items
2/6/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,200				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements;
2/6/2022	340.ZZ.16.58000-SCL - U3 Annex Bldg: Sch Connections & Splices - Special	150				COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
2/6/2022	312.ZZ.27.51000-SCL - U3 Aux Bldg: HVAC Eqpt & Ductwork - Equipment		211			Added duct supports in Room 12421
2/6/2022 Total		19,569				
2/13/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	107				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
2/13/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	858				Minimal qty to earn for Air Baffles
2/13/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	560				Area / Room closure; Raceway buyoffs; Lighting design interference
2/13/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,968				Cable seperation/IEEE rework; Repulls
2/13/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	2,091				Cable seperation/IEEE rework; Repulls
2/13/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,760				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
2/13/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,100				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
2/13/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,898				Area / Room closure; Raceway buyoffs;
2/13/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,330				Area / Room closure; Raceway buyoffs;
2/13/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,235				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
						Area / Room closure; Raceway buyoffs;
2/13/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,196				Area / Room closure; Raceway buyoffs;
2/13/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,808				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
2/13/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,060				Area / Room closure
2/13/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	430				Area / Room closure, Punchlist Items, Rework
2/13/2022	311.ZZ.16.39100-SCL - U3 Contmnt: Field Routed Conduit Support Fabrication (NI3-0287)	330				Area / Room closure; Punchlist items; Lighting design interference
2/13/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	480				

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Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
2/13/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	570				Area / Room closure; Punchlist items; Lighting design interference
2/13/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,496				Rework, Room/Area closure & Punchlist items
2/13/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	198				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
2/13/2022	311.AG.15.73000-SCL - U3 Contmnt: AG SB Sppts		451			Installation of Reach rods; Late design added for LARA issues
2/13/2022 Total		26,475				
2/20/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	746				Minimal qty to earn for Air Baffles
2/20/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,955				Cable seperation/IEEE rework; Repulls
2/20/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,854				Cable seperation/IEEE rework; Repulls
2/20/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	805				
2/20/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,705				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
2/20/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	945				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
2/20/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,450				Area / Room closure; Raceway buyoffs;
2/20/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,460				Area / Room closure; Raceway buyoffs;
2/20/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,473				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
2/20/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	952				Area / Room closure; Raceway buyoffs;
2/20/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	2,039				Area / Room closure; Raceway buyoffs;
2/20/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,649				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
2/20/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	360				Area / Room closure
2/20/2022	311.ZZ.16.39100-SCL - U3 Contmnt: Field Routed Conduit Support Fabrication (NI3-0287)	390				Area / Room closure, Punchlist Items, Rework
2/20/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	500				Area / Room closure; Punchlist items; Lighting design interference
2/20/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,834				Rework, Room/Area closure & Punchlist items
2/20/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	130				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
2/20/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	143				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
2/20/2022	311.ZZ.16.51100-SCL - U3 Contmnt: Sched Connections & Splices - 600/1000V - #2 & Smaller	168				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
2/20/2022 Total		26,558				
2/27/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	60				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
2/27/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	732				Minimal qty to earn for Air Baffles
2/27/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,628				Cable seperation/IEEE rework; Repulls
2/27/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	2,063				Cable seperation/IEEE rework; Repulls
2/27/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	760				Area / Room closure
2/27/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,895				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
2/27/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,172				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
2/27/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	870				Area / Room closure; Raceway buyoffs;
2/27/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,130				Area / Room closure; Raceway buyoffs;
2/27/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	990				Area / Room closure; Raceway buyoffs;
2/27/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,595				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
2/27/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,012				Area / Room closure; Raceway buyoffs;
2/27/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,842				Area / Room closure; Raceway buyoffs;
2/27/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,400				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
2/27/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	290				Area / Room closure
2/27/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	537				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
2/27/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,772				Rework, Room/Area closure & Punchlist items
2/27/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	420				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA

Vogtle Units 3 & 4
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Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
2/27/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	130				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
2/27/2022 Total		25,298				
3/6/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	150				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
3/6/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	1,275				Minimal qty to earn for Air Baffles
3/6/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,245				Cable seperation/IEEE rework; Repulls
3/6/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,982				Cable seperation/IEEE rework; Repulls
3/6/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	665				Area / Room closure
3/6/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,829				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
3/6/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,505				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
3/6/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,488				Area / Room closure; Raceway buyoffs;
3/6/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,118				Area / Room closure; Raceway buyoffs;
3/6/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,790				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
3/6/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,800				Area / Room closure; Raceway buyoffs;
3/6/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,450				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
3/6/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	510				Area / Room closure; Punchlist Items
3/6/2022	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	420				Area / Room closure
3/6/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	430				Area / Room closure, Punchlist Items
3/6/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	510				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
3/6/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,693				Rework, Room/Area closure & Punchlist items
3/6/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	653				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
3/6/2022 Total		25,513				
3/13/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	1,361				Minimal qty to earn for Air Baffles
3/13/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,400				Cable seperation/IEEE rework; Repulls
3/13/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,640				Cable seperation/IEEE rework; Repulls
3/13/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	545				Area / Room closure
3/13/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,500				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
3/13/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,750				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
3/13/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	4,500				Area / Room closure; Raceway buyoffs;
3/13/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	980				Area / Room closure; Raceway buyoffs;
3/13/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,050				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
3/13/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,225				Area / Room closure; Raceway buyoffs;
3/13/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,020				Area / Room closure; Raceway buyoffs;
3/13/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,050				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
3/13/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	385				Area / Room closure; Punchlist Items
3/13/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	350				Area / Room closure; Punchlist Items
3/13/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	420				Area / Room closure, Punchlist Items
3/13/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	490				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
3/13/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	2,000				Rework, Room/Area closure & Punchlist items
3/13/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	400				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
3/13/2022 Total		25,066				
3/20/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	150				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
3/20/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	1,050				Minimal qty to earn for Air Baffles
3/20/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,058				Cable seperation/IEEE rework; Repulls
3/20/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,714				Cable seperation/IEEE rework; Repulls
3/20/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	890				Area / Room closure
3/20/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,520				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
3/20/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,550				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
3/20/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,650				Area / Room closure; Raceway buyoffs;
3/20/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,390				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
3/20/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,600				Area / Room closure; Raceway buyoffs;
3/20/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,350				Area / Room closure; Raceway buyoffs;
3/20/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	330				Area / Room closure; Punchlist Items
3/20/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	315				Area / Room closure; Punchlist Items
3/20/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,800				Rework, Room/Area closure & Punchlist items
3/20/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	600				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
3/20/2022 Total		21,967				
3/27/2022	312.ZZ.14.13000-SCL - U3 Aux Bldg: Doors	100				Problems with what is designed and what can be installed. Design discussion between vendor and construction are on-going
3/27/2022	312.ZZ.13.33000-SCL - U3 Aux Bldg: Air Baffle Platework	187				Minimal qty to earn for Air Baffles
3/27/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	2,292				Cable seperation/IEEE rework; Repulls
3/27/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,541				Cable seperation/IEEE rework; Repulls
3/27/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	650				Area / Room closure
3/27/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,710				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
3/27/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,530				Cable tray closure/ IEEE barriers, Rework, Min qty to earn
3/27/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	825				Area / Room closure
3/27/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,500				Area / Room closure; Raceway buyoffs;
3/27/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	575				Area / Room closure; Raceway buyoffs;
3/27/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,350				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
3/27/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	695				Area / Room closure; Raceway buyoffs;
3/27/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,900				Area / Room closure; Raceway buyoffs;
3/27/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,100				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
3/27/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	400				Area / Room closure; Punchlist Items
3/27/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	470				Area / Room closure; Punchlist Items
3/27/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	380				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
3/27/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,500				Rework, Room/Area closure & Punchlist items
3/27/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	530				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
3/27/2022 Total		23,235				
4/3/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	400				Area / Room closure; Punchlist Items
4/3/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,756				Cable seperation/IEEE rework; Repulls
4/3/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,504				Cable seperation/IEEE rework; Repulls
4/3/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	555				Cable seperation; Repulls
4/3/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,600				Cable tray closure/ IEEE barriers, Rework, Min qty to earn;
4/3/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,350				Area / Room closure; Raceway buyoffs;
4/3/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,800				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
4/3/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,080				Area / Room closure; Raceway buyoffs;
4/3/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,120				Area / Room closure; Raceway buyoffs;
4/3/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,550				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
4/3/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	530				Area / Room closure; Punchlist Items
4/3/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	340				Area / Room closure; Punchlist Items
4/3/2022	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	780				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
4/3/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	415				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
4/3/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,930				Rework, Room/Area closure & Punchlist items

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
4/3/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	380				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
4/3/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	120				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
4/3/2022 Total		20,210				
4/10/2022	313.ZZ.13.11100-SCL - U3 Shield Bldg: Structural Steel: Light - Less than 18lbs per LF		549			Removal of brackets per E&DCR APP-1208-GEF-435
4/10/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	707				Cable seperation; Repulls
4/10/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,253				Cable seperation/IEEE rework; Repulls
4/10/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	1,130				Cable seperation/IEEE rework; Repulls
4/10/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	785				Cable seperation; Repulls
4/10/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	750				Area / Room closure; Punchlist Items
4/10/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,150				Cable tray closure; Rework, Min qty to earn;
4/10/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,680				Area / Room closure; Punchlist Items
4/10/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	550				Area / Room closure; Punchlist Items
4/10/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	3,700				Area / Room closure; Raceway buyoffs
4/10/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	550				Area / Room closure; Raceway buyoffs
4/10/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,100				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
4/10/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	850				Area / Room closure; Raceway buyoffs;
4/10/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,560				Area / Room closure; Raceway buyoffs;
4/10/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	600				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
4/10/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	425				Area / Room closure; Punchlist Items
4/10/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	340				Area / Room closure; Punchlist Items
4/10/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	250				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
4/10/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	530				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
4/10/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,350				Rework, Room/Area closure & Punchlist items
4/10/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	390				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
4/10/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	90				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
4/10/2022 Total		21,740				
4/17/2022	313.ZZ.13.11100-SCL - U3 Shield Bldg: Structural Steel: Light - Less than 18lbs per LF		453			Removal of brackets per E&DCR APP-1208-GEF-435
4/17/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	824				Cable seperation; Repulls
4/17/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	599				Cable seperation/IEEE rework; Repulls
4/17/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	1,373				Cable seperation; Repulls
4/17/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	960				Area / Room closure; Punchlist Items
4/17/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,290				Cable tray closure; Rework, Min qty to earn;
4/17/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,050				Area / Room closure; Punchlist Items
4/17/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	2,250				Area / Room closure; Raceway buyoffs
4/17/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	470				Area / Room closure; Raceway buyoffs
4/17/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,700				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
4/17/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	835				Area / Room closure; Raceway buyoffs;
4/17/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,370				Area / Room closure; Raceway buyoffs;
4/17/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	900				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
4/17/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	450				Area / Room closure; Punchlist Items
4/17/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	250				Area / Room closure; Punchlist Items
4/17/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	180				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
4/17/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	360				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
4/17/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,200				Rework, Room/Area closure & Punchlist items

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
4/17/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	270				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
4/17/2022 Total		19,331				
4/24/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	731				Cable seperation; Repulls
4/24/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,485				Cable seperation/IEEE rework; Repulls
4/24/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	883				Cable seperation/IEEE rework; Repulls
4/24/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	553				Cable seperation; Repulls
4/24/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	500				Area / Room closure; Punchlist Items
4/24/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,550				Cable tray closure; Rework, Min qty to earn;
4/24/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,250				Area / Room closure; Punchlist Items
4/24/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	1,150				IEEE Rework
4/24/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,500				Area / Room closure; Raceway buyoffs
4/24/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	470				Area / Room closure; Raceway buyoffs
4/24/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,400				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
4/24/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,740				Area / Room closure; Raceway buyoffs;
4/24/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	900				Area / Room closure; Raceway buyoffs;
4/24/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	530				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
4/24/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	400				Area / Room closure; Punchlist Items
4/24/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	375				Area / Room closure; Punchlist Items
4/24/2022	340.ZZ.28.74000-SCL - U3 Annex Bldg: Lighting Fixtures-Misc.	325				Area / Room closure; Punchlist Items
4/24/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	220				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
4/24/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	420				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
4/24/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,430				Rework, Room/Area closure & Punchlist items
4/24/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	200				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
4/24/2022 Total		21,012				
5/1/2022	340.ZZ.12.56100-SCL - U3 Annex Bldg: Concrete: Joint Preparation	2,006				Sealing and Prepping for VAS Testing
5/1/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	584				Cable seperation; Repulls
5/1/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	907				Cable seperation/IEEE rework; Repulls
5/1/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	408				Cable seperation/IEEE rework; Repulls
5/1/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	201				Cable seperation; Repulls
5/1/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	840				Area / Room closure; Punchlist Items
5/1/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,750				Cable tray closure; Rework, Min qty to earn;
5/1/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,600				Area / Room closure; Punchlist Items
5/1/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	1,300				IEEE Rework
5/1/2022	312.ZZ.16.16300-SCL - U3 Aux Bldg: Complex Cable Tray Sppts	180				Area / Room closure; Punchlist Items
5/1/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,300				Area / Room closure; Raceway buyoffs
5/1/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	900				Area / Room closure; Raceway buyoffs
5/1/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	3,750				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/1/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,700				Area / Room closure; Raceway buyoffs;
5/1/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	725				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/1/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	440				Area / Room closure; Punchlist Items
5/1/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	380				Area / Room closure; Punchlist Items
5/1/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	240				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/1/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	615				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/1/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,320				Rework, Room/Area closure & Punchlist items
5/1/2022	311.ZZ.16.59100-SCL - U3 Contmnt: Sched Connections & Splices - EPA Splices	170				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
5/1/2022 Total		21,316				
5/8/2022	340.ZZ.16.41000-SCL - U3 Annex Bldg: Sch W&C - 600/1000V #8 & Smaller	250				Area / Room closure; Punchlist Items
5/8/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	486				Cable seperation; Repulls
5/8/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,052				Cable seperation/IEEE rework; Repulls
5/8/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	450				Cable seperation; Repulls
5/8/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	900				Area / Room closure; Punchlist Items
5/8/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,050				Cable tray closure; Rework, Min qty to earn;
5/8/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	2,230				Area / Room closure; Punchlist Items
5/8/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	400	771			IEEE Rework; Design Change
5/8/2022	312.ZZ.16.16300-SCL - U3 Aux Bldg: Complex Cable Tray Sppts	215				Area / Room closure; Punchlist Items
5/8/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,500				Area / Room closure; Raceway buyoffs
5/8/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	460				Area / Room closure; Raceway buyoffs
5/8/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,300				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/8/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	850				Area / Room closure; Raceway buyoffs;
5/8/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	990				Area / Room closure; Raceway buyoffs;
5/8/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	570				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/8/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	502				Area / Room closure; Punchlist Items
5/8/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	304				Area / Room closure; Punchlist Items
5/8/2022	340.ZZ.28.97400-SCL - U3 Annex Bldg: Gen Elect Svces: Cable Seals - Roxtec - Gland Disassembly & Reassembly	184				Area / Room closure
5/8/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	380				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/8/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,140				Rework, Room/Area closure & Punchlist items
5/8/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	230				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
5/8/2022 Total		17,443				
5/15/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	282				Cable seperation; Repulls
5/15/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	480				Area / Room closure; Lighting/Comms buyoffs
5/15/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,508				Cable seperation/IEEE rework; Repulls
5/15/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	220				Cable seperation/IEEE rework; Repulls
5/15/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	460				Area / Room closure; Punchlist Items
5/15/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,050				Cable tray closure; Rework, Min qty to earn;
5/15/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	2,500				Area / Room closure; Punchlist Items
5/15/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	1,010				IEEE Rework; Design Change
5/15/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,215				Area / Room closure; Raceway buyoffs
5/15/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	400				Area / Room closure; Raceway buyoffs
5/15/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	2,525				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/15/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,400				Area / Room closure; Raceway buyoffs;
5/15/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	425				Area / Room closure; Raceway buyoffs;
5/15/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	850				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/15/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	400				Area / Room closure; Punchlist Items
5/15/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	350				Area / Room closure; Punchlist Items
5/15/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	240				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/15/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	280				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/15/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	950				Rework, Room/Area closure & Punchlist items
5/15/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	280				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
5/15/2022 Total		17,825				
5/22/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,457				Cable seperation/IEEE rework; Repulls
5/22/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	694				Cable seperation/IEEE rework; Repulls

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
5/22/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	140				Cable seperation rework; Repulls
5/22/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	360				Area / Room closure; Punchlist Items
5/22/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,400				Cable tray closure; Rework
5/22/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	2,300				Area / Room closure; Punchlist Items
5/22/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	190				Area / Room closure
5/22/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	1,200				IEEE Rework; Design Change
5/22/2022	311.ZZ.16.16100-SCL - U3 Contmnt: Cable Tray Sppts	400				Area / Room closure; Punchlist Items
5/22/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	870				Area / Room closure; Raceway buyoffs
5/22/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,750				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/22/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	800				Area / Room closure; Raceway buyoffs;
5/22/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,000				Area / Room closure; Raceway buyoffs;
5/22/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	985				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/22/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	450				Area / Room closure; Punchlist Items
5/22/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	425				Area / Room closure; Punchlist Items
5/22/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	450				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/22/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	950				Rework, Room/Area closure & Punchlist items
5/22/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	240				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
5/22/2022 Total		17,061				
5/29/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	139				Cable seperation rework; Repulls
5/29/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	315				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/29/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,745				Cable seperation/IEEE rework; Repulls
5/29/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	182				Cable seperation/IEEE rework; Repulls
5/29/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,200				Cable tray closure; Rework
5/29/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	2,000				Area / Room closure; Punchlist Items
5/29/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	730				Area / Room closure
5/29/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	915				IEEE Rework; Design Change
5/29/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,300				Area / Room closure; Raceway buyoffs
5/29/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,950				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/29/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,050				Area / Room closure; Raceway buyoffs;
5/29/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	480				Area / Room closure; Raceway buyoffs;
5/29/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,030				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
5/29/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	300				Area / Room closure; Punchlist Items
5/29/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	415				Area / Room closure; Punchlist Items
5/29/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	135				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/29/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	545				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
5/29/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	920				Rework, Room/Area closure & Punchlist items
5/29/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	240				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
5/29/2022 Total		16,591				
6/5/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	190				Cable seperation rework; Repulls
6/5/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	230				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
6/5/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,700				Cable seperation/IEEE rework; Repulls
6/5/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	115				Cable seperation/IEEE rework; Repulls
6/5/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	2,050				Cable tray closure; Rework
6/5/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,100				Area / Room closure; Punchlist Items
6/5/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,150				Area / Room closure
6/5/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	1,050				IEEE Rework; Design Change
6/5/2022	312.ZZ.16.16100-SCL - U3 Aux Bldg: Cable Tray Sppts	116				Area / Room closure; Punchlist Items

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
6/5/2022	311.ZZ.16.16100-SCL - U3 Contmnt: Cable Tray Sppts	165				Area / Room closure; Punchlist Items
6/5/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,150				Area / Room closure; Raceway buyoffs
6/5/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,750				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
6/5/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	525				Area / Room closure; Raceway buyoffs;
6/5/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	925				Area / Room closure; Raceway buyoffs;
6/5/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,150				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
6/5/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	400				Area / Room closure; Punchlist Items
6/5/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	215				Area / Room closure; Punchlist Items
6/5/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	160				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
6/5/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	515				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
6/5/2022	311.ZZ.28.72000-SCL - U3 Contmnt: Lighting System: Panels	150				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
6/5/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	730				Rework, Room/Area closure & Punchlist items
6/5/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	200				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
6/5/2022 Total		15,736				
6/12/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	138				Cable seperation rework; Repulls
6/12/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	340				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
6/12/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,576				Cable seperation/IEEE rework; Repulls
6/12/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	247				Cable seperation/IEEE rework; Repulls
6/12/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	207				Cable seperation rework; Repulls
6/12/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,650				Cable tray closure; Rework
6/12/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	600				Area / Room closure
6/12/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,700				Area / Room closure; Punchlist Items
6/12/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,550				Area / Room closure
6/12/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	910				IEEE Rework; Design Change
6/12/2022	311.ZZ.16.16100-SCL - U3 Contmnt: Cable Tray Sppts	150				Area / Room closure; Punchlist Items
6/12/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,425				Area / Room closure; Raceway buyoffs
6/12/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,300				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
6/12/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	575				Area / Room closure; Raceway buyoffs;
6/12/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	850				Area / Room closure; Raceway buyoffs;
6/12/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	950				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
6/12/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	240				Area / Room closure; Punchlist Items
6/12/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	215				Area / Room closure; Punchlist Items
6/12/2022	312.ZZ.28.73000-SCL - U3 Aux Bldg: Receptacles & Switches	150				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
6/12/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	625				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
6/12/2022	311.ZZ.28.72000-SCL - U3 Contmnt: Lighting System: Panels	160				Area / Room closure, Punchlist Items; Lighting/Comms buyoffs
6/12/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	850				Rework, Room/Area closure & Punchlist items
6/12/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	250				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
6/12/2022 Total		16,658				
6/19/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,332				Cable seperation/IEEE rework; Repulls
6/19/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	498				Cable seperation/IEEE rework; Repulls
6/19/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	163				Cable seperation rework; Repulls
6/19/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,650				Cable tray closure; Rework
6/19/2022	312.ZZ.16.161BM-SCL - U3 Aux Bldg: Modifications to Existing Supports for Barrier Attachment	530				IEEE Rework; Design Change
6/19/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,000				Area / Room closure; Punchlist Items
6/19/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,545				Area / Room closure
6/19/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	1,200				IEEE Rework; Design Change
6/19/2022	311.ZZ.16.16100-SCL - U3 Contmnt: Cable Tray Sppts	250				Area / Room closure; Punchlist Items

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
6/19/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,600				Area / Room closure; Raceway buyoffs
6/19/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,100				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
6/19/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,400				Area / Room closure; Raceway buyoffs;
6/19/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	850				Area / Room closure; Raceway buyoffs;
6/19/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	700				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
6/19/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	375				Area / Room closure; Punchlist Items
6/19/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	450				Area / Room closure; Punchlist Items
6/19/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	915				Rework, Room/Area closure & Punchlist items
6/19/2022	340.ZZ.16.58000-SCL - U3 Annex Bldg: Sch Connections & Splices - Special	130				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
6/19/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	198				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
6/19/2022 Total		15,886				
6/26/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	133				Cable seperation rework; Repulls
6/26/2022	312.ZZ.16.60000-SCL - U3 Aux Bldg: Unsch W & C, and Connections	100				Area / Room closure, Punchlist Items; Lighting/Comms
6/26/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	915				Cable seperation/IEEE rework; Repulls
6/26/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	541				Cable seperation/IEEE rework; Repulls
6/26/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	319				Cable seperation rework; Repulls
6/26/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	1,690				Cable tray closure; Rework
6/26/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	644				Area / Room closure
6/26/2022	312.ZZ.16.161BM-SCL - U3 Aux Bldg: Modifications to Existing Supports for Barrier Attachment	513				IEEE Rework; Design Change
6/26/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,021				Area / Room closure; Punchlist Items
6/26/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,471				Area / Room closure
6/26/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	865				IEEE Rework; Design Change
6/26/2022	311.ZZ.16.16100-SCL - U3 Contmnt: Cable Tray Sppts	200				Area / Room closure; Punchlist Items
6/26/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,370				Area / Room closure; Raceway buyoffs
6/26/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,675				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
6/26/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	950				Area / Room closure; Raceway buyoffs;
6/26/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	1,215				Area / Room closure; Raceway buyoffs;
6/26/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	815				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
6/26/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	589				Area / Room closure; Punchlist Items
6/26/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	1,115				Area / Room closure; Punchlist Items
6/26/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	515				Area / Room closure, Punchlist Items; Lighting/Comms
6/26/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	750				Rework, Room/Area closure & Punchlist items
6/26/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	175				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
6/26/2022 Total		17,582 ⁽²⁾				
7/3/2022	340.ZZ.16.63000-SCL - U3 Annex Bldg: Grounding	250				Area / Room closure; Punchlist Items
7/3/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,295				Cable seperation/IEEE rework; Repulls
7/3/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	436				Cable seperation/IEEE rework; Repulls
7/3/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	137				Cable seperation rework; Repulls
7/3/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	75				Cable tray closure; Rework
7/3/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	75				Area / Room closure
7/3/2022	312.ZZ.16.161BM-SCL - U3 Aux Bldg: Modifications to Existing Supports for Barrier Attachment	543				IEEE Rework; Design Change
7/3/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	1,015				Area / Room closure; Punchlist Items
7/3/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,295				Area / Room closure
7/3/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	1,030				IEEE Rework; Design Change
7/3/2022	311.ZZ.16.16100-SCL - U3 Contmnt: Cable Tray Sppts	150				Area / Room closure; Punchlist Items
7/3/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,549				Area / Room closure; Raceway buyoffs

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
7/3/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,829				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/3/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,515				Area / Room closure; Raceway buyoffs;
7/3/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	925				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/3/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	490				Area / Room closure; Punchlist Items
7/3/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	700				Area / Room closure; Punchlist Items
7/3/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	115				Area / Room closure, Punchlist Items; Lighting/Comms
7/3/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	800				Rework, Room/Area closure & Punchlist items
7/3/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	190				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
7/3/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	125				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
7/3/2022	311.ZZ.16.58000-SCL - U3 Contmnt: Sched Connections & Splices - Special	125				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
7/3/2022 Total		14,664				
7/10/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	1,084				Cable seperation/IEEE rework; Repulls
7/10/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	175				Cable seperation/IEEE rework; Repulls
7/10/2022	340.ZZ.16.17000-SCL - U3 Annex Bldg: Cable Tray Covers	146				Area / Room closure
7/10/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	448				Cable tray closure; Rework
7/10/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	557				Area / Room closure
7/10/2022	312.ZZ.16.161BM-SCL - U3 Aux Bldg: Modifications to Existing Supports for Barrier Attachment	539				IEEE Rework; Design Change
7/10/2022	312.ZZ.16.110BF-SCL - U3 Aux Bldg: Fabrication of Sheet Metal Barrier		197			IEEE Rework
7/10/2022	312.ZZ.16.110BO-SCL - U3 Aux Bldg: Installation of Sheet Metal Barrier		338			IEEE Rework
7/10/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	691				Area / Room closure; Punchlist Items
7/10/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	916				Area / Room closure
7/10/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	642				IEEE Rework; Design Change
7/10/2022	311.ZZ.16.16100-SCL - U3 Contmnt: Cable Tray Sppts	182				Area / Room closure; Punchlist Items
7/10/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	303				Area / Room closure; Raceway buyoffs
7/10/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	920				Area / Room closure; Raceway buyoffs
7/10/2022	312.ZZ.16.2211M-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	118				Area / Room closure; Punchlist Items; Raceway buyoffs
7/10/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,571				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/10/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,217				Area / Room closure; Raceway buyoffs;
7/10/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	158				Area / Room closure; Punchlist Items; Raceway buyoffs
7/10/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	824				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/10/2022	312.ZZ.16.29000-SCL - U3 Aux Bldg: Conduit Sppts - Scheduled	280				Area / Room closure; Punchlist Items
7/10/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	996				Area / Room closure; Punchlist Items
7/10/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	167				Area / Room closure, Punchlist Items; Lighting/Comms
7/10/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	545				Rework, Room/Area closure & Punchlist items
7/10/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	159				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
7/10/2022	312.ZZ.16.58000-SCL - U3 Aux Bldg: Sched Connections & Splices - Special	113				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
7/10/2022	312.ZZ.12.32100-SCL - U3 Aux Bldg: Rebar: Walls					Mischarge to Rebar. Hours were meant to be for Unsch Conduit in Containment building. Labor Correction submitted.
7/10/2022 Total		12,749 ⁽²⁾				
7/17/2022	340.ZZ.16.49001-SCL - U3 Annex Bldg: Cable Separation Rework Issues	135				Cable seperation; Repulls
7/17/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	954				Cable seperation/IEEE rework; Repulls
7/17/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	144				Cable seperation/IEEE rework; Repulls
7/17/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	318				Cable seperation; Repulls
7/17/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	930				Cable tray closure; Rework

Vogtle Units 3 & 4
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Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
7/17/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	950				Area / Room closure
7/17/2022	312.ZZ.16.161BM-SCL - U3 Aux Bldg: Modifications to Existing Supports for Barrier Attachment	300				IEEE Rework; Design Change
7/17/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	750				Area / Room closure; Punchlist Items
7/17/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,662				Area / Room closure
7/17/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	575				IEEE Rework; Design Change
7/17/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	665				Area / Room closure; Raceway buyoffs
7/17/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,400				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/17/2022	311.ZZ.16.2211M-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Model)	875				Area / Room closure; Punchlist Items; Raceway buyoffs
7/17/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,300				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/17/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	1,025				Area / Room closure; Punchlist Items
7/17/2022	312.ZZ.28.72000-SCL - U3 Aux Bldg: Lighting System: Panels	390				Area / Room closure, Punchlist Items; Lighting/Comms
7/17/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	150				Area / Room closure, Punchlist Items; Lighting/Comms
7/17/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	750				Rework, Room/Area closure & Punchlist items
7/17/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	240				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
7/17/2022 Total		13,513				
7/24/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	803				Cable seperation/IEEE rework; Repulls
7/24/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	120				Cable seperation/IEEE rework; Repulls
7/24/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	353				Cable seperation; Repulls
7/24/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	800				Cable tray closure; Rework
7/24/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	1,300				Area / Room closure
7/24/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	2,250				Area / Room closure
7/24/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,200				Area / Room closure; Raceway buyoffs
7/24/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,485				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/24/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,035				Area / Room closure; Raceway buyoffs
7/24/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,080				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/24/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	1,351				Area / Room closure; Punchlist Items
7/24/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	450				Area / Room closure, Punchlist Items; Lighting/Comms
7/24/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	870				Rework, Room/Area closure & Punchlist items
7/24/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	225				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
7/24/2022 Total		13,322				
7/31/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	716				Cable seperation/IEEE rework; Repulls
7/31/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	246				Cable seperation/IEEE rework; Repulls
7/31/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	250				Cable seperation; Repulls
7/31/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	900				Cable tray closure; Rework
7/31/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	1,500				Area / Room closure
7/31/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	300				Area / Room closure; Punchlist Items
7/31/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,400				Area / Room closure
7/31/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	440				IEEE Rework; Design Change
7/31/2022	340.ZZ.16.32100-SCL - U3 Annex Bldg: Conduit, Unsch, AG, RGS	325				Area / Room closure; Raceway buyoffs
7/31/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	840				Area / Room closure; Raceway buyoffs
7/31/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,140				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/31/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	674				Area / Room closure; Punchlist Items
7/31/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,450				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
7/31/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	1,000				Area / Room closure; Punchlist Items
7/31/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	450				Area / Room closure, Punchlist Items; Lighting/Comms
7/31/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	825				Rework, Room/Area closure & Punchlist items
7/31/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	150				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
7/31/2022 Total		12,606				
8/7/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	298		-		Cable seperation/IEEE rework; Repulls
8/7/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	643		-		Cable seperation/IEEE rework; Repulls
8/7/2022	312.ZZ.16.11000-SCL - U3 Aux Bldg: Cable Tray Non Safety	430				Cable tray closure; Rework
8/7/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	1,659				Area / Room closure
8/7/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,338				Area / Room closure
8/7/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	490				IEEE Rework; Design Change
8/7/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,092				Area / Room closure; Raceway buyoffs
8/7/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,550				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
8/7/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	570				Area / Room closure; Punchlist Items
8/7/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,020				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
8/7/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	1,051				Area / Room closure; Punchlist Items
8/7/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	475				Area / Room closure, Punchlist Items; Lighting/Comms
8/7/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	1,000				Rework, Room/Area closure & Punchlist items
8/7/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	150				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
8/7/2022 Total		11,766				
8/14/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	574				Cable seperation/IEEE rework; Repulls
8/14/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	400				Cable seperation/IEEE rework; Repulls
8/14/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	1,800				Area / Room closure
8/14/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,450				Area / Room closure
8/14/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	440				IEEE Rework; Design Change
8/14/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	740				Area / Room closure; Raceway buyoffs
8/14/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	1,060				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
8/14/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	1,115				Area / Room closure; Punchlist Items
8/14/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,450				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
8/14/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	945				Area / Room closure; Punchlist Items
8/14/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	250				Area / Room closure, Punchlist Items; Lighting/Comms
8/14/2022	311.ZZ.28.74000-SCL - U3 Contmnt: Lighting Fixtures-Misc.	640				Area / Room closure, Punchlist Items; Lighting/Comms
8/14/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	630				Rework, Room/Area closure & Punchlist items
8/14/2022 Total		11,494				
8/21/2022	340.ZZ.13.31000-SCL - U3 Annex Bldg: Misc Steel		654			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope
8/21/2022	320.ZZ.13.31000-SCL - U3 Turbine Bldg: Misc Steel		691			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope
8/21/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	425				Cable seperation/IEEE rework; Repulls
8/21/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	881				Area / Room closure
8/21/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,527				Area / Room closure
8/21/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	425				IEEE Rework; Design Change
8/21/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	692				Area / Room closure; Raceway buyoffs
8/21/2022	312.ZZ.16.32100-SCL - U3 Aux Bldg: Conduit, Unsch, AG, RGS	509				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
8/21/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	911				Area / Room closure; Punchlist Items
8/21/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	1,825				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
8/21/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	1,063				Area / Room closure; Punchlist Items
8/21/2022	311.ZZ.28.74000-SCL - U3 Contmnt: Lighting Fixtures-Misc.	585				Area / Room closure, Punchlist Items; Lighting/Comms
8/21/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	761				Rework, Room/Area closure & Punchlist items
8/21/2022 Total		9,605 ⁽²⁾				
8/28/2022	340.ZZ.13.31000-SCL - U3 Annex Bldg: Misc Steel		966			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope

Vogtle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
8/28/2022	320.ZZ.13.31000-SCL - U3 Turbine Bldg: Misc Steel		502			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope
8/28/2022	311.ZZ.16.60000-SCL - U3 Contmnt: Unsch W & C, and Connections	868				Area / Room closure; Punchlist Items
8/28/2022	312.ZZ.16.17000-SCL - U3 Aux Bldg: Cable Tray Covers	539				Area / Room closure; Punchlist Items
8/28/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	2,042				Area / Room closure; Punchlist Items
8/28/2022	320.ZZ.16.17000-SCL - U3 Turbine Bldg: Cable Tray Covers	467				Area / Room closure; Punchlist Items
8/28/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	481				Area / Room closure; Raceway buyoffs
8/28/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	653				Area / Room closure; Punchlist Items
8/28/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,404				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
8/28/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	600				Area / Room closure; Punchlist Items
8/28/2022	312.ZZ.28.74000-SCL - U3 Aux Bldg: Lighting Fixtures-Misc.	168				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs
8/28/2022	311.ZZ.28.72000-SCL - U3 Contmnt: Lighting System: Panels	596				Area / Room closure, Punchlist Items
8/28/2022	311.ZZ.28.74000-SCL - U3 Contmnt: Lighting Fixtures-Misc.	1,137				Area / Room closure, Punchlist Items; Lighting/Comms
8/28/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	840				Rework, Room/Area closure & Punchlist items
8/28/2022 Total		10,794 ⁽²⁾				
9/4/2022	340.ZZ.13.31000-SCL - U3 Annex Bldg: Misc Steel		591			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope
9/4/2022	320.ZZ.13.31000-SCL - U3 Turbine Bldg: Misc Steel		411			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope
9/4/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,200				Area / Room closure; Punchlist Items
9/4/2022	312.ZZ.16.2211F-SCL - U3 Aux Bldg: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	375				Area / Room closure; Raceway buyoffs
9/4/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	450				Area / Room closure; Punchlist Items
9/4/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,000				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
9/4/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	862				Area / Room closure; Punchlist Items
9/4/2022	311.ZZ.28.74000-SCL - U3 Contmnt: Lighting Fixtures-Misc.	596				Area / Room closure, Punchlist Items; Lighting/Comms
9/4/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	199				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
9/4/2022 Total		5,683 ⁽²⁾				
9/11/2022	320.ZZ.13.31000-SCL - U3 Turbine Bldg: Misc Steel		516			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope
9/11/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	142				Cable Separation/Rework
9/11/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	1,100				Area / Room closure; Punchlist Items
9/11/2022	320.ZZ.16.17000-SCL - U3 Turbine Bldg: Cable Tray Covers	475				Area / Room closure; Punchlist Items
9/11/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	652				Area / Room closure; Punchlist Items
9/11/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,300				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
9/11/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	750				Area / Room closure; Punchlist Items
9/11/2022	311.ZZ.28.74000-SCL - U3 Contmnt: Lighting Fixtures-Misc.	536				Area / Room closure, Punchlist Items; Lighting/Comms
9/11/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	255				Area / Room closure, Punchlist Items; Lighting/Comms
9/11/2022	312.ZZ.16.51100-SCL - U3 Aux Bldg: Sched Connections & Splices - 600/1000V - #2 & Smaller	270				Constr Rework - WP closure rework / punchlist items; Emergent Scope - increased craft hours due to EEWP and LOTO requirements; COAX cable rework, De-term and Re-term with Min Qty to earn, CWA
9/11/2022 Total		6,481 ⁽²⁾				
9/18/2022	320.ZZ.13.31000-SCL - U3 Turbine Bldg: Misc Steel		543			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope
9/18/2022	312.ZZ.16.49001-SCL - U3 Aux Bldg: Cable Separation Rework Issues	127				Cable seperation; Repulls
9/18/2022	320.ZZ.16.49001-SCL - U3 Turbine Bldg: Cable Separation Rework Issues	165				Cable seperation; Repulls
9/18/2022	311.ZZ.16.11000-SCL - U3 Contmnt: Cable Tray Non Safety	131				Area / Room closure; Punchlist Items
9/18/2022	311.ZZ.16.17000-SCL - U3 Contmnt: Cable Tray Covers	437				Area / Room closure; Punchlist Items
9/18/2022	311.ZZ.16.161BM-SCL - U3 Contmnt: Modifications to Existing Supports for Barrier Attachment	346				Area / Room closure; Punchlist Items
9/18/2022	320.ZZ.16.17000-SCL - U3 Turbine Bldg: Cable Tray Covers	866				Area / Room closure; Punchlist Items
9/18/2022	311.ZZ.16.2211F-SCL - U3 Contmnt: Conduit, Sch, AG, RGS, 3/4" - 2" (Field Run)	583				Area / Room closure; Punchlist Items
9/18/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,867				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
9/18/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	889				Area / Room closure; Punchlist Items

Vogle Units 3 & 4
Prudence Review & Analysis
Bechtel Categorization Of Unit 3 Spent Hours From 9/26/21 - 9/25/22

Week Ending	Description	Constr Rework / Emergent Scope	Added Scope Change to be Trended	Mischarged to Directs	Qty Verification Required	Comments/Workfronts
9/18/2022	311.ZZ.28.74000-SCL - U3 Contmnt: Lighting Fixtures-Misc.	789				Area / Room closure, Punchlist Items; Lighting/Comms
9/18/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	415				Area / Room closure, Punchlist Items; Lighting/Comms
9/18/2022 Total		7,614				
9/25/2022	320.ZZ.13.31000-SCL - U3 Turbine Bldg: Misc Steel		739			Architectural Finishes. Scope transferred to RCC from Vulcan; Trend being drafted to capture entire scope
9/25/2022	311.ZZ.16.60000-SCL - U3 Contmnt: Unsch W & C, and Connections	250				Punchlist items
9/25/2022	311.ZZ.16.49001-SCL - U3 Contmnt Bldg: Cable Separation Rework Issues	220				Cable Seperation; Rework
9/25/2022	320.ZZ.16.17000-SCL - U3 Turbine Bldg: Cable Tray Covers	1,200				Area / Room closure; Punchlist Items
9/25/2022	311.ZZ.16.32100-SCL - U3 Contmnt: Conduit, Unsch, AG, RGS	2,500				Area / Room closure, Punchlist Items; Lighting/Comms conduit buyoffs, Lighting design interference, Min qty to earn
9/25/2022	311.ZZ.16.29000-SCL - U3 Contmnt: Conduit Sppts - Scheduled	800				Area / Room closure; Punchlist Items
9/25/2022	311.ZZ.28.72000-SCL - U3 Contmnt: Lighting System: Panels	150				Punchlist items
9/25/2022	311.ZZ.28.74000-SCL - U3 Contmnt: Lighting Fixtures-Misc.	750				Area / Room closure, Punchlist Items
9/25/2022	320.ZZ.28.73000-SCL - U3 Turbine Bldg: Receptacles & Switches	225				Area / Room closure, Punchlist Items
9/25/2022	320.ZZ.17.32001-SCL - U3 Turbine Bldg: Tubing Damage Rework	204				Rework
9/25/2022 Total		6,299				
Total		972,918				

Notes:
(1) HKA added these line items to reconcile the detailed breakout and summary.
(2) Weekly total adjusted to match source document.

Source:
Bechtel Scorecard reviews for week ending 9/26/21 through week ending 9/25/22. Hours represent unadjusted spent hours.

**Attachment H has been redacted in its
entirety**

Vogle Units 3 & 4
Prudence Review & Analysis
RCC Apprentice to Journeyman Ratio (October 2017 To June 2023)

Attachment I

Redacted

Vogtle Unit 3 & 4

Attachment I

Prudence Review & Analysis

RCC Apprentice to Journeyman Ratio By Week (October 2017 To June 2023)

Date	Apprentice to Journeyman %
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Redacted

10/29/17
11/05/17
11/12/17
11/19/17
11/26/17
12/03/17
12/10/17
12/17/17
12/24/17
12/31/17
01/07/18
01/14/18
01/21/18
01/28/18
02/04/18
02/11/18
02/18/18
02/25/18
03/04/18
03/11/18
03/18/18
03/25/18
04/01/18
04/08/18
04/15/18
04/22/18
04/29/18
05/06/18
05/13/18
05/20/18
05/27/18
06/03/18
06/10/18
06/17/18
06/24/18
07/01/18
07/08/18
07/15/18
07/22/18
07/29/18
08/05/18
08/12/18
08/19/18
08/26/18
09/02/18
09/09/18
09/16/18
09/23/18
09/30/18
10/07/18
10/14/18
10/21/18

Vogtle Unit 3 & 4

Attachment I

Prudence Review & Analysis

RCC Apprentice to Journeyman Ratio By Week (October 2017 To June 2023)

Date	Apprentice to Journeyman %
10/28/18	Redacted
11/04/18	
11/11/18	
11/18/18	
11/25/18	
12/02/18	
12/09/18	
12/16/18	
12/23/18	
12/30/18	
01/06/19	
01/13/19	
01/20/19	
01/27/19	
02/03/19	
02/10/19	
02/17/19	
02/24/19	
03/03/19	
03/10/19	
03/17/19	
03/24/19	
03/31/19	
04/07/19	
04/14/19	
04/21/19	
04/28/19	
05/05/19	
05/12/19	
05/19/19	
05/26/19	
06/02/19	
06/09/19	
06/16/19	
06/23/19	
06/30/19	
07/07/19	
07/14/19	
07/21/19	
07/28/19	
08/04/19	
08/11/19	
08/18/19	
08/25/19	
09/01/19	
09/08/19	
09/15/19	
09/22/19	
09/29/19	
10/06/19	
10/13/19	
10/20/19	

Vogtle Unit 3 & 4

Attachment I

Prudence Review & Analysis

RCC Apprentice to Journeyman Ratio By Week (October 2017 To June 2023)

Date	Apprentice to Journeyman %
10/27/19	Redacted
11/03/19	
11/10/19	
11/17/19	
11/24/19	
12/01/19	
12/08/19	
12/15/19	
12/22/19	
12/29/19	
01/05/20	
01/12/20	
01/19/20	
01/26/20	
02/02/20	
02/09/20	
02/16/20	
02/23/20	
03/01/20	
03/08/20	
03/15/20	
03/22/20	
03/29/20	
04/05/20	
04/12/20	
04/19/20	
04/26/20	
05/03/20	
05/10/20	
05/17/20	
05/24/20	
05/31/20	
06/07/20	
06/14/20	
06/21/20	
06/28/20	
07/05/20	
07/12/20	
07/19/20	
07/26/20	
08/02/20	(1)
08/09/20	(1)
08/16/20	(1)
08/23/20	(1)
08/30/20	(1)
09/06/20	(1)
09/13/20	(1)
09/20/20	(1)
09/27/20	(1)

Vogtle Unit 3 & 4

Attachment I

Prudence Review & Analysis

RCC Apprentice to Journeyman Ratio By Week (October 2017 To June 2023)

Date	Apprentice to Journeyman %
10/04/20	(1)
10/11/20	(1)
10/18/20	(1)
10/25/20	(1)
11/01/20	(1)
11/08/20	(1)
11/15/20	(1)
11/22/20	(1)
11/29/20	(1)
12/06/20	(1)
12/13/20	(1)
12/20/20	(1)
12/27/20	(1)
01/03/21	
01/10/21	
01/17/21	
01/24/21	
01/31/21	
02/07/21	
02/14/21	
02/21/21	
02/28/21	
03/07/21	
03/08/21	
03/14/21	
03/21/21	
04/04/21	
04/11/21	
04/18/21	
04/25/21	
05/02/21	
05/09/21	
05/16/21	
05/23/21	
05/30/21	
06/06/21	
06/13/21	
06/20/21	
06/27/21	
07/04/21	
07/11/21	
07/18/21	
07/25/21	
08/01/21	
08/08/21	
08/15/21	
08/22/21	

Redacted

Vogtle Unit 3 & 4

Attachment I

Prudence Review & Analysis

RCC Apprentice to Journeyman Ratio By Week (October 2017 To June 2023)

Date	Apprentice to Journeyman %
08/29/21	Redacted
09/05/21	
09/12/21	
09/19/21	
09/26/21	
10/03/21	
10/10/21	
10/17/21	
10/24/21	
10/31/21	
11/07/21	
11/14/21	
11/21/21	
11/28/21	
12/05/21	
12/12/21	
12/19/21	
12/26/21	
01/02/22	
01/09/22	
01/16/22	
01/23/22	
01/30/22	
02/06/22	
02/13/22	
02/20/22	
02/27/22	
03/06/22	
03/13/22	
03/20/22	
03/27/22	
04/03/22	
04/10/22	
04/17/22	
04/24/22	
05/01/22	
05/08/22	
05/15/22	
05/22/22	
05/29/22	
06/05/22	
06/12/22	
06/19/22	
06/26/22	
07/03/22	
07/10/22	
07/17/22	
07/24/22	
07/31/22	
08/07/22	
08/14/22	
08/21/22	

Vogtle Unit 3 & 4

Attachment I

Prudence Review & Analysis

RCC Apprentice to Journeyman Ratio By Week (October 2017 To June 2023)

Date	Apprentice to Journeyman %
08/28/22	Redacted
09/04/22	
09/11/22	
09/18/22	
09/25/22	
10/02/22	
10/09/22	
10/16/22	
10/23/22	
10/30/22	
11/06/22	
11/13/22	
11/20/22	
11/27/22	
12/04/22	
12/11/22	
12/18/22	
12/25/22	
01/01/23	
01/08/23	
01/15/23	
01/22/23	
01/29/23	
02/05/23	
02/12/23	
02/19/23	
02/26/23	
03/05/23	
03/12/23	
03/19/23	
03/26/23	
04/02/23	
04/09/23	
04/16/23	
04/23/23	
04/30/23	
05/07/23	
05/14/23	
05/21/23	
05/28/23	
06/04/23	

Note:

(1) The source file did not provide data for this week.

Source:

RCC Apprentice Ratio By Week.XLSX