

SOUTH CAROLINA ELECTRIC & GAS COMPANY
OFFICE OF REGULATORY STAFF'S FIRST AUDIT INFORMATION REQUEST
SCE&G Activities and Events Related to the Intention to Abandon V.C. Summer
for Units 2 & 3 site in Jenkinsville, SC

REQUEST 1-28:

Please provide a list of all equipment that has been sold or disposed of since the abandonment decision and the reason for the action.

RESPONSE 1-28:

As of November 8, 2017, SCE&G has not sold or disposed of any equipment since the abandonment decision.

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REQUEST 1-29:

Please provide a list of remaining equipment deliveries and the cost of each item.

RESPONSE 1-29:

SCE&G is not in possession of a complete list of remaining equipment deliveries including the cost of each item. Notwithstanding the foregoing, attached to this response in a partial list of open purchase orders that Westinghouse has not rejected in its Bankruptcy proceeding.

| Description | VCS Unit 2 | | | VCS Unit 3 | | | PO Commitments | | |
|---|------------|---------|---------|-----------------|----------------------|------------------|----------------|--|--|
| | Shipped | Shipped | Shipped | Total Committed | Commitments Received | Open Commitments | | | |
| Tube, Fuel Transfer, 30 in ID - Unit 2 | partial | partial | partial | 352,575 | 223,974 | 128,601 | | | |
| Viv, 3Way Sol,1", BR | partial | partial | partial | 19,184 | 11,517 | 7,667 | | | |
| RCP Cart - SCANA | no | no | no | 390,062 | 390,062 | - | | | |
| V52, Heat Exchanger, RNS, ME1C | partial | partial | partial | 1,858,780 | 1,858,778 | 2 | | | |
| Buss Duct | no | no | no | 15,237,013 | 280,149 | 14,956,864 | | | |
| Restrictor,Flow,Guide Tube | no | no | no | 1,125,283 | 1,125,283 | - | | | |
| VC Summer DBO1 Cabinets | yes | yes | yes | 2,800 | 1,783 | 1,017 | | | |
| V52 DCIS CABINETS TO SITE (4) | yes | N/A | N/A | 3,310 | 3,099 | 211 | | | |
| Welded Hoop Ties at Wall 11 | N/A | N/A | no | 135,519 | 107,518 | 28,000 | | | |
| Fabricated Structural Steel Materials | N/A | partial | partial | 150,724 | 91,474 | 59,250 | | | |
| Shop Fabricated ASME III Piping | partial | N/A | N/A | Post Filling PO | | | | | |
| Shop Fabricated ASME B31.1 Piping | N/A | partial | partial | 10,085,434 | 8,545 | 10,076,889 | | | |
| Shop Fabricated ASME B31.1 Piping | partial | N/A | N/A | 5,661,256 | 300,578 | 5,360,678 | | | |
| Pipe Sleeves | N/A | partial | partial | 7,432 | - | 7,432 | | | |
| Fabrication of R365 Module | N/A | N/A | no | 214,443 | - | 214,443 | | | |
| Equipment Module Piping | partial | partial | partial | 4,202 | 4,202 | - | | | |
| CWS, RWS and WWS Above Ground Piping | N/A | partial | partial | 100,700 | - | 100,700 | | | |
| Shop Fabricated ASME III Piping | N/A | partial | partial | 13,215,128 | 417,721 | 12,797,407 | | | |
| Shop Fabricated ASME III Piping | partial | N/A | N/A | 9,713,645 | 1,045,639 | 8,668,006 | | | |
| Carbon Steel Pipe Spools | partial | N/A | N/A | 97,860 | - | 97,860 | | | |
| Stainless Steel Pipe Spools | partial | N/A | N/A | 71,001 | - | 71,001 | | | |
| Pipe Sleeves | partial | partial | partial | 109,070 | 1,038 | 108,032 | | | |
| Pipe Spools | partial | partial | partial | 88,742 | - | 88,742 | | | |
| Pipe Spools | N/A | N/A | partial | 69,304 | - | 69,304 | | | |
| CB&I LAURENS 976732 OP TRANS | N/A | N/A | N/A | 1,200,000 | - | 1,200,000 | | | |
| V52 Invt Screens A & B | no | no | no | 5,352,034 | 5,342,034 | 10,000 | | | |
| V52 CCI Field Services Support -MY03 | N/A | N/A | N/A | 350,000 | 189,776 | 160,224 | | | |
| Viv,Glb,12"x8",Cl900,AS-A-O,BW,S-80 | partial | partial | partial | 1,692,982 | 1,686,981 | 6,000 | | | |
| APP-PV59-ZDD-103 | partial | partial | partial | 28,200 | 28,200 | - | | | |
| **HOT HOT** Tracstar T28 Welder, pipe stands, inserts, hose e | no | no | no | 4,700 | 2,883 | 1,817 | | | |
| T412 WELDER - FUSION INSERT- Hoses - Cords FOR SITE LAYOU | no | no | no | 5,550 | 5,350 | 200 | | | |
| Rental Equipment - Consolidated Pipe | no | no | no | 50,625 | 38,339 | 12,286 | | | |
| ASME B31.1 Non-Safety Related Piping and Fittings (D-RTNSS) | partial | N/A | N/A | 88,708 | 84,256 | 4,452 | | | |
| Isolation Gaskets for Dielectric Flanges | partial | N/A | N/A | 15,025 | 13,482 | 1,543 | | | |
| Structural Steel Materials | partial | N/A | N/A | 11,455 | 10,099 | 1,356 | | | |
| Safety-Related Embed Plates and Miscellaneous Steel | N/A | N/A | no | 347,217 | 257,322 | 89,894 | | | |
| BViv 2' 1500SS ManOp BW 160 Cl 2 CIV LC | partial | partial | partial | 1,994,630 | 1,898,205 | 96,425 | | | |
| Viv,Chk,1",Cl1500INT,CS,Man,SKW | partial | partial | partial | 62,372 | 62,372 | - | | | |
| Unit 2 Annex Cable Tray Supports | partial | N/A | N/A | 64,727 | 61,370 | 3,357 | | | |
| Electrical Conduit and Junction Box Supports | partial | N/A | N/A | 230,008 | 147,989 | 82,009 | | | |
| Electrical Conduit and Junction Box Supports | N/A | N/A | partial | 226,911 | 120,429 | 106,482 | | | |
| Seismic Category I Cable Tray Supports | no | N/A | N/A | 733,594 | 733,589 | 5 | | | |
| Seismic Category I Cable Tray Supports | N/A | N/A | no | 737,561 | 733,591 | 3,970 | | | |
| Air Handling Units | no | N/A | N/A | 70,875 | 68,325 | 2,550 | | | |
| M510 Air Handling Units | N/A | N/A | no | 118,301 | 68,325 | 49,976 | | | |
| FTD1-V2-533-ASY | partial | partial | partial | 18,000 | 9,000 | 9,000 | | | |

| | | | | | |
|--|---------|---------|-----------|-----------|-----------|
| PSViv 4", 1500, 1205 BW, CI, 1 N-Act | partial | partial | 718,708 | 678,852 | 39,856 |
| FWCHViv 20" 800 | partial | partial | 461,243 | 322,165 | 139,078 |
| Mechanical Splices Blanket Purchase Agreement Release #1 | partial | N/A | 662,443 | 491,653 | 170,790 |
| Blanket Purchase Agreement Release #3 | partial | N/A | 173,158 | 172,950 | 208 |
| VC Summer EHX Installation tool for RCP | no | no | 23,750 | 23,750 | - |
| Tool, X-Brace Lifting, Fuel Rack Install | no | no | 357,427 | 339,556 | 17,871 |
| V52 Design, Mfg., & Documentation Cost | partial | partial | 1,248,312 | 1,248,312 | - |
| EFS ESSOW | N/A | N/A | 8,011,932 | 4,399,680 | 3,612,252 |
| Emergency Preparedness Communication Systems (EFS) Integr | no | N/A | 147,068 | 141,997 | 5,072 |
| U-Boats and Pipe Straps | partial | partial | 2,107 | 1,912 | 195 |
| Unit 3 Turbine Building Foundation SIP Forms | N/A | yes | 239,635 | 196,711 | 42,924 |
| Parts and Service for Company Owned Equip. | N/A | N/A | 19,182 | 19,182 | - |
| MH40 Hoists and Trolleys | No | No | 48,180 | 46,872 | 1,308 |
| MH40 Hoists and Trolleys | No | No | 47,505 | 46,872 | 633 |
| Penetration Assy, Elec, Non-1E, I&C, P03 | partial | no | 9,139,418 | 7,481,905 | 1,657,513 |
| PV39-ZOD-103 | partial | partial | 150,949 | 150,949 | - |
| PV39-ZOD-103 | N/A | no | 150,949 | 150,949 | - |
| V52 High Pressure Filters | partial | partial | 387,976 | 381,496 | 6,480 |
| Viv, AuxRel; 2"x3", CL150, SS, S-A, FI | partial | partial | 98,257 | 98,380 | (123) |
| Vacuum Breaker Vivs, 1", CL600, SST, FI | partial | partial | 251,608 | 251,608 | - |
| RV/LR, Complete - Vogtle #3 | N/A | partial | 4,501,715 | 2,303,215 | 2,198,500 |
| Technical and Quality Requirements | N/A | N/A | 2,232,620 | 2,232,620 | - |
| Gate Assy, Weir, Fuel Pool, Trans Canal | no | no | 2,052,765 | 1,266,476 | 786,289 |
| V52 Design, Mfg., & Documentation Cost | partial | partial | 811,970 | 452,320 | 359,650 |
| V52 Design, Mfg., & Documentation Cost | partial | partial | 374,452 | 264,404 | 110,048 |
| Viv, Gt; 3" CL1500INT, SS, Man, BW, S-XXS | yes | no | 4,007,363 | 3,158,308 | 849,055 |
| Viv, Glib; 2", CL300, AS, M-D | partial | partial | 899,254 | 797,964 | 101,291 |
| Penetration, Bellows Exp. Joint, SCS, P23 | yes | no | 1,050,740 | 988,548 | 62,192 |
| Non-Safety Related Dampers | no | N/A | 599,331 | 363,815 | 235,516 |
| Viv, Mdl; 1", CL1500INT, SS, Man, BW | partial | partial | 16,380 | 16,380 | - |
| VC Summer Unit 2 Iso Phase Bus Duct MPA-E030-00 | no | N/A | 351,999 | - | 351,999 |
| VC Summer Unit 3 Non Seg Phase Bus Duct MPA-E031-00 | N/A | no | 1,443,565 | - | 1,443,565 |
| VC Summer Unit 3 Iso Phase Bus Duct MPA-E030-00 | N/A | no | 1,287,169 | 30,000 | 1,257,169 |
| VC Summer Unit 2 Non Seg Phase Bus Duct MPA-E031-00 | no | N/A | 363,554 | - | 363,554 |
| Blanket Order for ASME B31.1 Non-Safety Related Piping and F | no | no | 2,825 | 2,700 | 125 |
| MINZO DESIGN VC SUMMER UNIT 2 | yes | no | 5,932,239 | 3,698,318 | 2,233,921 |
| RCP Stud Installation Tool - VC Summer | partial | partial | 96,955 | 96,955 | - |
| Select CH Modules Fabrication | N/A | no | 848,635 | 721,150 | 127,485 |
| Air-operated, double diaphragm pump | partial | partial | 227,906 | 220,806 | 7,100 |
| JE02 Press / Diff. Press Transmitters | partial | partial | 1,316,380 | 695,276 | 621,104 |
| Viv, Ck; 3", CL1500INT, SS, A-O, BW, S-160 | no | no | 409,692 | 407,500 | 2,192 |

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for Units 2 & 3 site in Jenkinsville, SC

REQUEST 1-30:

Please provide the results of the most recent equipment inventory and plant walk-down.

RESPONSE 1-30:

SCE&G has instituted reoccurring walk-downs of the warehouses, tents, and laydown yards. The most recent walk-down revealed that the condition of the warehouses (on-site and off-site) meet ANSI level B storage requirements. Also, the ANSI level A storage in warehouse 20A continues to meet level A storage requirements (temperature and humidity). All of the equipment in warehouses and tents is in good condition. SCE&G has not performed a walk-down with respect to installed equipment.

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REQUEST 1-31:

Please describe the actions SCE&G has taken to ensure the property preservation of equipment and component remaining on site.

RESPONSE 1-31:

Please see SCE&G's Response 1-2.

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REQUEST 1-32:

Please discuss the Company's quality assurance program with regard to demobilization activities.

RESPONSE 1-32:

The VC Summer Units 2/3 Combined Operating License currently remains in effect even though SCE&G has ceased construction. As such, 10 CFR 50 Appendix B Quality Assurance Program Criteria requirements remain applicable to activities that may affect safety related systems, structures and components as described in the Quality Assurance Program Description ("QAPD"). During site demobilization to prepare for abandonment, there are no work activities currently being performed that could adversely affect Safety Related System Structures and Components and fall under the purview of the Unit 2/3 QAPD.

Should activities be required under Appendix B and the Unit 2/3 QAPD prior to license withdrawal, measures remain in place to assure compliance. Upon determination of ownership for certain Unit 2/3 components, inventory control and preventive maintenance for these components will be transferred and performed under the Unit-1 QA Program.

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REQUEST 1-33:

Please provide the status of the training simulators for the Units and the associated training materials. Also, discuss the Company's decision regarding the simulator (e.g., retain salvage).

RESPONSE 1-33:

The training simulators for the Units have been de-energized and are no longer in use. The associated training materials (currently BL7) are obsolete. Westinghouse has expressed interest in the VISION database (SAT task-to-training materials database). SCE&G's plan is to salvage or sell the simulators.

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REQUEST 1-34:

Please provide a categorized list of all unpaid invoices to include the dollar amount associated with each invoice.

RESPONSE 1-34:

Please see attached.

| Name | Amount |
|-----------------------------------|------------------------|
| ALLIED SPECIALTY RESOURCES LLC | \$ 27,561.76 |
| BLYTHEWOOD OIL CO INC | \$ 8,720.55 |
| BULLDOG ERECTORS INC | \$ 636,732.68 |
| BUNNELL-LAMMONS ENGINEERING INC | \$ 42,619.20 |
| COMMUNICATION MANAGEMENT INC | \$ 4,404.39 |
| DOCUMENT SOLUTIONS INC | \$ 39,534.99 |
| FLUOR ENTERPRISES INC | \$ 1,810,753.33 |
| GUTOR ELECTRONICS LLC | \$ 98,450.00 |
| HERC RENTALS INC | \$ 64,189.59 |
| JENSEN HUGHES INC | \$ 36,904.45 |
| M B KAHN CONSTRUCTION CO INC | \$ 627,600.00 |
| REED SMITH LLP | \$ 254,760.42 |
| SANTEE COOPER | \$ 48,644.60 |
| SIMPLEXGRINNELL | \$ 1,104.10 |
| SYSTEM ONE HOLDINGS LLC | \$ 7,318.80 |
| US NUCLEAR REGULATORY COMMISSION | \$ 530,237.18 |
| WESTINGHOUSE ELECTRIC COMPANY LLC | \$ 483,367.19 |
| TOTAL | \$ 4,722,903.23 |

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REQUEST 1-35:

Please provide a list of any and all items that have been salvaged and the dollar amount received from each salvaged item.

RESPONSE 1-35:

As of November 8, 2017, SCE&G has not salvaged any items.

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REQUEST 1-36:

Please provide a list of any and all items anticipated to be salvaged and the estimated dollar amount to be received from each salvaged item.

RESPONSE 1-36:

All equipment owned by SCE&G at the site is available for salvage. SCE&G has not yet projected a dollar amount that it could receive from each salvaged item.

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REQUEST 1-37:

Please discuss the level and processes in place to ensure adequate security for the site.

RESPONSE 1-37:

SCE&G has engaged the services of Allied Universal to ensure adequate security for the site. Due to the sensitive nature of the services provided and in responding to this request, SCE&G will not detail the level and processes it has in place for security at the site.

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REQUEST 1-38:

Please identify and list all equipment and buildings associated with the Units that will be supporting V.C. Summer Unit 1 after the abandonment.

RESPONSE 1-38:

SCE&G is in the process of evaluating which equipment and buildings can support V.C. Summer Unit 1. Please also see SCE&G Response 1-16.

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REQUEST 1-39:

Please provide an estimated cost to preserve the site for future restart (within 2 years, 5 years and 10 years).

RESPONSE 1-39:

SCE&G has abandoned the Project, is evaluating salvage options and is not preserving the site for future restart.

In the event, however, that another party seeks to preserve the site for future restart, a third-party consultant has estimated that a 2-year site preservation would cost approximately \$800 million; a 5-year delay would cost approximately \$2 billion; and a 10-year delay would cost approximately \$4.1 billion. These amounts are 100% numbers and reflect the maintenance of the appropriate and necessary level of staffing to restart construction.

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REQUEST 1-40:

Please provide a copy of the process to be used by WEC and SCE&G to determine ownership of equipment and components related to the Units.

RESPONSE 1-40:

The process used to determine ownership of equipment between the Consortium and the Owners is not resolved. The Consortium has taken the position that, under section 21.1 of the EPC Agreement, until a particular piece of equipment is paid for "in full," title remains with the Consortium. The Consortium further contends that under the fixed price arrangement, payments are allocated to all equipment, so that none has been paid in full until all payments under the contract have been made. The Owners dispute this position. The parties, however, have made efforts to resolve this dispute and those efforts are ongoing. Presumably, any position agreed to by Westinghouse is subject to the approval of the Bankruptcy Court.

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REQUEST 1-41:

Please provide a comprehensive list of major equipment and components by owner (WEC or SCE&G) related to the Units.

RESPONSE 1-41:

Please see SCE&G Response 1-40.

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REQUEST 1-42:

Please provide any agreements/contracts between SCE&G and salvage vendors.

RESPONSE 1-42:

SCE&G has not entered into any agreements/contracts with salvage vendors. Accordingly, SCE&G is not in possession of any documents responsive to this request.

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REQUEST 1-43:

Provide all written documents detailing the cost of abandoning versus preserving or "mothballing" the site.

RESPONSE 1-43:

Please see attached. Please note that SCE&G is currently conducting an extensive collection and review of its own documents and is continuing to review whether there are any additional documents responsive to this request, as well as whether there are any existing confidentiality agreements or privilege issues that would be implicated by production of other documents. SCE&G states that it will supplement its production, to the extent any additional responsive documents are found, to produce any additional responsive and non-privileged, non-work product documents in its possession.

FIRST SUPPLEMENTAL RESPONSE 1-43:

SCE&G has located an additional document responsive to this request which consists of a document prepared by AECOM ("AECOM Document"). The AECOM Document, however, contains highly confidential and sensitive information. Due to the highly confidential and sensitive nature of the information contained within the AECOM Document, the Company will make the AECOM Document responsive to this request available for review and inspection at the SCE&G headquarters. You may contact SCE&G's counsel, Chad Burgess, at 217-8141, to schedule a time to view this document.

LEGAL DEPARTMENT
NOV 28 2017
OFFICE OF REGULATORY STAFF

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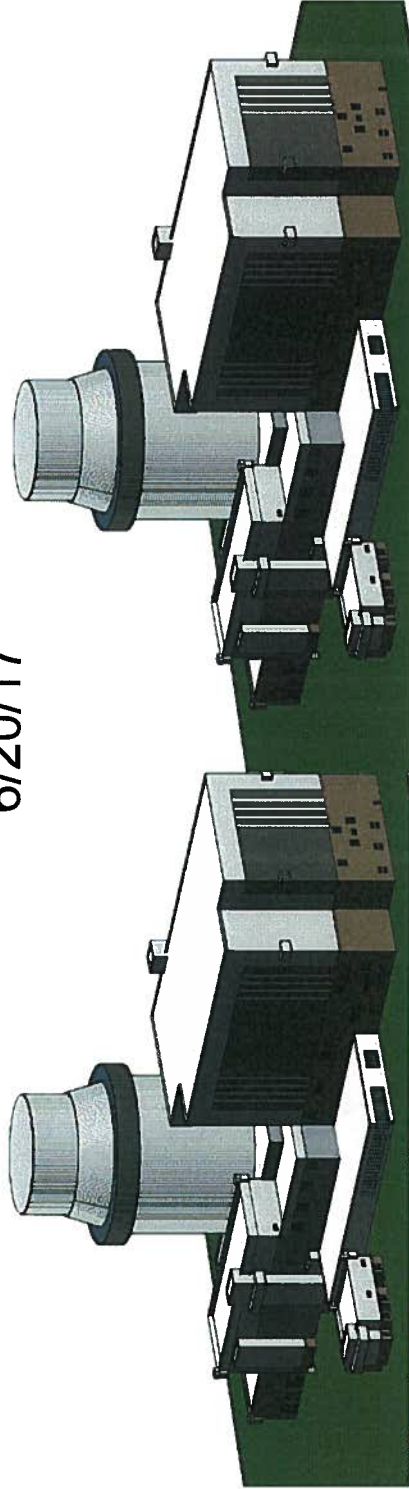
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V.C. Summer Units 2 & 3
Estimate To Complete Overview
6/20/17



Today's Agenda

- Introductions
Byron Hinson
- Estimate To Complete (ETC) Presentation
Kyle Young
Alan Torres
Kevin Kochems
- Documents in E-room
Kyle Young
- Approach to Prospective Q&A
Byron Hinson
- E-room access (tokens)
William Hutson
- Lunch
NOB Cafe
- Login to E-room
ORS NND Offices
William Hutson

ETC Overview Agenda

- WEC ETC Information
- ETC Baselines
- ETC Validation Process
 - Quantity Validation
 - Unit Rates
- Schedule Model
- Cost Model
- Baseline Schedule for ETC cost pricing

ETC Overview Agenda

- Significant Process Improvements
- Overall Cost Summary – 2-Unit ETC
 - Non-Construction Phases
 - Construction Phases
 - Direct Construction, Indirect Construction, Field Non-Manual
 - Subcontracts
 - Distributables, Equipment/Other
 - Other Project-related costs
- Owner's Cost
- Overall Cost Summary – 1-Unit ETC
- Open Items
- Process to Finalize ETC

ETC Overview

Westinghouse
ETC Information

EAC & ETC for V.C. Summer AP1000 Project (Actuals reflect WEC spending from Inception to Feb. 2017) + WECTEC spending (Jan 2016 - Feb 2017))

| | Actuals (thru 2/2017) \$Mills | ETC (from 3/2017) \$Mills | EAC \$Mills |
|---|-------------------------------------|---------------------------------|------------------|
| Non-Construction | | | |
| • Procurement - Equipment & Bulk/Raw Materials | \$ 2,091 | \$ 863 | \$ 2,954 |
| • Engineering (Labor) | 449 | 73 | 522 |
| • Instrumentation & Controls | 254 | 79 | 332 |
| • Commissioning | 65 | 189 | 254 |
| • Procurement-related (Labor) | 201 | 77 | 278 |
| • Project Management | 69 | 47 | 116 |
| • Provisional Cost for Impact of schedule extension | - | 50 | 50 |
| • All Other Non-Constr. (incl. Qual/EHS, Licensing, Proj. Services) | 94 | 95 | 189 |
| Subtotal | \$ 3,223 | \$ 1,472 | \$ 4,696 |
| Construction | | | |
| • Construction - Fluor (Direct Craft, Indirect Craft, Field Non-Manual) | \$ 547 | \$ 2,270 | \$ 2,817 |
| • Construction Direct & Indirect Subcontracts | 282 | 751 | 1,033 |
| • Construction - Distributables, Equipment/Other | 131 | 281 | 412 |
| • All Other (incl. WEC Construction, WECTEC Professional Services) | 109 | 211 | 320 |
| Subtotal | \$ 1,069 | \$ 3,513 | \$ 4,582 |
| Other Project-related Costs | | | |
| • Escalation | \$ - | \$ 247 | \$ 247 |
| • Mgmt Reserves (Risk Register, LDs, "Unknown Unknown" contingency) | - | 554 | 554 |
| • Warranty | - | 62 | 62 |
| • Historical Costs (including Design Finalization) | 42 | - | 42 |
| • All Other | 21 | 130 | 151 |
| Subtotal | \$ 63 | \$ 993 | \$ 1,056 |
| TOTAL | \$ 4,214 | \$ 6,119 | \$ 10,333 |

LESS: AP not yet paid as of 2/28/17 (estimate)



WEC Pre-Bankruptcy ETC



WEC ETC

- WEC began ETC efforts in March 2016
- Price Waterhouse Coopers independently audited, not complete
- Constrained to April 2020 and December 2020 schedule
- Schedule never finalized
- Non-Construction
 - Went through 3 major reviews and subsequent cuts
- Construction
 - WEC provided engineered quantities, applied 1x4 learnings factor
 - Fluor provided Unit Rates, wages, per diem rates, ratios, staffing plan in Basis of Estimate (multiple revisions)

ETC Baselines

- WEC ETC contained varying baseline dates depending on area
- Some areas were progressed with actuals, others remained at 3/31/2016
- SCE&G ETC baselines are all April 2017 for the examined areas

| | WEC ETC | SCE&G ETC |
|------------------------|------------|-----------|
| Quantities | 12/31/2016 | 4/17/2017 |
| Direct Hours | 2/1/2017 | 4/17/2017 |
| Subcontracts | 8/1/2016 | 4/1/2017 |
| Procurement | 3/31/2016 | 4/1/2017 |
| Substantial Completion | 4/20/2020 | 8/20/2023 |

ETC Validation Process

Step 1 – Receive Information from WEC

- Started 03-Apr; Substantially completed 12-May
- Received 150+ workbooks for Non-Construction support estimate
- Received 1,000+ line items for WEC Construction estimate
- Received Fluor Basis of Estimate (a subset of WEC Construction estimate)

Step 2 – Review Information

- Started 17-Apr; Substantially completed 22-May
- Had to interview WEC ETC “Phase Leads” and WEC “Cost Accounting Managers” and reconcile differences

Step 3 – Validate Information

- Started 1-May; Substantially completed 28-May
- Unit Rates – Validated Fluor rates through independent review; some risks in electrical rates (captured in Risk Register)
- Quantities – Invalidated WEC quantities; re-estimated 35% of total quantities; added risks for remainder of quantities
- Invalidated WEC major assumptions on Subcontracts, Schedule, Risk, overhead, etc.

ETC Validation Process

Step 4 – New Owner Estimate to Complete

- Started 9-May
- Created new Level 1 Schedule Model by SCE&G, Fluor and WEC schedulers
 - Utilized independent consultant to validate Construction, Startup, and Power Ascension schedules
 - Utilized historical performance at VCS for civil and structural commodities
 - Utilized historical performance in Nuclear industry for other bulk commodities
- Created new Cost Model based on Fluor actual performance
- Created new Risk Register
- Created new staffing plan (significantly changed from WEC)
- Initial ETC based on completing both units
- Revising ETC based on completing one unit

ETC Validation – Quantities

SCE&G/Southern Nuclear % of Quantities Sampled
(in terms of direct man-hours)

| Account | Total Quantities | Quantities Surveyed | Percentage |
|-----------------|-------------------|---------------------|---------------|
| 00 - Civil | 591,003 | 541,974 | 92% |
| 10 - Concrete | 4,462,070 | 2,097,136 | 47% |
| 20 - Steel | 1,548,780 | 233,815 | 15% |
| 30 - Buildings | 47,283 | - | 0% |
| 40 - Equipment | 1,440,524 | - | 0% |
| 41 - Modules | 1,268,392 | 1,268,392 | 100% |
| 50 - Pipe | 4,204,314 | 536,042 | 13% |
| 60 - Electrical | 7,968,125 | 2,941,307 | 37% |
| 70 - Controls | 367,983 | - | 0% |
| xx - Insulation | Subcontracted | Subcontracted | Subcontracted |
| xx - Paint | Subcontracted | Subcontracted | Subcontracted |
| Total | 21,898,474 | 7,618,666 | 35% |

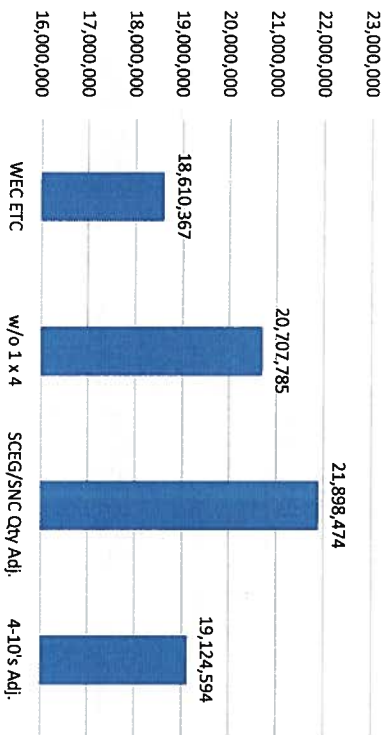


ETC Validation – Quantities

SCE&G Quantity Verification – Direct Hours Impact

| Account | WEC ETC | Removal of 1x4 | Change in Hours (2 Unit Totals) | | | | SCE&G ETC Final |
|-----------------|-------------------|------------------|---------------------------------|-------------------|-----------|------------------------|-------------------|
| | | | Prior to Qty Adj. | SCEG/SNC Qty Adj. | % | Prior to Schedule Adj. | |
| 00 - Civil | 461,699 | 45,727 | 507,426 | 83,577 | 16% | 591,003 | 516,141 |
| 10 - Concrete | 4,330,063 | 551,324 | 4,881,387 | (419,317) | -9% | 4,462,070 | 3,896,860 |
| 20 - Steel | 1,575,983 | 208,600 | 1,784,583 | (235,803) | -13% | 1,548,780 | 1,352,596 |
| 30 - Buildings | 42,816 | 6,039 | 48,855 | (1,572) | -3% | 47,283 | 41,294 |
| 40 - Equipment | 1,362,110 | 171,964 | 1,534,074 | (93,550) | -6% | 1,440,524 | 1,258,053 |
| 41 - Modules | 1,362,717 | 0 | 1,362,717 | (94,323) | -7% | 1,268,392 | 1,107,725 |
| 50 - Pipe | 4,003,285 | 437,755 | 4,441,010 | (236,696) | -5% | 4,204,314 | 3,671,754 |
| 60 - Electrical | 5,106,276 | 633,658 | 5,739,934 | 2,228,191 | 39% | 7,968,125 | 6,958,803 |
| 70 - Controls | 365,448 | 42,351 | 407,799 | (39,816) | -10% | 367,983 | 321,371 |
| xx - Insulation | Subcontracted | Subcontracted | Subcontracted | Subcontracted | - | Subcontracted | Subcontracted |
| xx - Paint | Subcontracted | Subcontracted | Subcontracted | Subcontracted | - | Subcontracted | Subcontracted |
| Total | 19,610,367 | 2,097,418 | 20,707,785 | 1,190,689 | 6% | 21,898,474 | 19,124,594 |
| | | | 111% | | | | 106% |

Change in Hours (2 Unit Totals)



ETC Validation – Unit Rates

Fluor Basis of Estimate

- A site specific project productivity analysis was performed for Vogtle and VC Summer and is incorporated in the estimate. The results were reviewed and agreed upon by the WEC and Fluor Construction teams at Vogtle and VC Summer.
- Craft Performance Factors (PFs) were established by Accounts, Areas, and Units.
- Performance Factors are based on current and previous project experience and information on local unions. The analysis focused on the following attributes that drive craft productivity.
 - 1. Craft Availability – Unemployment and Demand
 - 2. Craft Skill Level & Experience
 - 3. Work Space per Person / Congestion
 - 4. Work Week and Hours
 - 5. 40% Night Shift Work
 - 6. Site Conditions / Logistics
 - 7. Work Heights
 - 8. Climate / Temperature / Precipitation
 - 9. Other Site Specific Performance Conditions

ETC Validation – Unit Rates

- Owner engaged High Bridge/Work Management Inc. to independently review Unit Rates.
- Consolidated the Fluor estimate file by combining “like” descriptions for simplification of the piping and electrical estimate files
- Analyzed unit rates for similar types from High Bridge/WMI past projects establishing 48 unit rates.
- Analyzed the data by reviewing the highs and low unit rates.
- Established “key commodity data sheets” for each rate for inclusions/exclusions
- Found variances only in a few minor areas of piping and electrical
- Value of variance <\$30M
- Added line item to Risk Register
- Received general Unit Rate concurrence from Southern Nuclear

ETC Summary

Schedule Model

Schedule Model

- **Methodology: use Bulk Commodities as a schedule driver, input achievable Startup and Power Ascension durations**
- **Earliest schedule dates were converted to durations and these durations were run in risk software @ P80 confidence level to establish new P80 bulk commodity durations.**
- These bulk commodity P80 durations in the Aggressive Schedule were input into P6 and run in the software to establish a new “ETC Pricing” schedule, establishing a end date of Commercial Operations of **8/20/23**
- **Critical Path Commodities - Example below:**

U2 Auxiliary Electrical Bulks – P80 dates on critical path

| Activity Description | Aggressive End Date | P80 Most Likely End Date | Duration Days Slip | Aggres. Critical Path |
|-------------------------------------|---------------------|--------------------------|--------------------|-----------------------|
| U2-Cable Tray & Supports | 4/18/2020 | 12/19/2020 | 245 | 1 |
| U2-Conduit & Supports | 7/19/2020 | 3/22/2021 | 246 | 1 |
| U2-Auxiliary Cable Pull | 10/18/2020 | 6/22/2021 | 247 | 1 |
| U2-Auxiliary Instruments & Controls | 12/19/2020 | 8/22/2021 | 246 | 1 |

Schedule Model

Critical Path through the Auxiliary Building
Established by the estimated “P80” dates

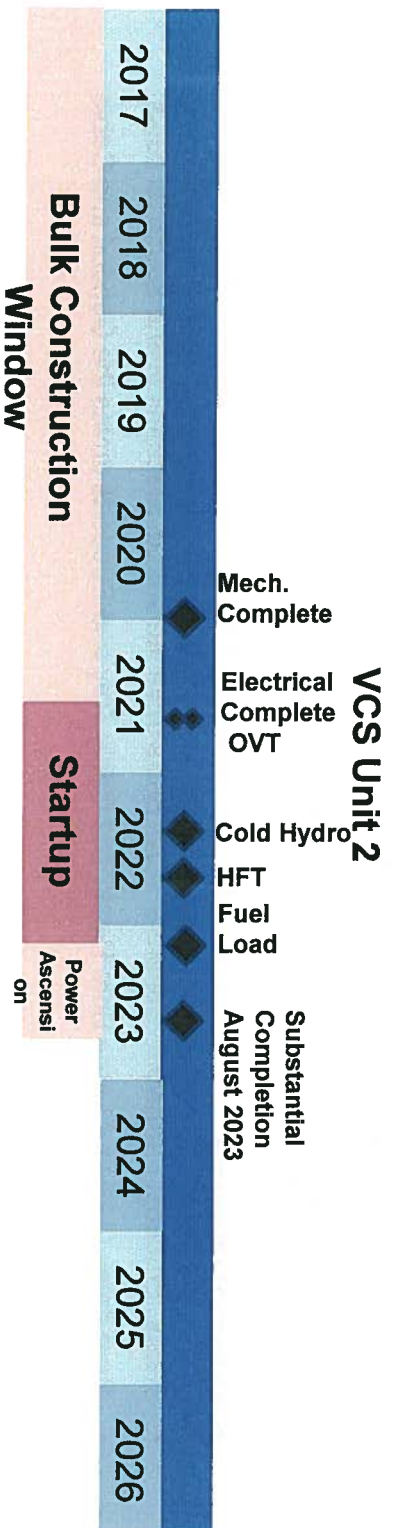
CONSTRUCTION

- Rebar, Embeds, Formwork, Concrete (Civil Bulks drive the start of Mechanical and Electrical bulks)
- Start dates (10%) for Large Bore Piping and Cable Tray and Supports drives the Conduit and Cable pulling activities,
- Start dates to Electrical Terminations ultimately drives the Instrumentation bulks,
- Instrumentation drives system turnovers, that drives the startup phase.

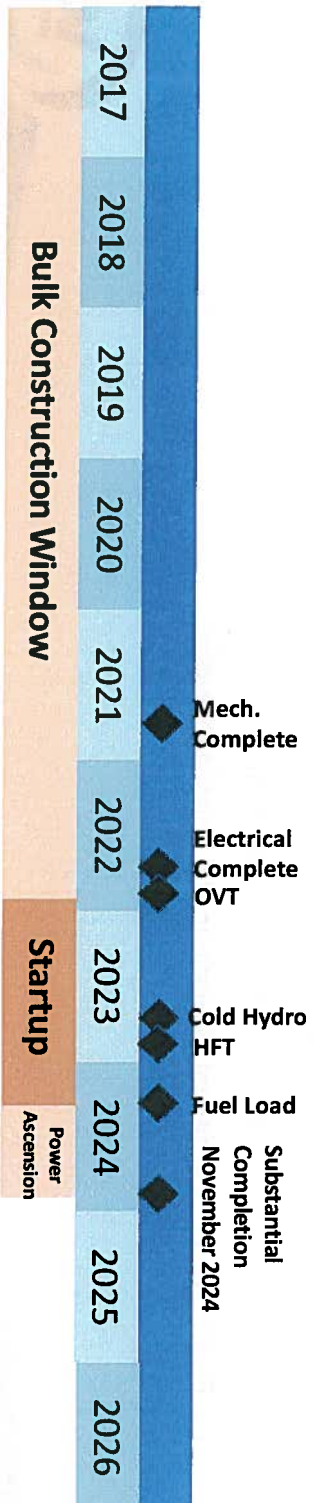
STARTUP

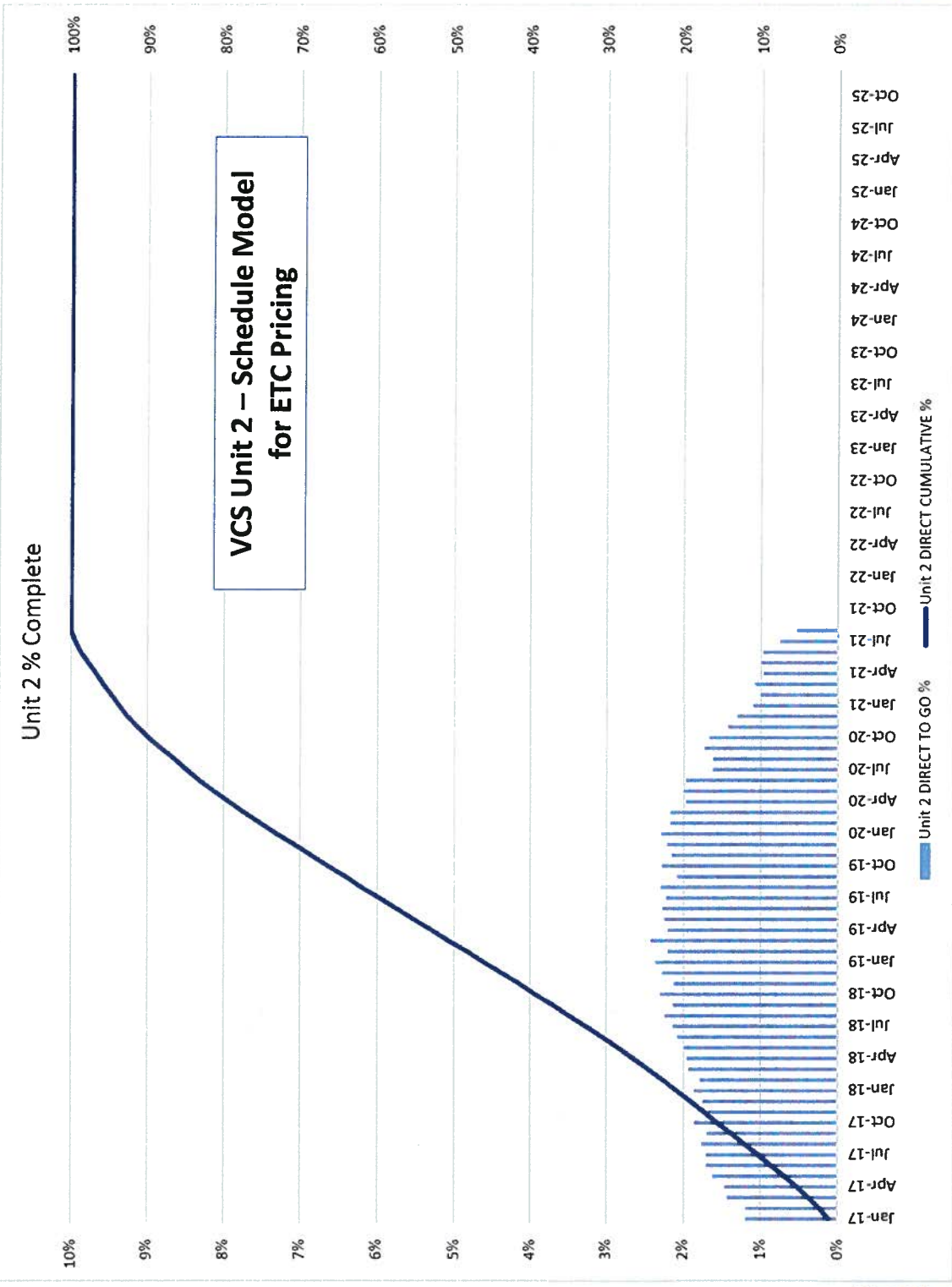
- Open vessel testing (marks the beginning of Startup)
- Startup to Fuel load is critical path with an 18 month duration.
- Fuel Load to Commercial Operations is a 6 month duration.

Schedule Model for ETC Cost Pricing



VCS Unit 3

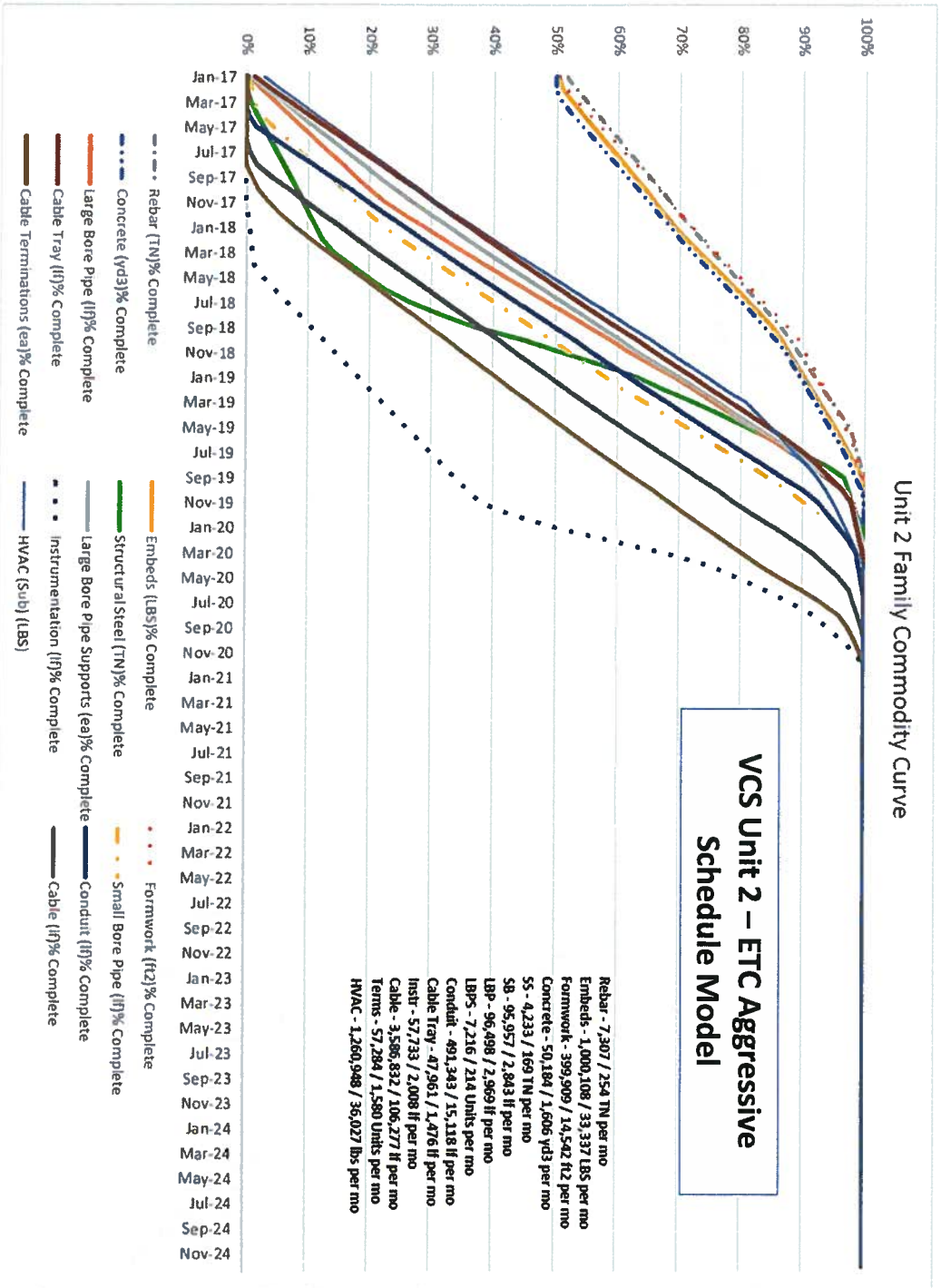




VCS U2 Aggressive Commodity Completion Distribution

Unit 2 Family Commodity Curve

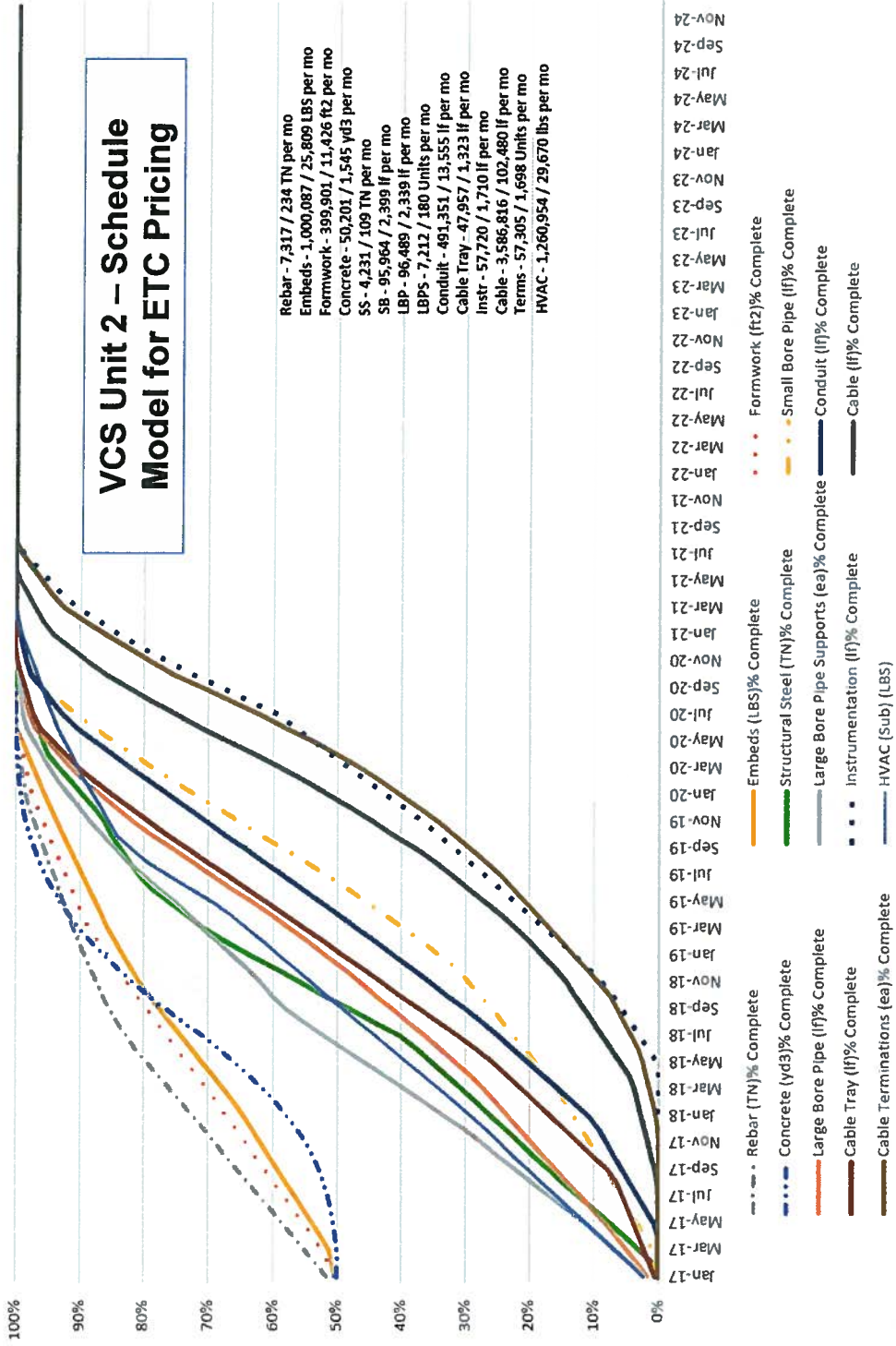
VCS Unit 2 – ETC Aggressive
Schedule Model

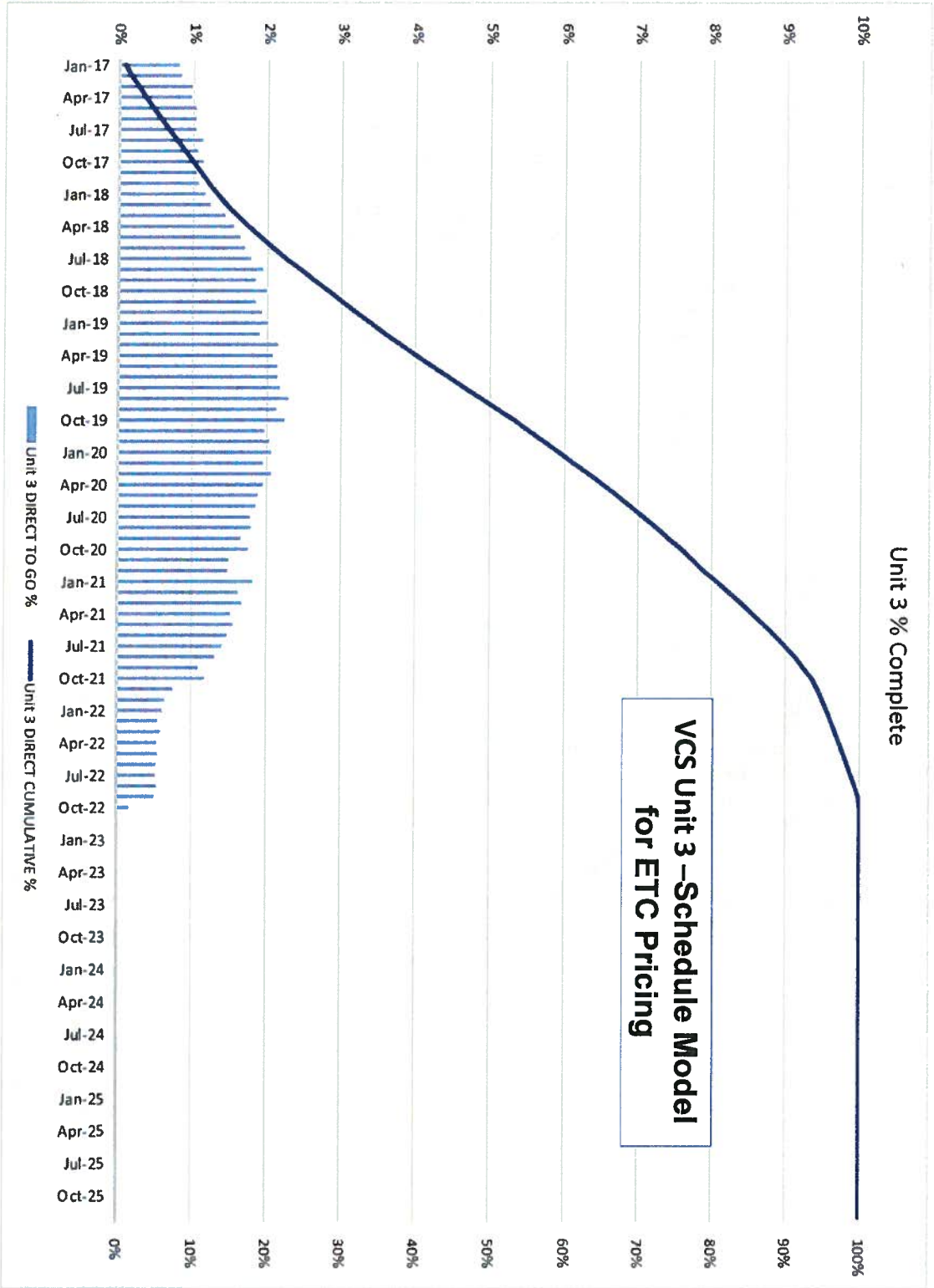


VCS U2 Most Likely Commodity Completion Distribution

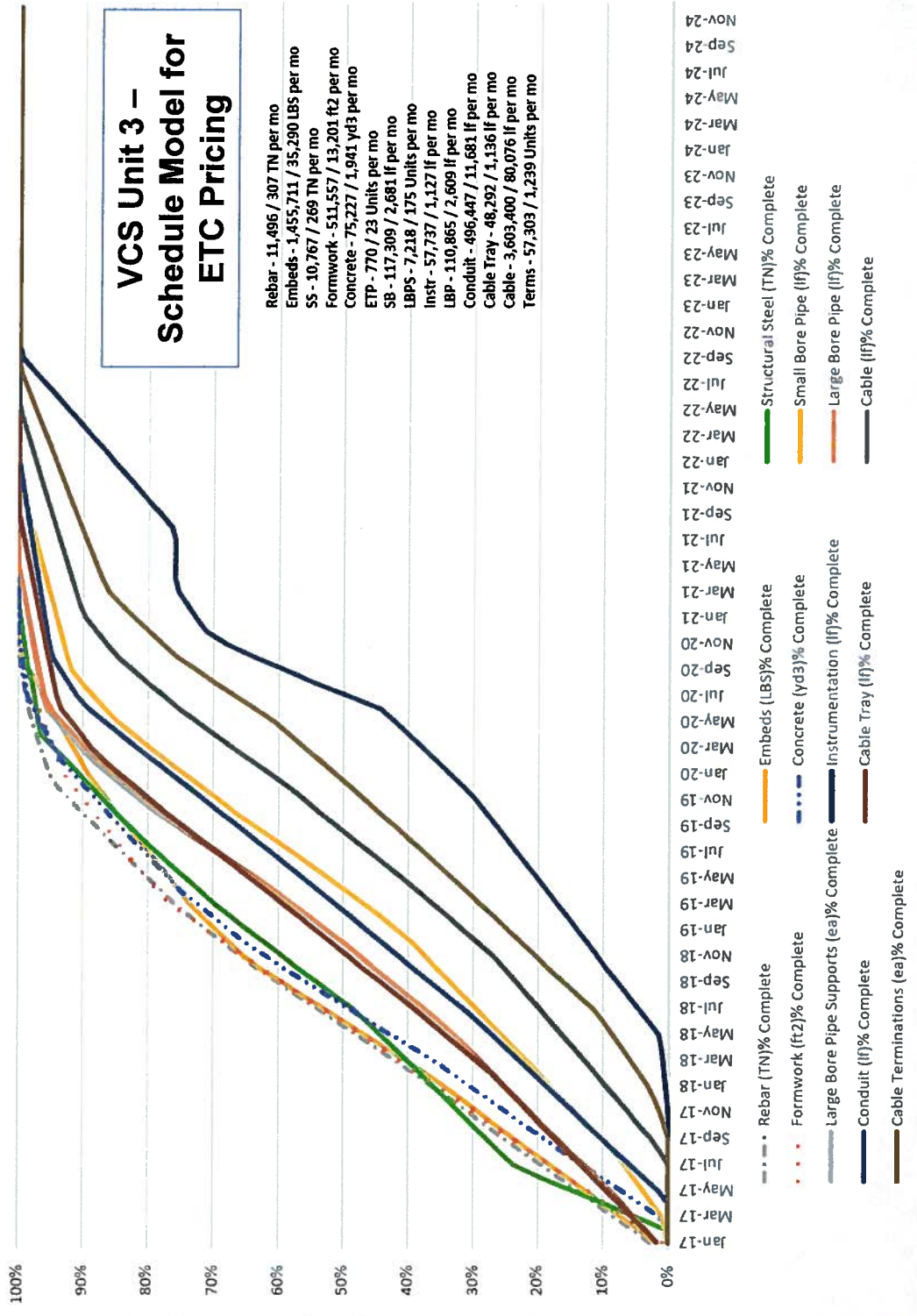
Unit 2 Family Commodity Curve

VCS Unit 2 – Schedule Model for ETC Pricing





Unit 3 Family Commodity Curve



Cost Model

Direct and Indirect Assumptions

1. Duration of labor assumes the "ETC Pricing" schedule for budgetary purposes.
2. Craft ratio for per diem is 75% at \$75/day.
3. Work schedule will consist of 70 hour work weeks with a rotating "A" and "B" team for craft. Each craft team will work a base 40 hour per week schedule.
4. One foreman will cover (7) direct craftsmen and one general foreman will be responsible for (3) foreman.
5. Foreman and general foreman will participate in the same rotating shifts that craft work.
6. The proposed base pay increase by Fluor for rotating shifts has been applied to the revised budget (of a 25% wage increase).
7. The revised budget applies an assumption that 80% of staff will work day shift and the 20% remaining will work night shift.
8. Burdens over the base hourly rate have been applied to the budget for straight time hours only.
9. Time off with pay is calculated in the budget, as applicable to each position.

Field Non-Manual Assumptions

1. Duration of labor assumes the “ETC Pricing” schedule for budgetary purposes.
2. Current Field Non-Manual ratio for per diem is 40% and will continue for the project.
3. For budget application, Field Non-Manual’s work schedule vary between a 40 hr and 50 hr per week dependent on job function.
4. The Field Non-Manual craft support ratio is currently 50% on the construction site. The same basis of (1) Field Non-Manual to (2) craftsmen is included in the budget estimate.
5. Burdens over the base hourly rate have been applied to the budget for both straight time and overtime hours.
6. Time off with pay is calculated in the budget for Field Non-Manual staff.

Cost Model

- The Cost Model assumes a Performance Factor of 1.0
- This was determined by adjusting the total earned hours to the SCE&G ETC Quantity Validation results as well as the Fluor provided Unit Rates.
- Total Earned hours were also adjusted for site progress from Dec 2016 to Mar 2017

$$P_f = \frac{\text{Total Spent Hours from VCS 3/31/17 Scorecard}}{\text{Total Adjusted Earned Hours}}$$

Total Adjusted Earned Hours

$$P_f = \frac{10,487,408 \text{ Spent Hours}}{10,244,021 \text{ Earned Hours}}$$

10,244,021 Earned Hours

$$P_f = 1.02$$

- Additional evaluation of earned quantities will further validate Performance Factor assumptions and allow for better performance tracking in the future.

ETC Risk Analysis

Two part Risk Analysis

- Discrete Risk for Cost
- Schedule Risk based on bulk commodities

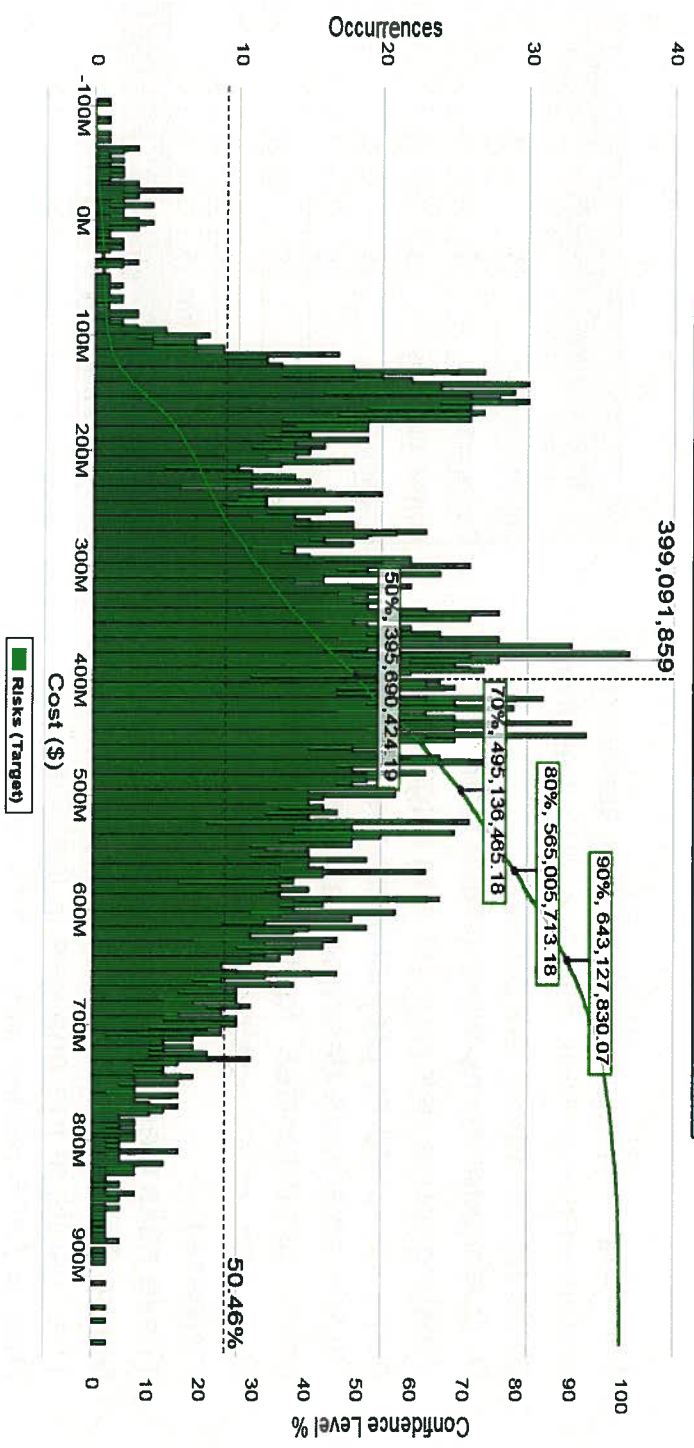
Cost Risk

- The Cost Risk portion of the risk assessment identified project risk and opportunities that could occur during the project.
- Risk Register items were drawn from the Westinghouse risk register and augmented by items identified by project team members.
- Risk events were described as a positive effect "opportunities" for the project (cost reduction) or a negative effect "risks" (cost increase).
- These risks were combined and run in a Monte Carlo simulation and results analyzed.
- The results of the analysis is that the Cost Risk is \$495 million at the 70% confidence level.

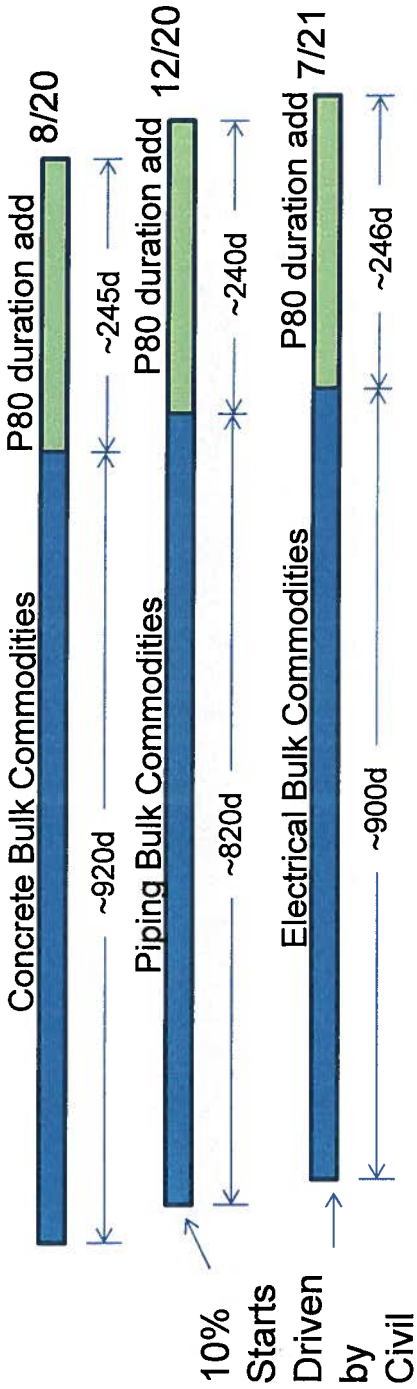
| Current Register | Risks (\$mm) | Opportunities (\$mm) |
|---------------------------------------|---------------|----------------------|
| Commissioning | \$ - | \$ - |
| Construction | \$ 38 | \$ (85) |
| Constr. Dir. Subs | \$ 133 | \$ (18) |
| Engineering | \$ 5 | \$ - |
| I&C | \$ 13 | \$ - |
| Licensing | \$ 13 | \$ - |
| Procurement | \$ 193 | \$ - |
| Project Management | \$ 108 | \$ - |
| Total | \$ 503 | \$ (103) |
| Net Risk EMV is \$399 million. | | |

Cost Risk

SCE&G ETC RISK REGISTER ANALYSIS



Schedule Risk



Start of Open Vessel Testing

Note: Aggressive schedule durations were created from limiting average installation rates per month. Rates were set at a ~35% increase from historical rates based off a 5-day-a-week schedule.

Schedule Risk

- Aggressive Schedule last meeting
- with reduced manhours of 12.5%

| VC Summer Unit 2 & 3 Aggressive Schedule Risk Model | | | | | | | | | |
|---|-----------|-----|-----------|-----|-----------|-----|-----------|-----------|----------|
| Descriptions | 50% | 55% | 60% | 65% | 70% | 75% | 80% | 85% | 90% |
| CO Dates | 4/25/2022 | | 8/12/2022 | | 12/5/2022 | | 4/10/2023 | 6/17/2023 | 9/1/2023 |
| Months Duration | 63.6 | | 67.2 | | 71.0 | | 75.1 | 77.3 | 79.8 |

Note: 01/01/2017 Start date and latest quantity updates Incorporated.

Concrete at current levels 1239 cu. Yds. per month.
 Lg. Pipe at 2816 ln. ft./mo.
 Cable Tray at 1552 ln. ft./mo.
 Cable at 122,000 ln. ft./mo.
 Terminations at 8500 ea./mo.

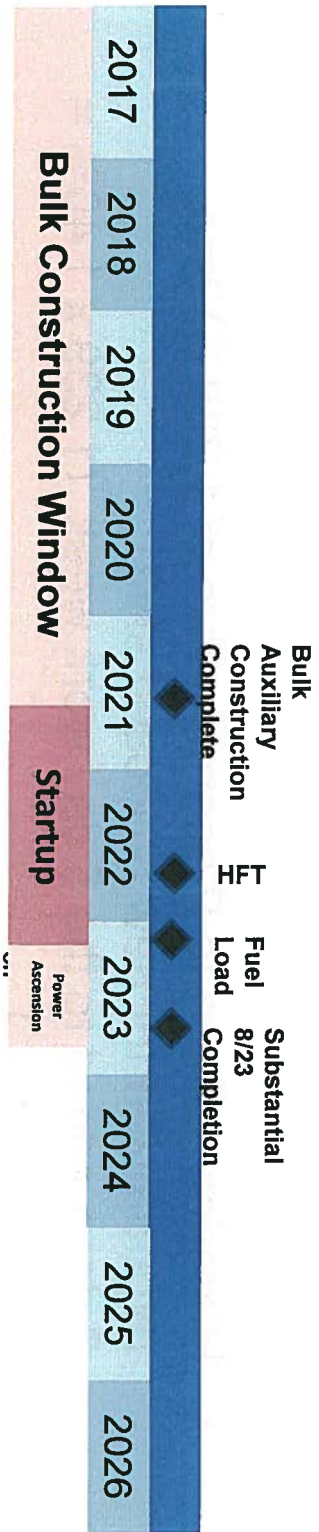
Schedule Analysis

Alternating 4 x 10's

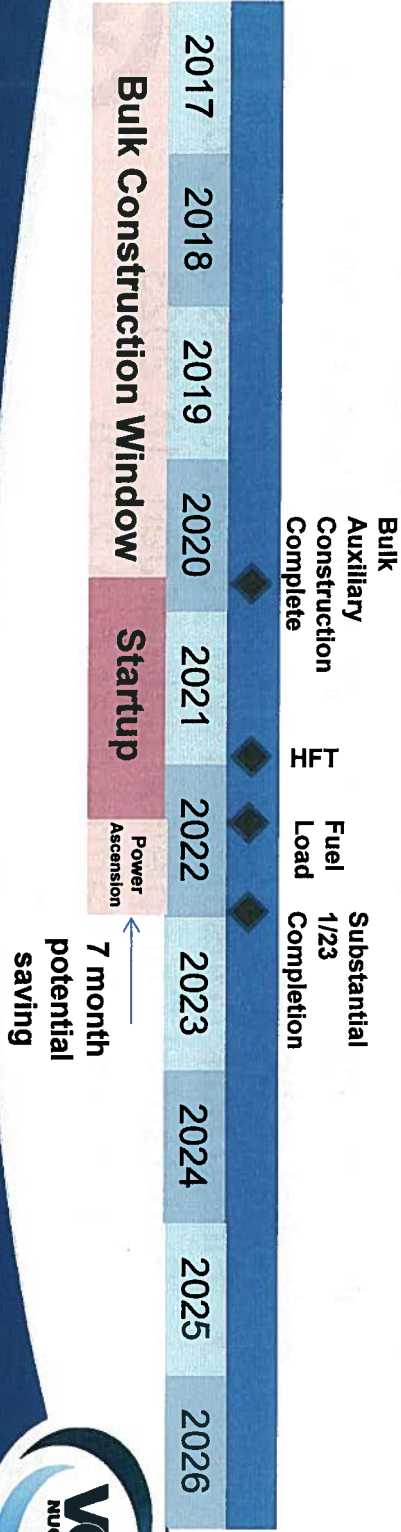
- Historical Concrete Placement rate of 1,239 CY/mo. (Normalized for new proposed shift)
2 days added to the 5 day work week (1,239 x 1.40% = 1,735 CY/mo.)
- The 1,735 CY/mo. Concrete rate establishes with other bulk commodities using mid-range installation rates a new potential schedule
 - Finish bulk construction Nov. 10, 2020 (was July 2021)
 - Substantial Completion date of Jan. 10, 2023 with 18 month startup (was Aug 2023)

Schedule Analysis

VCS Unit 2 – ETC Schedule for Cost Pricing



VCS Unit 2 – ETC Normalized Schedule Potential w/new shift arrangement



Owner Estimate to Complete V.C. Summer Units 2 & 3

| Owner Estimate to Complete V.C. Summer Units 2 & 3 | | VCS 2/3 (MONTHLY) HOTEL LOAD COSTS \$Mils |
|---|---|---|
| Non-Construction | <ul style="list-style-type: none"> • Procurement (Materials & Equipment) • Engineering (Labor) • Instrumentation & Controls • Commissioning • Procurement (Labor) • Project Management • Quality Assurance, Quality Control, ECP • HR/Access Control/FFD • IT Costs • Finance/Accounting • Licensing | - 3.5 0.3 0.6 1.2 5.7 1.8 0.2 0.5 0.1 0.3 14.2 |
| | Subtotal | |
| Construction | <ul style="list-style-type: none"> • Construction - Fluor (Direct Craft) • Construction - Fluor (Indirect Craft) • Construction - Fluor (Field Non-Manual) • Construction Direct & Indirect Subcontracts • Construction - Distributables, Equipment/Other | 27.4 0.5 10.2 38.1 |
| | Subtotal | |
| Other Project-related costs | <ul style="list-style-type: none"> • Escalation • Risk Register • Warranty | 3.5 - - 3.5 |
| | Subtotal | |
| | Total "Traditional EPC" Costs | 55.8 |
| Owner's Cost | Total Owner's Cost (includes Escalation) | 15.0 |
| | Total Project ETC Costs | 70.8 |

Schedule Risk

Hotel Load

| 3 Months | \$212 M |
|-----------|---------|
| 7 Months | \$496 M |
| 10 Months | \$708 M |

Significant Process Improvements

- Overall
 - Embed Owner personnel directing all Organizations
 - Establish a Level 2 Schedule
 - Complete transition to a proper Project Controls System
- Engineering
 - Establish 120 “Field Design Engineers” to directly support field changes
 - Detailed review of tolerance stack-up between commodities
 - Complete Bi-Furcation of Turbine and BOP
- Subcontracts
 - Reduce Fluor scope to reduce cost and increase Fluor focus on Critical Path and Bulk Commodity work
 - Remove WEC “nuclear” design from Commercial buildings

Significant Process Improvements

- Procurement - Transition to Owner Procurement system
 - Streamlined approvals
 - Min/max system
 - Schedule procurements from Level 2
 - Reduce Staff and Cost due to Program Efficiencies
- Construction
 - Rolling 4x10 Schedule
 - Utilize Night Shift for Setup
 - Complete Bi-furcation of Design, Work Packages, and Work Management
 - Hold Construction (Fluor) accountable for productivity (Vitale study)

Operational Readiness Support Opportunity

- Current approved plan will supply 200 owner employees to various site organizations.
- Employee quantity can increase with adjustment to the owners' training schedule.

- Owner Employee:

Engineer:

- \$88/hour with 20% markup = \$110/hour
- 2080 hours/year X \$110/hour = ~~\$228,800/year~~
- Staff Augmented Employee:
Per Diem @ \$100 per day = \$36,500/year
- **Total yearly cost = \$265,300**

Engineer IV:

- \$48.56/hour with 38% markup = \$67.01/hour
- 2080 hours/year X \$67.01/hour = \$139,381/year
- No Per Diem required
- **Total yearly cost = \$139,381**

Cost Difference = \$125,919/year

Operational Readiness Support Opportunity

- Current approved plan will supply 200+ Owner employees to various Construction Site organizations.
- Ownership and accountability in the field could improve
- Can increase beyond 200 with adjustment to the OR Training schedules.

200 Staff Augmented Employees

- \$80/hour average "All-In" rate
- Assume 40% on Per Diem
- **Total 3 year cost = \$112,980,000**

200 Owner Employees

- \$56.55/hour average "All-In" rate
- No Per Diem required
- **Total 3 year cost = \$70,574,400**

3 Year Cost Difference = \$42,405,600

| | |
|-------------------|----------|
| Potential Savings | \$ 113 M |
|-------------------|----------|

ETC Summary

Overall Cost Summary

Complete Both Units

| Estimate as of June 12, 2017 (\$000,000) | 100% | SCE&G % | Santee % |
|--|--------------------|-------------------|-------------------|
| Total Actual Spent | \$ 7,556 | \$ 4,169 | \$ 3,387 |
| Estimated Costs to Complete | | | |
| Estimated "EPC" Costs to Complete | \$ 7,156 | \$ 3,936 | \$ 3,220 |
| Estimated Escalation to Complete | \$ 456 | \$ 251 | \$ 205 |
| Estimated "Owner's" Costs to Complete (w/ Esc) | \$ 1,837 | \$ 1,011 | \$ 827 |
| Total Estimated Costs to Complete | \$ 9,449 | \$ 5,197 | \$ 4,252 |
| Total EAC | \$ 17,006 | \$ 9,366 | \$ 7,639 |
| Parental Guarantee Net of Liens "Flow through" ** | \$ (1,785) | \$ (982) | \$ (803) |
| Total Transmission Costs | \$ 679 | \$ 373 | \$ 306 |
| Total AFUDC | \$ 812 | \$ 447 | \$ 365 |
| Total Project Costs | \$ 16,712 | \$ 9,205 | \$ 7,507 |
| Cost Approved in Order 2016- 794 | \$ (13,910) | \$ (7,658) | \$ (6,252) |
| Estimated Cost Increase | \$ 2,802 | \$ 1,546 | \$ 1,255 |
| Delta Breakdown | | | |
| WEC Estimated Overrun | \$ 1,500 | \$ 825 | \$ 675 |
| Additional Owner Estimated EPC Overrun | \$ 1,999 | \$ 1,099 | \$ 899 |
| Total Construction Costs Increase | \$ 3,499 | \$ 1,924 | \$ 1,574 |
| Additional Owner's Costs | \$ 866 | \$ 481 | \$ 384 |
| Additional Transmission | \$ (5) | \$ (3) | \$ (2) |
| Additional AFUDC | \$ 228 | \$ 125 | \$ 103 |
| Toshiba Guarantee | \$ (1,785) | \$ (982) | \$ (803) |
| Total Estimated Cost Increase | \$ 2,802 | \$ 1,546 | \$ 1,255 |

ETC Overview

Overall Cost Summary

2-Unit ETC

Complete Construction of Both Units

| Estimate as of June 12, 2017 (\$000,000) | 100% | | SCE&G % |
|---|----------|--------------------|-------------------|
| Total Actual Spent | | \$ 7,556 | \$ 4,169 |
| Estimated Costs to Complete | | | |
| Estimated "EPC" Costs to Complete | \$ 7,156 | | \$ 3,936 |
| Estimated Escalation to Complete | \$ 456 | | \$ 251 |
| Estimated "Owner's" Costs to Complete (w/ Esc) | \$ 1,837 | | \$ 1,011 |
| Total Estimated Costs to Complete | | \$ 9,449 | \$ 5,197 |
| Total EAC | | \$ 17,006 | \$ 9,366 |
| Parental Guarantee Net of Liens "Flow through" | | \$ (1,785) | \$ (982) |
| Total Transmission Costs | | \$ 679 | \$ 373 |
| Total AFUDC | | \$ 812 | \$ 447 |
| Total Project Costs | | \$ 16,712 | \$ 9,205 |
| Cost Approved in Order 2016-794 | | \$ (13,910) | \$ (7,658) |
| Estimated Cost Increase | | \$ 2,802 | \$ 1,546 |
| Delta Breakdown | | | |
| WEC Estimated Overrun | \$ 1,500 | | \$ 825 |
| Additional Owner Estimated EPC Overrun | \$ 1,999 | | \$ 1,099 |
| Total Construction Costs Increase | | \$ 3,499 | \$ 1,924 |
| Additional Owner's Costs | | \$ 866 | \$ 481 |
| Additional Transmission | | \$ (5) | \$ (3) |
| Additional AFUDC | | \$ 228 | \$ 125 |
| Toshiba Guarantee | | \$ (1,785) | \$ (982) |
| Total Estimated Cost Increase | | \$ 2,802 | \$ 1,546 |

These Costs are DRAFT and contain assumptions that need to be validated.



Complete Construction of Both Units

Comparison to SCPSA Board-Approved Budget for Fixed Price Option

Estimate as of June 12, 2017 (\$'000,000)

| | | | |
|---|----|---------|-------|
| Total Actual Spent thru 3/31/17 (Construction + Initial Fuel Core) | | \$ | 3,460 |
| Estimated Costs to Complete | | | |
| Estimated "EPC" Costs to Complete | \$ | 3,220 | |
| Estimated EPC Escalation to Complete | \$ | 205 | |
| Estimated "Owner's" Costs to Complete (w/ Escalation) | \$ | 827 | |
| Estimated Initial Fuel Core Costs to Complete | \$ | 37 | |
| Total Estimated Costs to Complete | \$ | 4,289 | |
| Total Estimate at Completion (Construction + Initial Fuel Core) | \$ | 7,749 | |
| Parental Guaranty (Net of Liens) | \$ | (803) | |
| Total Transmission Costs in Approved Budget | \$ | 261 | |
| Total Project Costs | \$ | 7,207 | |
| SCPSA Board-Approved Budget for Fixed Price Option ^{1, 2} | \$ | (6,114) | |
| Estimated Cost Increase | \$ | 1,093 | |

¹ SCPSA board-approved budget excludes capitalized interest and cost increase estimate does not include impact of additional capitalized interest due to delay.

² The production tax credit bonus allowance of \$135 million was removed from the total approved \$6,249 million budget.

These Costs are DRAFT and contain assumptions that need to be validated.

**Owner Estimate to Complete
V.C. Summer Units 2 & 3**

| | | OWNER ETC (6/12/17 PRESENTATION) |
|------------------------------------|--|--|
| | | \$Mils |
| Non-Construction | | |
| | • Procurement (Materials & Equipment) | \$ 823 |
| | • Engineering (Labor) | \$ 297 |
| | • Instrumentation & Controls | \$ 130 |
| | • Commissioning | \$ 235 |
| | • Procurement (Labor) | \$ 147 |
| | • Project Management | \$ 325 |
| | • Quality Assurance, Quality Control, ECP | \$ 177 |
| | • HR/Access Control/FFD | \$ 31 |
| | • IT Costs | \$ 72 |
| | • Finance/Accounting | \$ 8 |
| | • Licensing | \$ 61 |
| | Subtotal | \$ 2,306 |
| Construction | | |
| | • Construction - Fluor (Direct Craft) | \$ 1,323 |
| | • Construction - Fluor (Indirect Craft) | \$ 721 |
| | • Construction - Fluor (Field Non-Manual) | \$ 437 |
| | • Construction Direct & Indirect Subcontracts | \$ 1,231 |
| | • Construction - Distributables, Equipment/Other | \$ 581 |
| | Subtotal | \$ 4,294 |
| Other Project-related costs | | |
| | • Escalation | \$ 456 |
| | • Risk Register | \$ 495 |
| | • Warranty | \$ 62 |
| | Subtotal | \$ 1,013 |
| | Total "Traditional EPC" Costs | \$ 7,612 |
| Owner's Cost | Total Owner's Cost (Includes Escalation) | \$ 1,837 |
| | Total Project ETC Costs | \$ 9,449 |

ETC Status

Not Complete
In Initial Review
In Final Review

Markups & Fee Assumptions

| Company | Type of Cost | Bas | Burden/ Markup | OH Rate | Fee |
|--------------------|--|---|-------------------|------------|-----|
| Fluor | Craft | W2 Pay w/ Taxes | 15.59% | \$1/HR | 4% |
| | FNM - HO | W2 Pay + 13.5% TOWP | 38% | \$31.50/HR | 4% |
| | FNM - Site | W2 Pay + 13.5% TOWP + 5% for HO Assigned | 39% | \$6.50/HR | 4% |
| | Living Allowance | \$3,850/Month (Includes 1 Trip home/Month) | | | 4% |
| | Per Diem Expenses | \$100/Day 3rd Party Cost | | | 4% |
| WEC | FNM - HO | W2 Pay | 3.20 | | 7% |
| | FNM - Site Living Allowance Expenses | W2 Pay 3rd Party Cost | 3.00 5.5% | | 7% |
| WECTEC | FNM - HO | W2 Pay | 2.20 | | 7% |
| | FNM - Site Living Allowance Expenses | W2 Pay 3rd Party Cost | 2.00 5.5% | | 7% |
| WECTEC Staffing | FNM - HO | W2 Pay (higher base pay) | 1.35 | | 7% |
| | FNM - Site Living Allowance | W2 Pay (higher base pay) | 1.35 | | 7% |
| | Expenses | \$2,800/Month 3rd Party Cost | 5.5% | | 7% |
| Staff Aug | FNM - Site | W2 Pay (higher base pay) | 1.18-1.7 | | 0% |
| | Living Allowance | \$2,800/Month | | | 0% |

ETC - Subcontracts

| | WEC Manhours | SCE&G ETC Manhours | WEC ETC Amount | SCE&G ETC Amount |
|--------------------------|------------------|---|------------------------|----------------------------|
| | | | Aug 2016 Baseline | March 31, 2017 Baseline |
| Indirect Subcontracts | Not given | 661,808 | \$171,635,899 | \$78,352,285 |
| Direct Subcontracts | 4,604,410* | 9,149,711 | \$694,580,151 | \$1,152,679,678 |
| Totals | Not given | 9,811,519 | \$866,216,050** | \$1,231,031,963 |
| | * | Alternate number given by WEC ETC Team was 5.4M hours | | |
| | ** | Alternate number given by WEC Controller was \$751M | | |

ETC – Subcontracts

MEC ETC Process

- MEC's ETC baseline subcontract costs used their archived statistical data at face value without a thorough deep dive into each subcontractor, or the without investigating the sources of the unawarded values.
- They then began a discounting process based on the 1 x 4 concept & cost reduction goals through more aggressive negotiations, and targeting discount values for existing change order proposals.
- Our review of the MEC process during the development of the Owner ETC was perceived to be a mix of loosely compiled statistical information without a thorough review of each subcontractor.

ETC – Subcontracts Owner ETC Process

- Our approach to evaluating and estimating new values for the subcontracts phase consisted of receiving and reviewing the WEC provided eight (8) source documents.
- We then spent several weeks isolated with the WEC/TEC Subcontracts group to evaluate 107 subcontracts to determine the source of the WEC value for each subcontract. We discussed and evaluated the perceived subcontractors attitude toward the project and the bankruptcy development, along with discussing their financial condition, risk of continuing or performing on the project, reviewing the contract financial status including all changes, change request, & potential changes. Finally we interviewed the subcontract administrator's insight of any relationship dynamics that do not show up in the statistical data.
- As a part of that process, we established new ETC values for each line item and recorded our notes, assumptions, & risks for each one.

ETC - Owner's Cost (Complete Both Units)

- For Budgeting purposes, assumed original "Owner's" scope remained the same. This will be refined as DOR's are finalized and we transition to an Owner Controlled Site.
- Basis is the February 2017 budget adjusted for impact of the delay (U2= 48months, U3=52months).
- Remaining in PSC Approved Budget approximately \$1.013B (CY 100%).
- Cost to Complete estimated at approximately \$1.878B (CY 100%) or \$866M in additional costs.

ETC - Owner's Cost (Complete Both Units)

- Significant Drivers of Increase (escalated dollars)
 - NND Labor - \$542M Approximately 99% due to delay
 - NND Non Labor \$174M
 - Due to Delay \$164M
 - Site Layout \$29M (transfer from CO to Owners)
 - Decrease (\$19M) for contractors moved to ETC and other adjustments
 - SCANA Services \$150M
 - Due to Delay \$43M
 - Spare Parts \$72M
 - Sales Tax \$29M (transfer from T&M to Owner)
 - Miscellaneous adjustments \$6M

ETC Summary

DRAFT

Overall Cost Summary

1-Unit ETC

AECOM Study

- Scenarios
 - Defer both Units
 - Abandon or Brownfield both Units
 - Complete U2, Defer, Abandon, or Brownfield U3
 - Defer U2, Abandon or Brownfield U3
- Approach
 - Conducted data gathering, site walk down & interviews
 - Assumptions were made per SME's judgements, where data not available
 - Excludes Owner's ETC Costs
- Key Assumptions
 - ROM estimated with accuracy of -30% to +50%
 - Salvage assumed at 43% of value. Recent historical trends are 10%-40%.
 - Sale of salvaged items needs to occur in 5 years, otherwise value would be scrap

AECOM Study

| Incremental Cost Impact (\$'000,000) | | | |
|--|-------------|------------|-------------|
| Scenarios | UNIT 2 (\$) | UNIT3 (\$) | TOTALS (\$) |
| Defer both units (UNIT 2: 1 YR, UNIT 3: 2 YRS) | 207 | 310 | 517 |
| Salvage | | | |
| Cost to Remove | 37 | 16 | 53 |
| PM & Storage Costs | 27 | 27 | 53 |
| Transportation Costs | 155 | 142 | 297 |
| Total Cost to Salvage | 219 | 184 | 403 |
| Cash from "Customer" | (656) | (608) | (1,264) |
| Net Salvage | (437) | (424) | (861) |
| Abandon both units (AFTER SALVAGE) | 3 | 2 | 5 |
| Brownfield both units (AFTER SALVAGE) | 14 | 10 | 24 |
| Defer UNIT 3 (for 2 years) | - | 310 | 310 |
| Abandon UNIT 3 (AFTER SALVAGE) | - | (422) | (422) |
| Brownfield UNIT 3 (AFTER SALVAGE) | - | (414) | (414) |
| Complete UNIT 2 | | | |
| | | | |

Complete Unit 2

| Owner Estimate to Complete | | \$Mils |
|------------------------------------|--|--------------|
| Non-Construction | | |
| | • Procurement (Materials & Equipment) | 494 |
| | • Engineering (Labor) | 202 |
| | • Instrumentation & Controls | 51 |
| | • Commissioning | 137 |
| | • Procurement (Labor) | 100 |
| | • Project Management | 195 |
| | • Quality Assurance, Quality Control, ECP | 120 |
| | • HR/Access Control/FFD | 21 |
| | • IT Costs | 64 |
| | • Finance/Accounting | 3 |
| | • Licensing | 42 |
| | Subtotal | 1,430 |
| Construction | | |
| | • Construction - Fluor (Direct Craft) | 1,303 |
| | • Construction - Fluor (Indirect Craft) | |
| | • Construction - Fluor (Field Non-Manual) | |
| | • Construction Direct & Indirect Subcontracts | 704 |
| | • Construction - Distributables, Equipment/Other | 265 |
| | Subtotal | 2,271 |
| Other Project-related costs | | |
| | • Escalation | 232 |
| | • Risk Register | 337 |
| | • Warranty | 31 |
| | Subtotal | 599 |
| Demobilization Costs of Unit 3 | | |
| | Total "Traditional EPC" Costs | 4,301 |
| Owner's Cost | Total Owner's Cost (includes Escalation) | 1,266 |
| | Total Project ETC Costs | 5,567 |

These Costs are DRAFT and contain assumptions that need to be validated.



Complete Construction of Unit 2, Defer Unit 3 for 2 Years

| Estimate as of June 12, 2017 (\$000,000) | 100% | SCE&G % |
|---|-----------------|-----------------|
| Total Actual Spent | \$ 7,556 | \$ 4,169 |
| Estimated Costs to Complete | | |
| Estimated "EPC" Costs to Complete | \$ 4,069 | \$ 2,238 |
| Estimated Escalation to Complete | \$ 232 | \$ 128 |
| Estimated "Owner's" Costs to Complete (w/ Esc) | \$ 1,266 | \$ 696 |
| Total Estimated Costs to Complete | \$ 5,567 | \$ 3,062 |
| Total EAC | \$ 13,123 | \$ 7,231 |
| Parental Guarantee Net of Liens "Flow through" | | |
| Total Transmission Costs | \$ (1,785) | \$ (982) |
| Total AFUDC | \$ 679 | \$ 373 |
| Total Project Costs | \$ 618 | \$ 340 |
| Total Project Costs | \$ 12,635 | \$ 6,963 |
| Incremental Cost to Defer Unit 3 * | \$ 310 | \$ 171 |
| Total Project Costs to Finish Unit 2, Defer Unit 3 | \$ 12,945 | \$ 7,133 |
| Cost Approved In Order 2016-794 | \$ (13,910) | \$ (7,658) |
| Estimated Cost Increase | \$ (965) | \$ (525) |
| Delta Breakdown | | |
| Total Construction Cost Increase | \$ 188 | \$ 103 |
| Cost to Defer Unit 3 | \$ 310 | \$ 171 |
| Additional Owner's Costs | \$ 294 | \$ 167 |
| Additional Transmission | \$ (5) | \$ (3) |
| Additional AFUDC | \$ 34 | \$ 19 |
| Toshiba Guarantee | \$ (1,785) | \$ (982) |
| Total Estimated Cost Increase | \$ (965) | \$ (524) |

* Fixed cost of deferral which covers a 4 month ramp-down and 6 month ramp-up period is estimated to be \$162.6M. Additional costs to maintain the site exclusive of the ramp-down and ramp-up periods is estimated at \$10.5M per month, or \$127M per year.



These Costs are DRAFT and contain assumptions that need to be validated.



Complete Construction of Unit 2, Abandon Unit 3

| Estimate as of June 12, 2017 (\$000,000) | 100% | SCE&G % |
|---|--------------------|-------------------|
| Total Actual Spent | \$ 7,556 | \$ 4,169 |
| Estimated Costs to Complete | | |
| Estimated "EPC" Costs to Complete | \$ 4,069 | \$ 2,238 |
| Estimated Escalation to Complete | \$ 232 | \$ 128 |
| Estimated "Owner's" Costs to Complete (w/ Esc) | \$ 1,266 | \$ 696 |
| Total Estimated Costs to Complete | \$ 5,567 | \$ 3,062 |
| Total EAC | \$ 13,123 | \$ 7,231 |
| Parental Guarantee Net of Liens "Flow through" | \$ (1,785) | \$ (982) |
| Total Transmission Costs | \$ 679 | \$ 373 |
| Total AFUDC | \$ 618 | \$ 340 |
| Total Project Costs | \$ 12,635 | \$ 6,963 |
| Cost to Abandon Unit 3 | \$ 2 | \$ 1 |
| Total Project Costs to Finish Unit 2, Abandon Unit 3 | \$ 12,637 | \$ 6,964 |
| Cost Approved in Order 2016-794 | \$ (13,910) | \$ (7,658) |
| Estimated Cost Increase | \$ (1,273) | \$ (695) |
| Delta Breakdown | | |
| Total Construction Cost Increase | \$ 188 | \$ 103 |
| Cost to Abandon Unit 3 | \$ 2 | \$ 1 |
| Additional Owner's Costs | \$ 294 | \$ 167 |
| Additional Transmission | \$ (5) | \$ (3) |
| Additional AFUDC | \$ 34 | \$ 19 |
| Toshiba Guarantee | \$ (1,785) | \$ (982) |
| Total Estimated Cost Increase | \$ (1,273) | \$ (695) |

These Costs are DRAFT and contain assumptions that need to be validated.



Process to Finalize ETC

| <u>Step</u> | <u>Status</u> |
|--|---------------|
| Review Westinghouse ETC | 99% Complete |
| Receive Transition Plan Assumptions | 80% Complete |
| Assemble ETC Schedule Range | 75% Complete |
| Assemble ETC Cost Estimate | 80% Complete |
| Review Estimate and Schedule (Includes External Cold-Body Review) | 50% Complete |
| Scrub Estimate for Inconsistencies | 30% Complete |
| Adjust for a 1-Unit ETC | 25% Complete |
| Report and Receive Concurrence of Major Assumptions | |
| Verify and Adjust Estimate | |
| Finalize Estimate | |
| Incorporate Management Comments | |
| Prepare Report | |

Questions

