

VC Summer Unit 2/3 Update

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New Nuclear Deployment

SCANA/South Carolina Electric & Gas

VC Summer 2 & 3 – Construction Site 2014



Storage

Unit 2

HLD

MAB

Unit 3

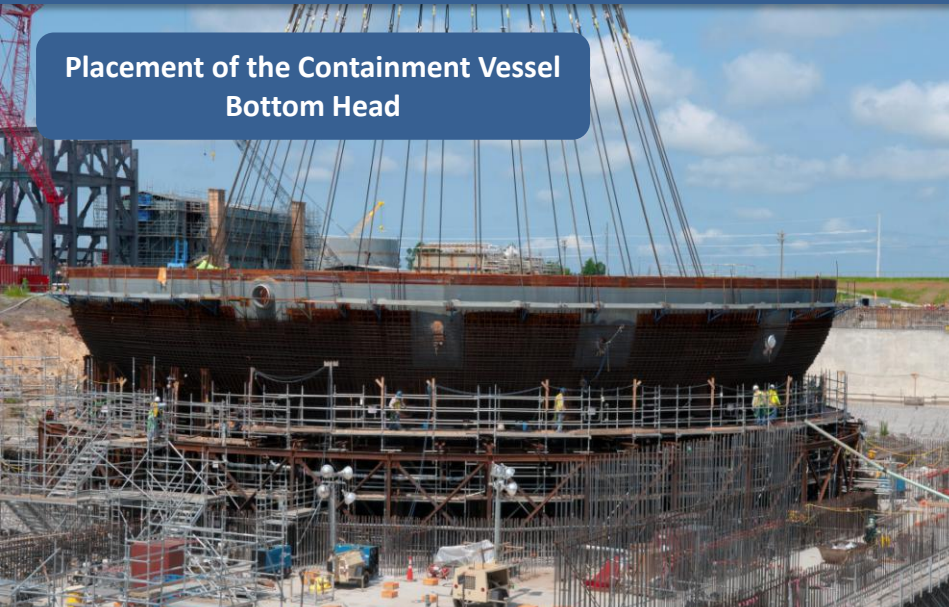
Cooling Towers

CV Assembly

Contractor
Support
Personnel

Unit 2 Nuclear Island

Placement of the Containment Vessel Bottom Head



Placement of Module CA-20



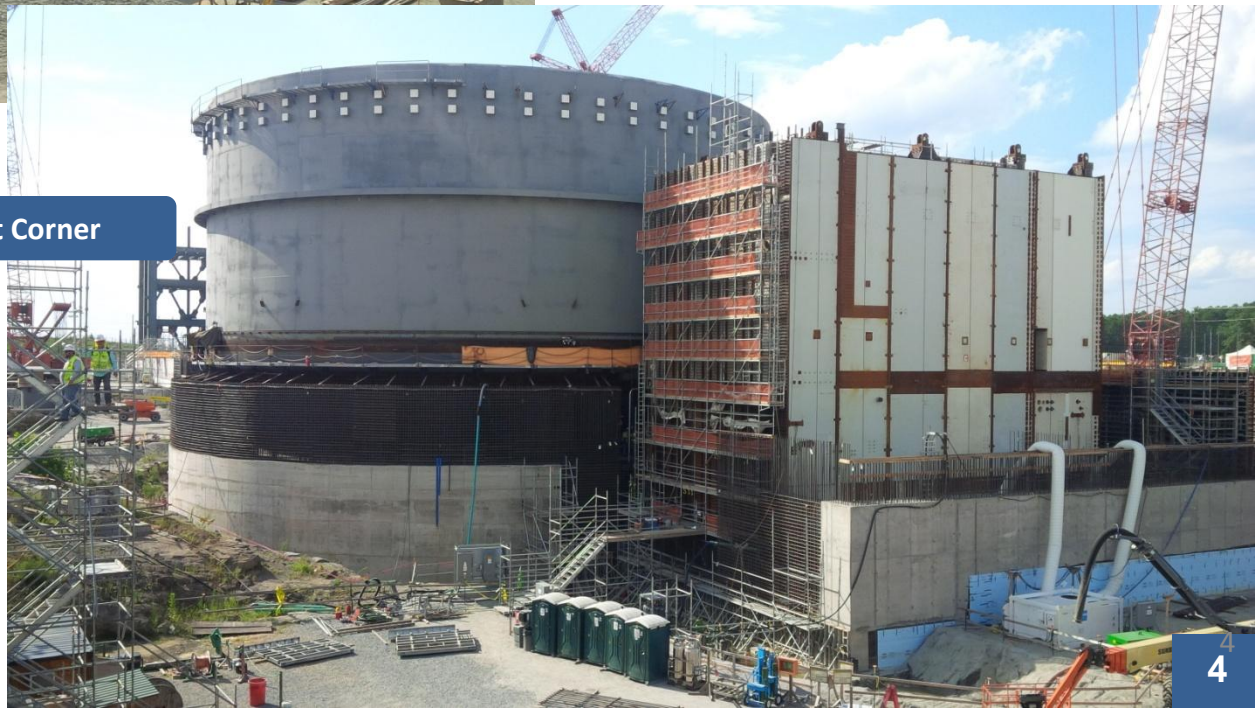
Placement of Containment Vessel Ring 1



Unit 2 Nuclear Island



Unit 2 NI/TB from Southeast Corner



Unit 2 NI from Southwest Corner

Unit 2 Containment Vessel Lower Ring

- Four Courses
- A lower and an Upper Equipment Hatch
- A lower and an Upper Personnel Hatch
- An external Stiffener



Containment Vessel

Unit 2

Unit 3

Top Head

Ring 3

Ring 2



Ring 1



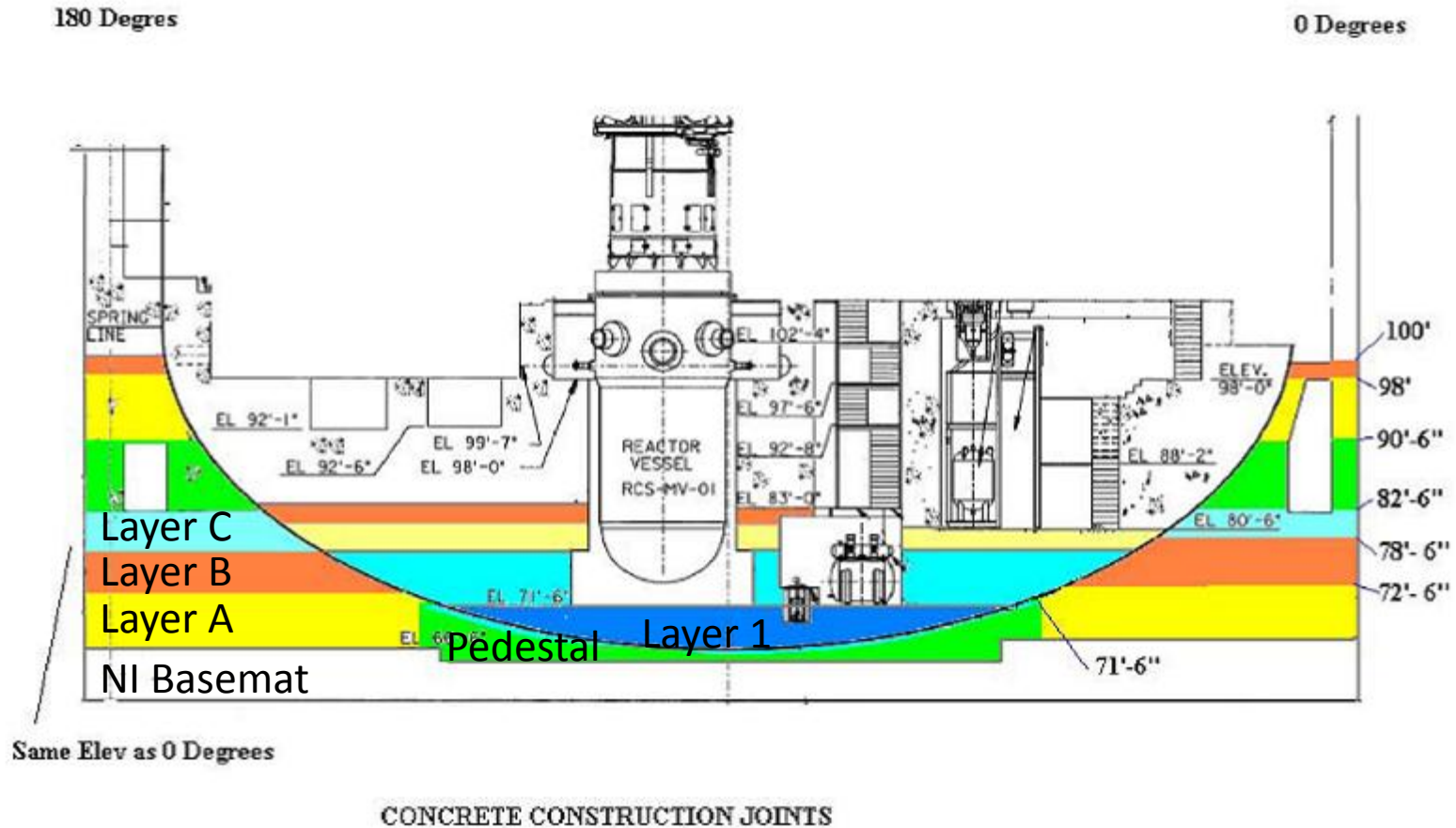
Bottom Head



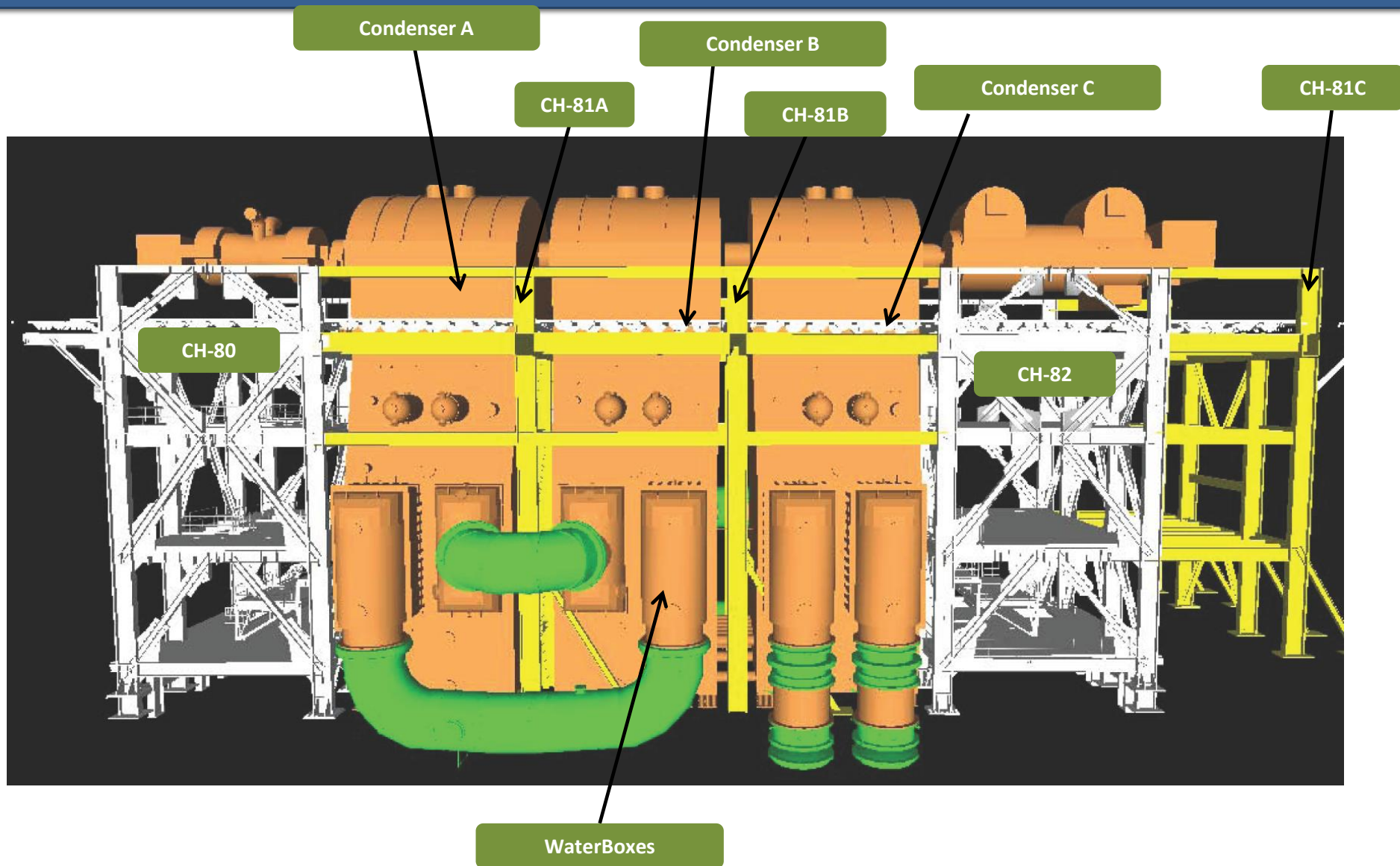
Equipment
Hatches (2)

Personnel
Airlocks (2)

Containment Vessel Concrete Layers



Turbine Building Layout



U2 Turbine Building



U2 Turbine Building Eastside



U2 Turbine Building Northside



Upcoming 2014 Construction Milestones

Unit 2

Nuclear Island

- Place Concrete in CA20
- Fabricate and Set CA05—*CVS / Access Tunnel / PXS-B Walls*
- Fabricate and Set CA01—*Steam Generator and Refueling Canal*
- Fabricate and Set CA02 —*IRWST / Pressurizer Wall*
- Fabricate and Set CA03 —*IRWST Southwest Walls*
- Set First-Floor Mechanical Modules
- Start Shield Building

Turbine Building

- Complete Condenser component installation
- Complete foundation at Elevation 100'0"
- Start First-Bay foundation

Unit 3 Nuclear Island



Unit 3 Nuclear Island



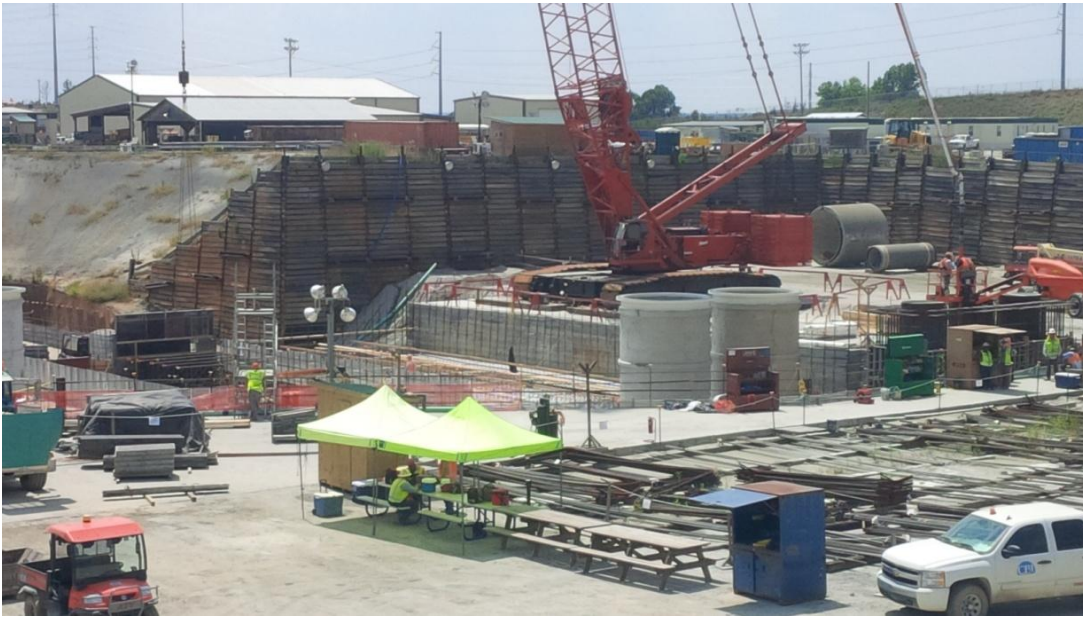
Column line
N wall

Column line
1 wall

Unit 3 Containment Vessel Bottom Head



Unit 3 Turbine Building Area



Circ Water Pipes



Circ Water Risers

Upcoming 2014 Construction Milestones

Unit 3

Nuclear Island

- Set Containment Vessel Bottom Head (CVBH)
- Grout CVBH
- Place first level of concrete in CVBH
- Fabricate and Set CA04—Reactor Vessel Cavity
- Place Auxiliary Building walls – A2 Elevation (66'6"-82'6")

Turbine Building

- Complete Backfill
- Install 82'6" basement foundation and walls
- Fabricate and install Condenser components
- Install CH Structural Steel modules

Units 2 & 3 Construction Milestones – Completed

- Unit 2 FNC, 3/11/13, 7000 cubic yards of concrete
- Unit 2 CR10 set, 4/3/13
- Unit 2 Containment Vessel Bottom Head placed, 5/22/13
- Unit 3 FNC, 11/4/13
- Unit 2 CV Ring 1
- Unit 3 CV Bottom Head
- Switchyard energized
- Cooling Tower 2A structure erected
- Unit 2 Turbine Building Basemat & Basement Walls placed
- Unit 2 Condensers set 12/30/13
- Unit 2 CH80 & CH82 steel set



Unit 3 Core Makeup Tanks



Units 2 & 3 Accumulator Tanks



Unit 2 Turbine Stator



Units 2 Turbine Waterbox

Unit 2 Main Step Up Transformers - 230/26kV

- Assembly weight with oil - 529,800lbs each
- 3 in service, 1 spare
- 12,720 gallons each
- Stored Air Filled



Lesson Learned

- Green NCV of 10 CFR Part 50, Appendix B, Criterion VII “for failure to assure purchased equipment met procurement and ITAAC requirements”
- Vendor provided the average wall thickness and average outer diameter, but did not provide/retain the data that supported the average
- The average values were used to obtain the “calculated volume” of the accumulator tanks
- Error required the tanks to be re-measured onsite
- ITAAC team is now more involved in the procurement process to ensure documentation will support ITAAC closure

Questions