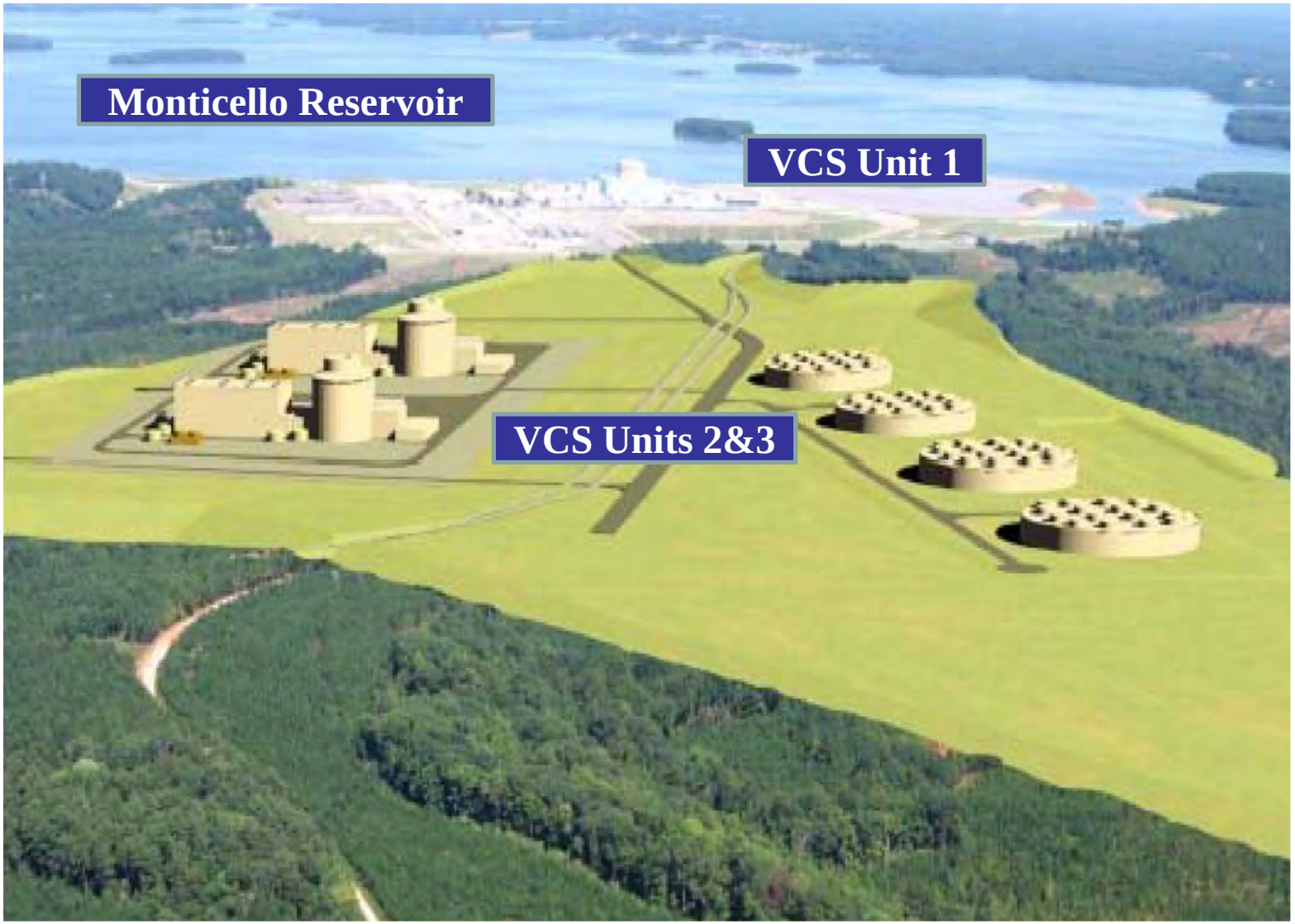
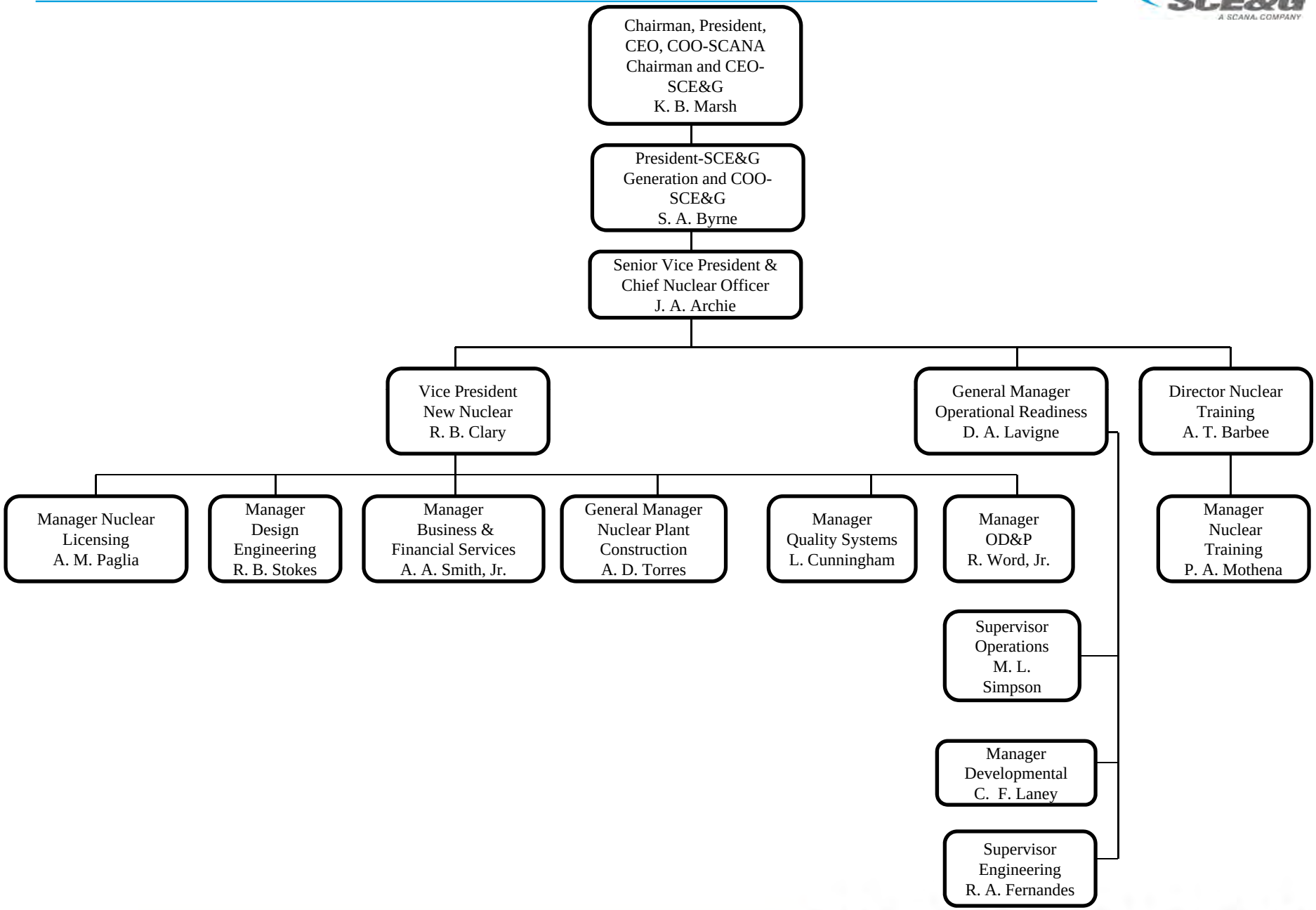
VCSNS Site

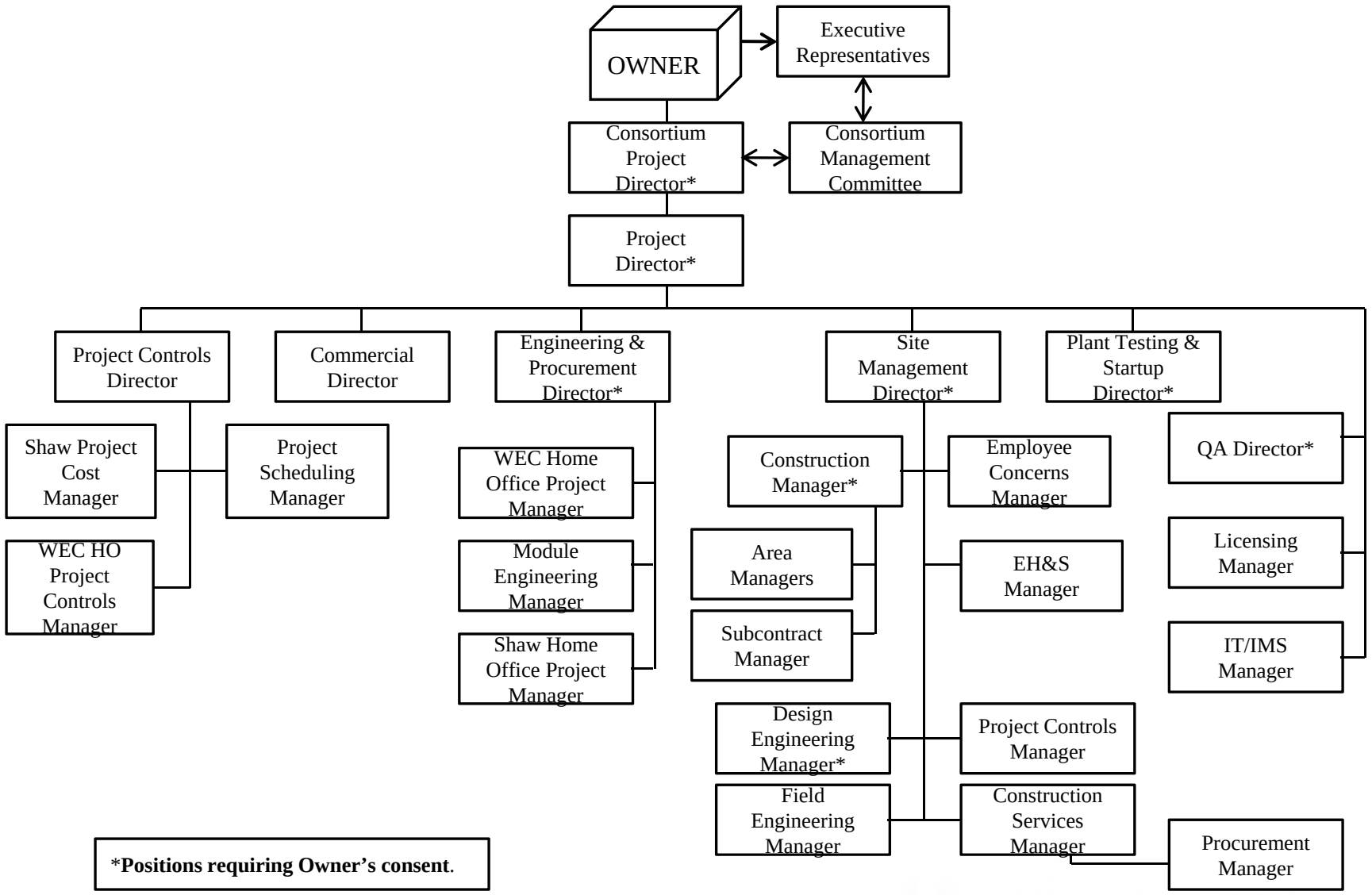


AGENDA

- Introductions
- Organization
- COL Readiness
- ITAAC overview
- Contractor Oversight
- Construction Experience
- Switchyard
- Project Status & Photos
- Operational Readiness


Chairman, President, CEO, COO-SCANA Chairman and CEO-SCE&G K. B. Marsh
President-SCE&G Generation and COO-SCE&G S. A. Byrne
Senior Vice President & Chief Nuclear Officer J. A. Archie
Vice President New Nuclear R. B. Clary
General Manager Operational Readiness D. A. Lavigne
Director Nuclear Training A. T. Barbee
Manager Nuclear Licensing A. M. Paglia
Manager Design Engineering R. B. Stokes
Manager Business & Financial Services A. A. Smith, Jr.
General Manager Nuclear Plant Construction A. D. Torres
Manager Quality Systems L. Cunningham
Manager OD&P R. Word, Jr.
Manager Nuclear Training P. A. Mothena
Supervisor Operations M. L. Simpson
Manager Developmental C. F. Laney
Supervisor Engineering R. A. Fernandes

Contractor Organization



COL Readiness Assessments

- SCE&G and the consortium completed separate COL Readiness Assessments
- The Assessments Were Multi-Week Efforts, Involving Large Teams and Use of Site Personnel, Off-Site Westinghouse /Shaw Personnel, and Industry Peers
- The Assessments Overlapped , but Each Reviewed Readiness From a Different Perspective
- Assessment results have been integrated for future actions

COL Readiness Assessments

- Both Assessments Reviewed:
  - Corrective Action Program
  - Quality Assurance
  - 10 CFR Part 21 and 10 CFR 50.55(e)
  - Security / Fitness for Duty
  - Readiness to Support NRC Inspection Activities
  - ITAAC Processes
  - Configuration Control
  - Training and Qualification

COL Readiness Assessments

- The Following Items Required for COL Issuance are Complete:
  - 10 CFR Part 21 and 50.55(e) Programs
  - 10 CFR 50.59 / 52 Appendix D Section VIII Programs
  - Personnel Qualification Program for 50.59/52 Appendix D Section VIII
  - NQA-1 Implementation Procedure Changes

COL Readiness Assessments

- Both Assessments Identified Enhancements to be Implemented in late 2011 / Early 2012, including:
  - Formalize ITAAC-Related CAP Identification Methods
  - Improve Accessibility Tools for Vendor Documents
  - Clarify Consortium Roles and Responsibilities
  - Ensure Adequate Consortium Staffing in Key Areas
  - Strengthen WEC / Shaw / SCE&G Interface Processes
  - Improve CAP Timeliness and Resolution
  - Provide Familiarization Training for Personnel on Unique Aspects of Construction, Such as ITAAC

COL Readiness Assessments

- Actions Needed for COL Issuance are Complete
- Enhancement Opportunities Have Been Entered Into the SCE&G / Consortium CAP
- The Site is Prepared for Safety-Related Construction Work

ITAAC Overview

Inspections, Tests, and Analyses are performed in accordance with normal work processes

- Not all ITAAC are safety-related, but all ITAAC are performed under the Licensee's QA program
- Identification on project schedules
- Construction work documents and test procedures that perform ITAACs specifically identified
- Procurement technical requirements specify ITAAC documentation requirements

ITAAC Overview(cont)

- Created ITAAC team including members from Construction, Licensing, Engineering, and Operational Readiness
- Developing Performance and Documentation Plans (PDPs) for all ITAAC
- Developing tracking tool

Contractor Oversight

- SCANA QA, Construction, Engineering, and Licensing direct oversight of Consortium activities
- SCANA has stop work authority for Consortium
- SCANA uses a release to work approach
  - Key Elements (Currently in place)
    - NND-AP-0012 Limited Notice to Proceed
    - NND-AP-0030 Preconstruction Screening
    - NNDG-CS-0001 Construction Oversight (Unit 1 impact assessment)
  - Minor Changes will occur to the above post COL

Contractor Oversight

- SMS Oversight
  - Periodic visits
  - Observations/Audits/Surveillances
  - Readiness Reviews
  - Participation in release to work
- CB&I Oversight
  - Participating in WEC audits, Vogtle readiness reviews, and corrective action review

Construction Experience Program

- Typical Inputs
  - NRC (Information Notices, Interim Staff Guidance, Generic Letters, NUREG 1055, etc.)
  - Industry: INPO, China AP1000 projects, APOG Utilities
  - Westinghouse and Shaw programs – CAPs, E&DCRs, RFIs, Post-Job critiques
- Evaluation Programs
  - SCE&G: Construction Experience Screening Committee → Corrective Action Program
  - Shaw: OE/Lessons Learned Program
  - Westinghouse: iKnow Program

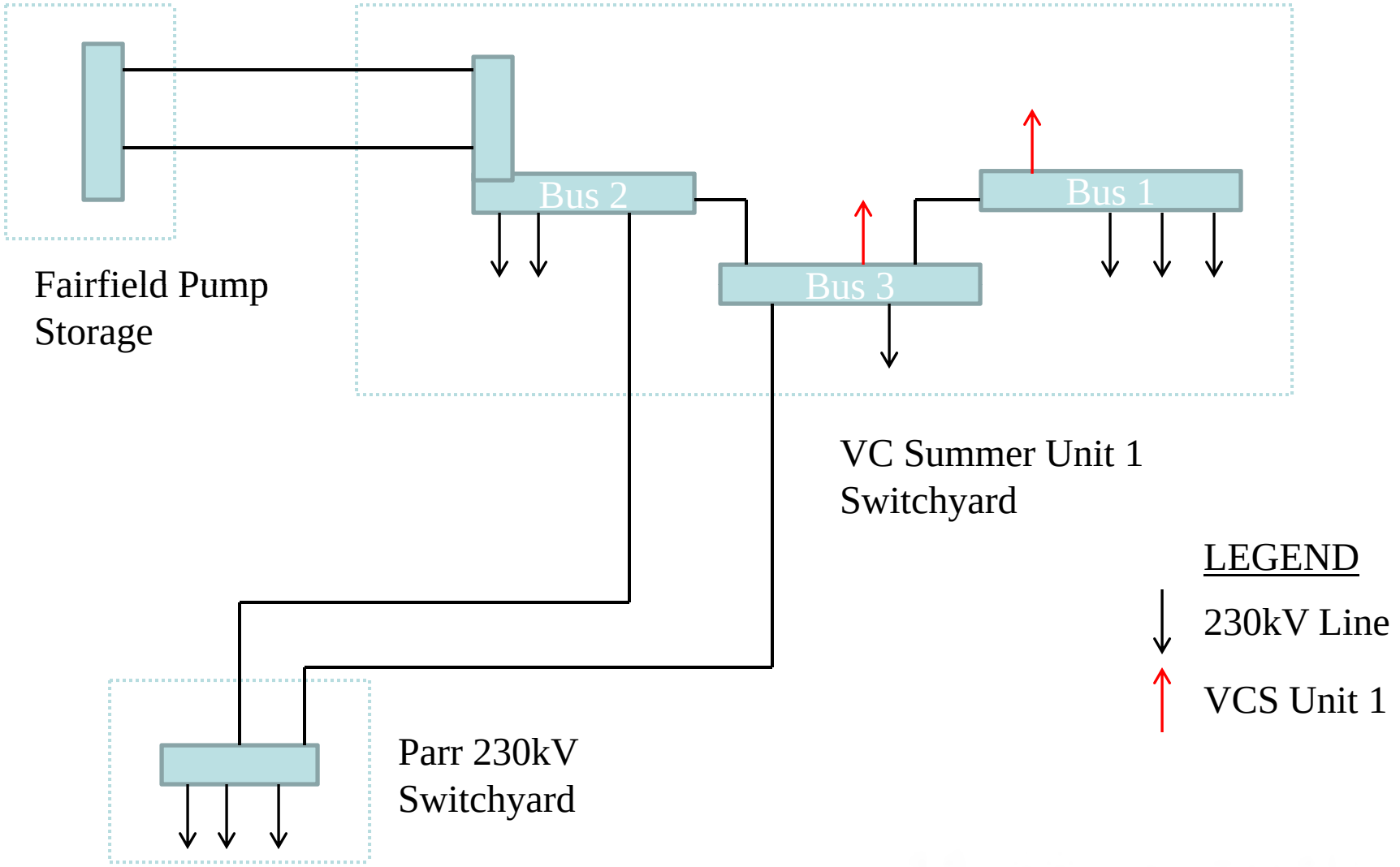
Construction Experience Examples

- Containment Vessel
- CA Structural modules
- Nuclear Island Base mat
- Logistics
- Working near operating units
- Waterproof Membrane

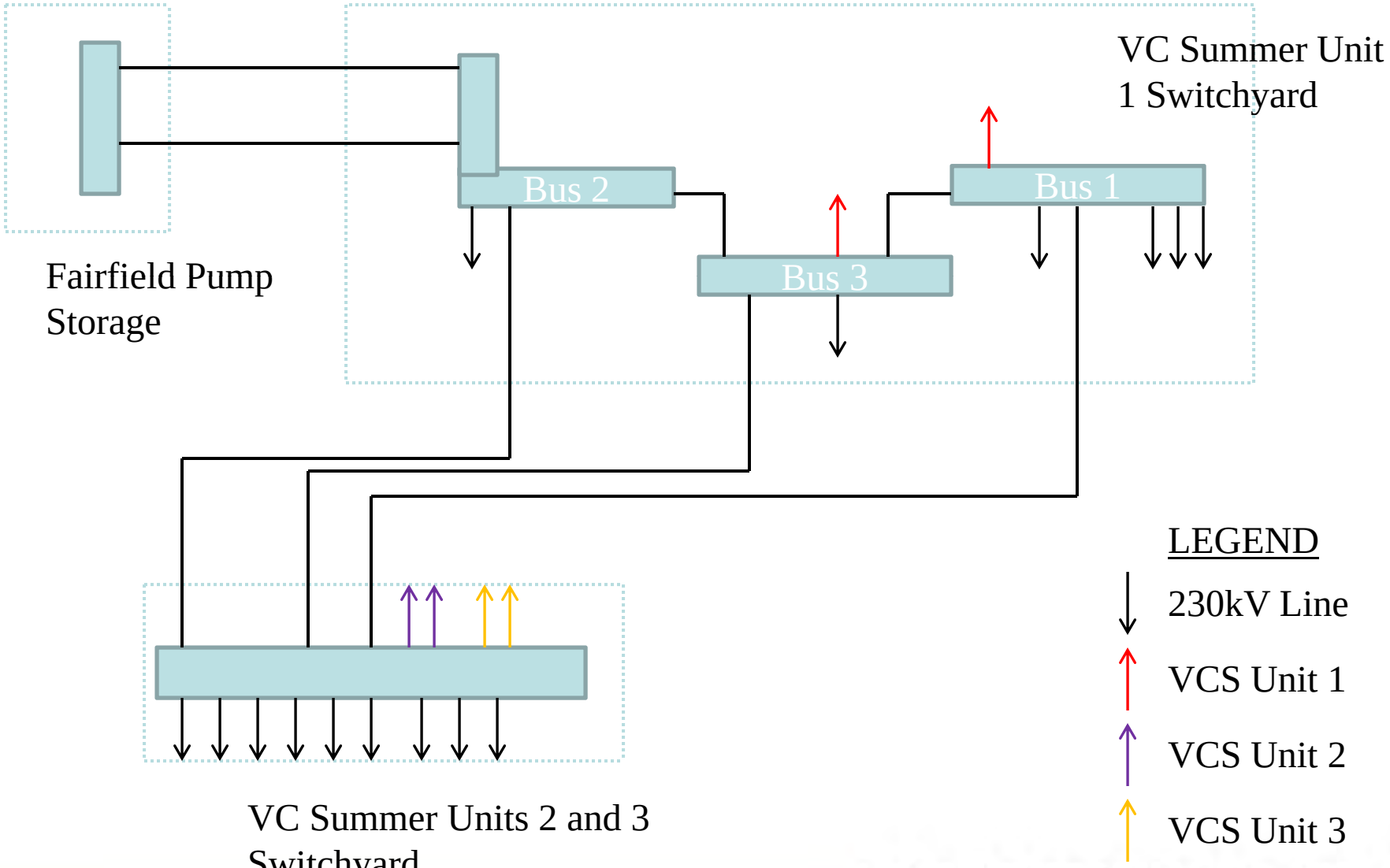
Switchyard

- The Basic design of the Switchyard is classified as a breaker and a half design
- The Switchyard consumes approximately 32 acres
- The foundations required 905 individual caissons
- The expected date to energize the yard is March 2013

Original Area 230 kV System



Final Area 230kV System



Changes to Area 230 kV System

- 5 new 230kV lines identified by transmission system power flow and grid stability studies (2 added to Unit 1 Switchyard and 3 added to Unit 2 switchyard)
- 3 ties added between Unit 1 Switchyard and Unit 2 and 3 Switchyard for stability and reliability
- 3 lines moved from Unit 1 switchyard to Unit 2 and 3 switchyard to avoid line crossings
- Parr 230 kV switchyard to be decommissioned requiring 1 line to be moved to Unit 1 switchyard and 2 lines to be moved to Units 2 and 3 switchyard

Project Status

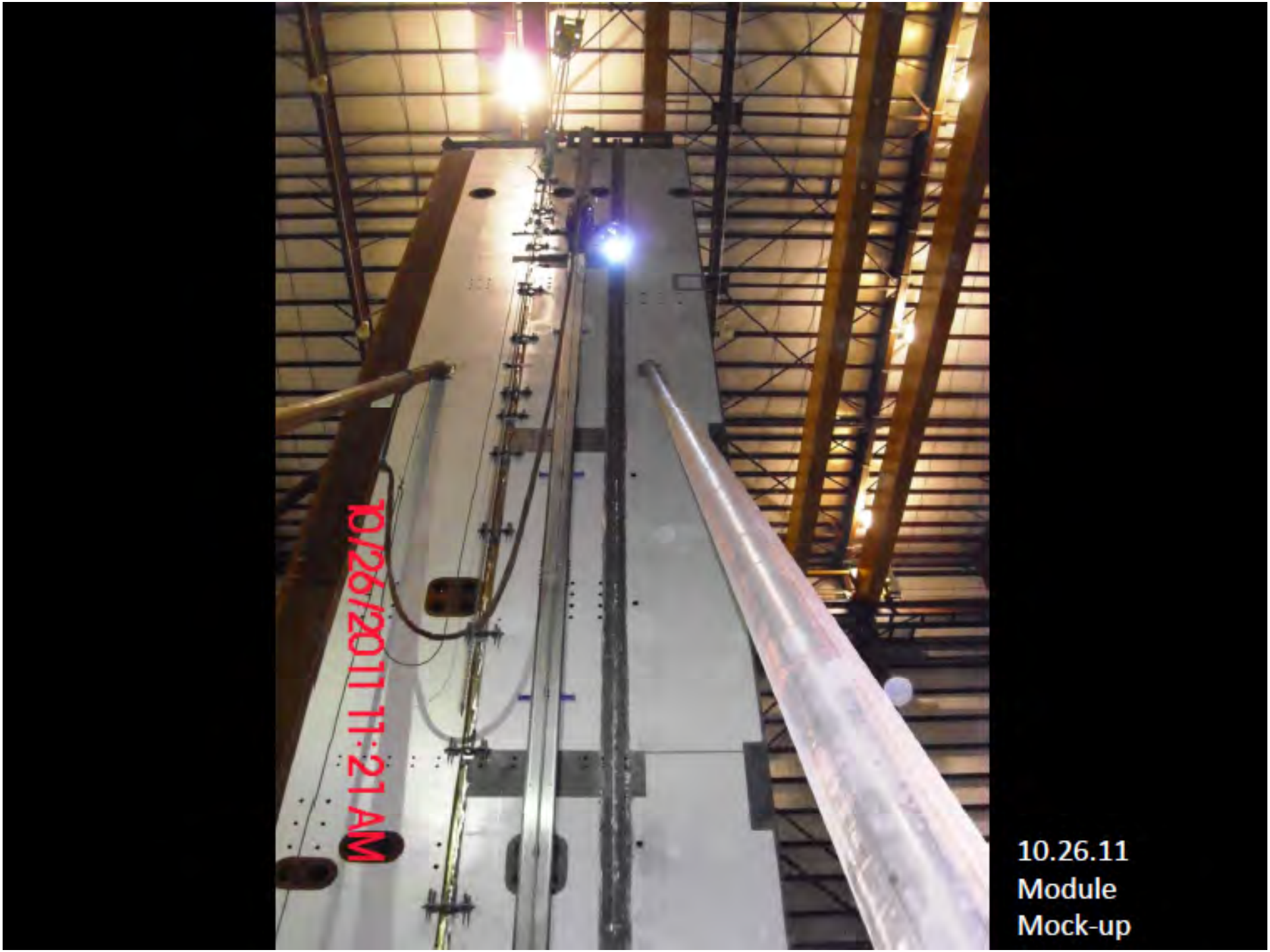
- Unit 2 and 3 construction on schedule
- 12 SCE&G personnel from Unit 1 construction assigned to Units 2 & 3
- Employees onsite: NND 150, Consortium 1000
- Completed activities: roads, railroad, concrete batch plants, Module Assembly Building, and construction support facilities
- Ongoing activities: Unit 3 mapping, Heavy Lift Derrick, Switchyard, Containment Vessel welding, Cooling Tower foundations, and underground piping systems

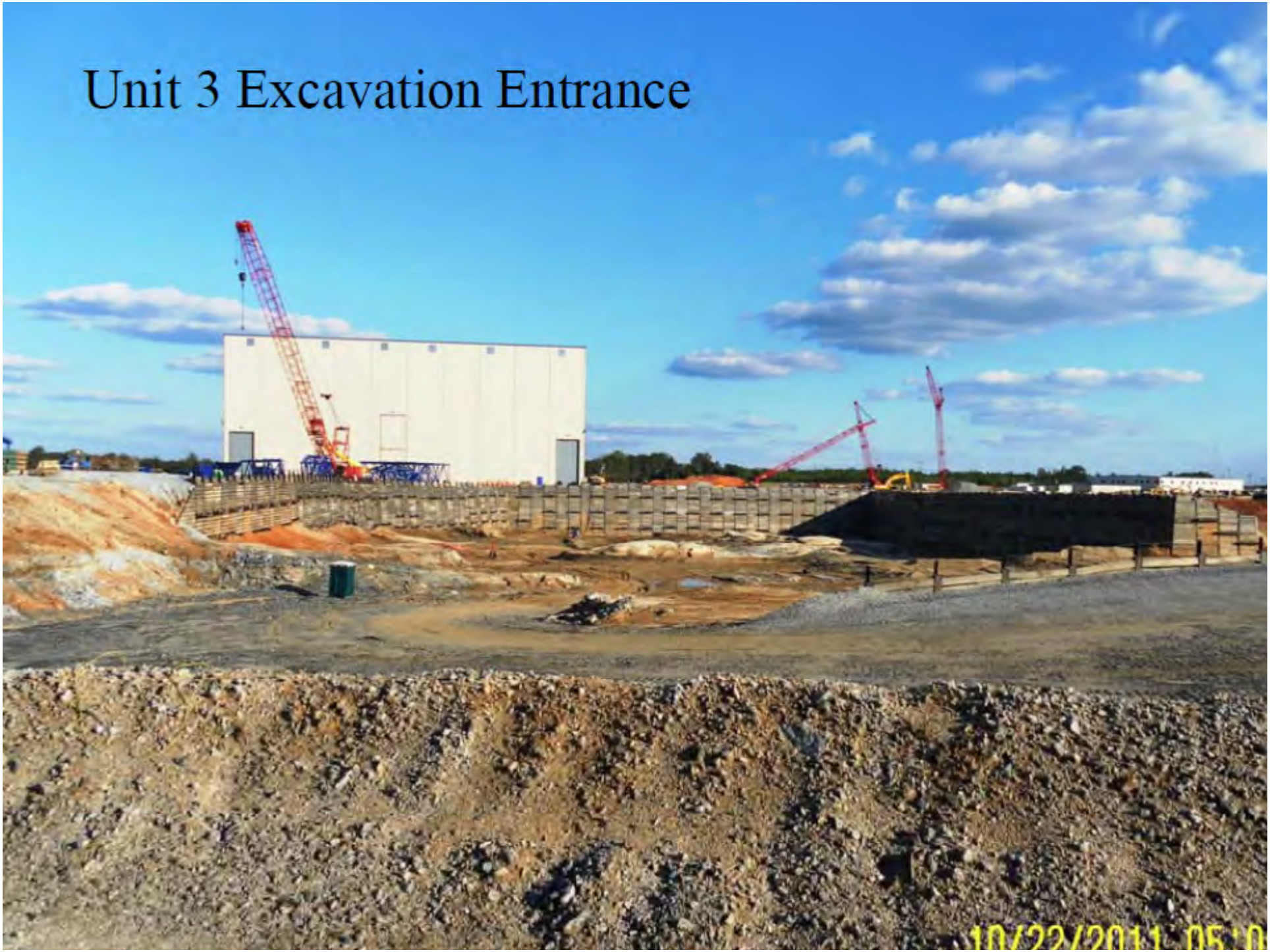
VCSNS Site Development

CA01/CA20 PLATEN FABRICATION


CA20_01 & CA20_0
Sized Mockup
10/18/2011 03:5


CA20_01 & CA20_02
Full Sized Mockup
(CA20 Platen Near
& CA01 Platen Far)
10/20/2017 08:43 PM


10/26/2011 11:21 AM
10.26.11
Module
Mock-up


Unit 3 Excavation Entrance
10/22/2011 05:0


Unit 2 Turbine Building
Excavation
10/22/2011 05:0


Setting Unit 2 CW
to the Pump House
10/20/2011 12:5

UNIT 2 CWS PIPE TO COOLING TOWER 2A

CB&I LOWER BOWL FABRICATON

CBI Bowl Placement

HLD Erection

BOOM SECTIONS

Switchyard

Operational Readiness

- People
- Programs
- Procedures
- Pre Operational/Start Up Test
- Technical Focus Areas

Closing Message

- Focus on Safety Culture
- Focus on Applying Lessons Learned
- Necessary Programs/Procedures in Place
- Effective Contractor Oversight
- Ready for COL & Safety Related Construction

Questions?