Special E&O Committee – San Vicente Pipeline and Lake Hodges Projects

April 11, 2013
Introduction

San Vicente Pipeline Background

Lake Hodges Background
Agenda

- Introduction
- San Vicente Pipeline Background
- Lake Hodges Background
Emergency Storage Project

- Four Phases – $1.5 billion
- System of pipelines, pump stations and reservoirs
- Store water locally
- Provide more flexible water deliveries
- Over 90,000 AF
- Meet needs through 2030
San Vicente Pipeline
Constructed June 2005 – January 2011
San Vicente Pipeline in Regional Water System

- Emergency Water Deliveries
  - Pipeline 5, north or south
  - Levy Water Treatment Plant

- Support Storage Opportunities
  - Carryover storage

- Operational Flexibility
  - Peak demand
  - Pipeline shutdowns
San Vicente Pipeline Project Facts

- 10-foot diameter tunnel
- 8-foot diameter cement mortar lined pipeline
- 11-miles long
- 440 cubic feet per second
San Vicente Pipeline Project Roles

- Construction Manager: Parsons Water & Infrastructure
- Designer: Jacobs Associates
- Contractor: Traylor–Shea JV
  - Board Awarded Construction Contract – June 2005
  - Board Approved Notice of Completion – January 2011
Geotechnical Investigation
Exceeded Standard of Practice

- 40 exploratory boreholes
- Total length of boreholes in excess of 13,000 feet
- 18 of the boreholes were drilled within Reach 4
- Cost of investigation – $2.9 million
- Additional boreholes would have involved environmental, access, right of way issues with the associated delays and cost premiums
Reach 4 Geologic Profile
Drill Rig Coring
Scale of Borehole

- Exploratory borehole
- Ground surface
- 3"
- 250'
- 12' diameter tunnel
Geotechnical Baseline Report Prepared

- Used by contractor to select equipment and other means and methods
- Provides a baseline to compare actual conditions
  - Differing site condition defined as a subsurface condition that is materially different from what is indicated by the Contract Documents and that could not have been discovered by the contractor upon reasonable pre-bid inspection and testing.
Digger Shield
Face Maps Show Highly Variable Conditions
3–D View of Section of Tunnel Showing Cemented Zones
Scale of Borehole

3 inch boring

Cemented Zone

12 ft dia tunnel
Water Authority Recognizes Differing Site Condition February 2007

- SDCWA Acknowledged a Differing Site Condition ("DSC") in Reaches 1 and 4
  - Reach 1 – conditions more fractured than anticipated in the GBR
  - Reach 4 – relates to the strength and quantity of the “strongly cemented” material compared to the GBR

- SDCWA Denied a DSC in Reach 2
  - Reach 2 – No material difference between the actual conditions and those described in the GBR

- Water Authority Board approved Interim Payment Agreement in September 2008

- Water Authority paid $19 million in interim payments


TSJV Lawsuits

- Reach 4 (June 2011) – $50+ million
- Reach 1 (Dec. 2011) – $2.1 million
- Reach 2 (Dec. 2011) – $2.5 million
- Wrap-Up Claim (Not yet filed) – $8.3 million
- Total Estimated Amount Sought: $64.9 million
Claim Defense Team

- **Special Counsel – Procopio, Cory, Hargreaves & Savitch**
  - Craig Ramseyer
  - Scott Omohundro

- **Water Authority Staff**
  - Dan Hentschke – General Counsel
  - Frank Belock – Deputy General Manager
  - Gary Bousquet – Engineering Manager

- **Support Experts**
Settlement of Project Labor Agreement Lawsuit – December 2011

- TSJV dismissed its $2.7M PLA complaint (Water Authority pays $0)
- Water Authority dismissed false claim cross-complaint
- Settlement consistent with contract specified Arbitrator’s ruling
SVPL Construction Board Communications Feb 2007 – Apr 2013

18 Regular E&O Meetings

4 E&O Committee Field Tours

10 Special E&O Meetings

13 Closed Sessions with General Counsel
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Lake Hodges Project Facts

- Two – 28,000 horsepower pumps (600–760 cubic feet per second) Could fill a backyard swimming pool in about 5 seconds.

- Provides access to Lake Hodges water e.g. ESP event or water operations.

- Pumped Storage provides 40 megawatts of peak hydroelectric power (enough for 26,000 homes).
Project Completion Milestones

- **Commercial Operations**
  - Unit 1 – September 2011
  - Unit 2 – August 2012

- **Archer Western Notice of Completion** – Filed Feb. 2013

- **Andritz Notice of Completion** – Pending
Litigation Team

- Special Counsel – McKenna Long & Aldridge
  - Mark Budwig, Esq.
  - Jim McNeil, Esq.

- Water Authority Staff
  - Dan Hentschke – General Counsel
  - Frank Belock – Deputy General Manager
  - Gary Bousquet – Engineering Manager

- Support Experts
Litigants

- MWH – Designer
- Archer Western – Contractor
- Andritz – Equipment Supplier
- Water Authority
Major Issues

- Pump House Equipment
- Turbine Binding
- Generator Bolt Design Issue
Lake Hodges Projects
Major Issues

- Pump House Equipment
- Turbine Binding
- Generator Bolt Design Issue
Turbine
Unit Binding

- Unit 1 bound during testing in January 2010
- Investigation determined components out of tolerance (manufacture and installation)
- Andritz Manufacturing Problem?
- Archer Western Installation Problem?
- September 2012 Mediation good first step, but no progress made
- Need all parties (MWH) present for comprehensive resolution
Major Issues

- Pump House Equipment
- Turbine Binding
- Generator Bolt Design Issue
Unit 2 Stator
Stator Core Damage
Independent Engineer agreed with Andritz – Failure was due to an Andritz Design Error
Warranty Phase

- Andritz and Archer Western are within 2-year warranty phase
  - Unit 1 expires September 2013
  - Unit 2 expires August 2014
- Warranty Repairs Ongoing
  - Material in oil reservoirs