

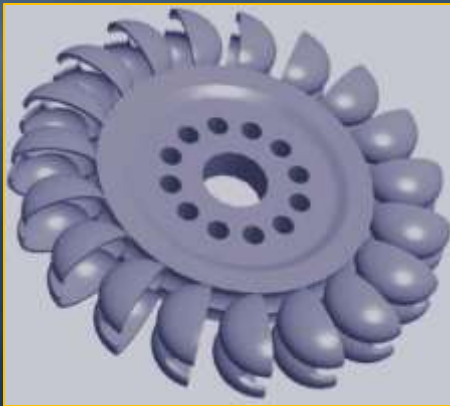


Engineering Services Manager's Report

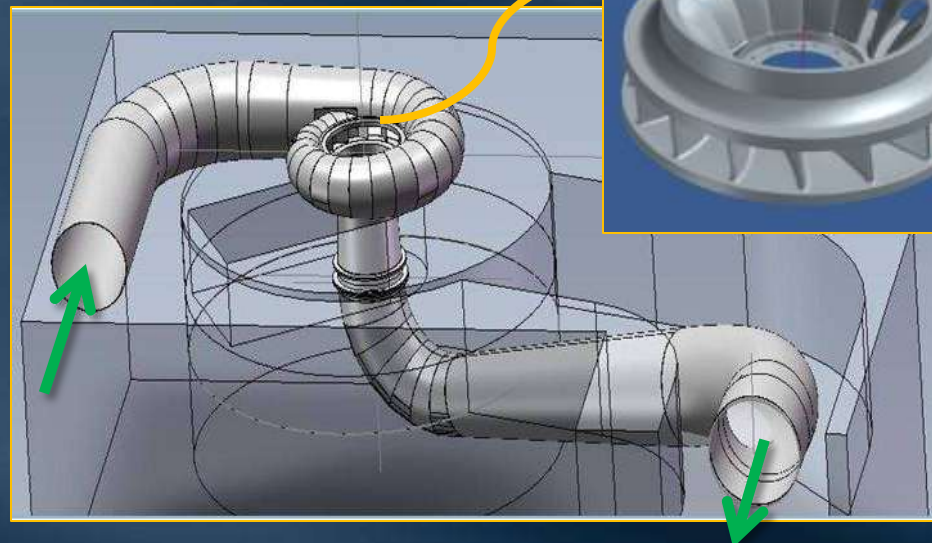
Engineering and Operations Committee
Item 7b
February 9, 2015

Yorba Linda Power Plant Modifications

- Replace Pelton wheel with a Francis-type turbine
 - Operation under submerged discharge conditions
 - Higher efficiency & higher speed
 - Smaller turbine can fit into existing building
- Modify turbine housing & control building
- Modify/integrate SCADA system



Pelton Wheel



Francis
Turbine

Yorba Linda Power Plant

Turbine Generator Replacement



Installing new turbine runner



Installing turbine shaft

Yorba Linda Power Plant

Turbine Generator Replacement



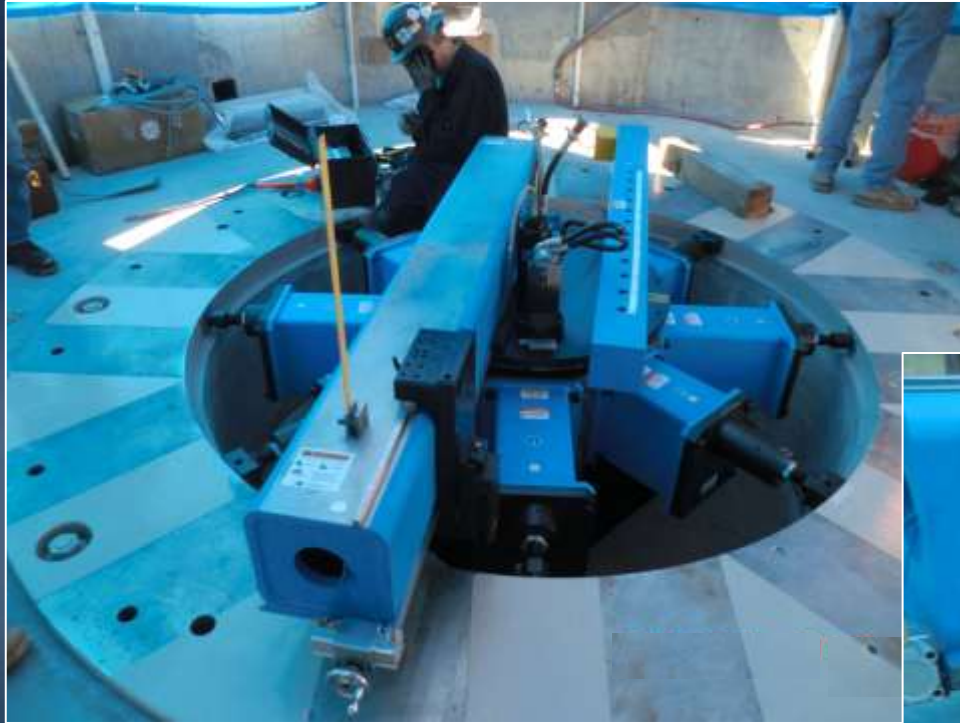
Positioning sole plate



Checking sole plate alignment

Yorba Linda Power Plant

Turbine Generator Replacement



Climax Orbital In-place Facing Machine



Setting depth of cut

Yorba Linda Power Plant

Turbine Generator Replacement



Sole Plate - machined, faced, painted and shimmed

Yorba Linda Power Plant

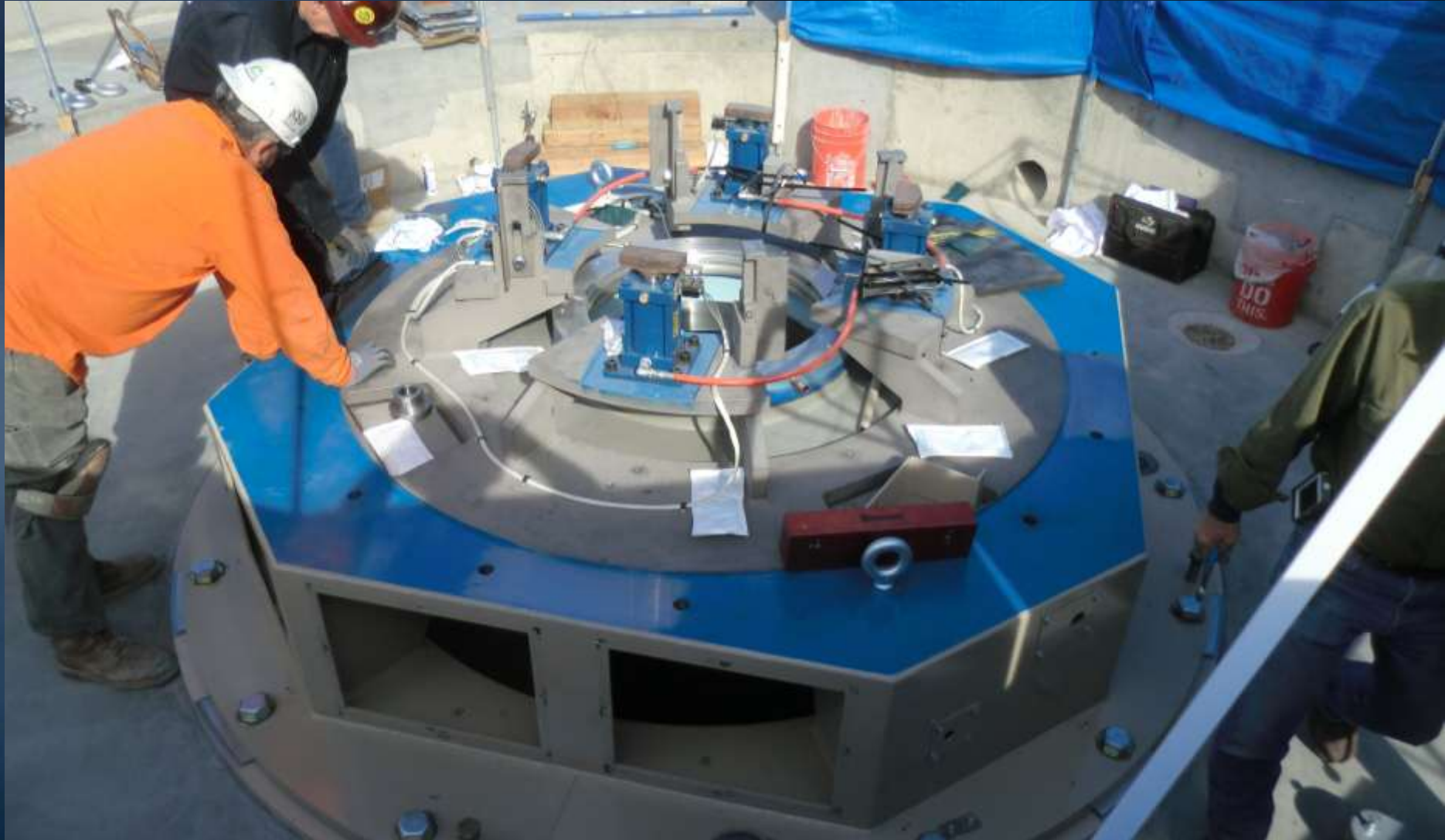
Turbine Generator Replacement



Crane – placement of generator lower bridge

Yorba Linda Power Plant

Turbine Generator Replacement



Installed generator lower bridge

Yorba Linda Power Plant

Turbine Generator Replacement



Positioning of generator main stator



Positioning of generator main stator

Yorba Linda Power Plant

Turbine Generator Replacement



Crane placement of rotor



Positioning of rotor

