

Sunol Valley Water Treatment Plant

Operations Survey

Sunol, California

I. Presenter:

Name: Anthony Scott

II. Why operations staff wanted the project – problems the project was intended to solve:

- Sunol Valley Water Treatment Plant (SVWTP) needed capacity upgrade to allow for longer future Hetch Hetchy Service Outages
- SVWTP needed filtered water treatment and storage upgrades to provide water quality reliability

III. Challenges of operating during construction:

- Hazards and disruption created by site occupation
- Shutdowns and work on live systems was required
- Operating capacity constraints on plant were imposed

IV. How project has affected operations:

- Improvements include 160 MGD plant capacity, 17.5 MG of new treated water storage & finishing facilities

V. Challenges of operating new facilities:

- New treatment chemical systems have introduced new O&M risks associated with ammonia
- New power generation and switch-gear pose medium voltage hazards

- New sedimentation facilities do not perform as expected and are of a completely different design than the rest of the plant, so staff have been slow to commission them, less confident, and reluctant to use

VI. Lessons Learned from an Operations perspective:

- Develop design criteria, performance standards, and control strategies early in design
- Plan to commission new systems immediately
- Maximize O&M flexibility in all design – extra benefits are certain to come of it
- Maximize O&M control, instrumentation and access in the design of all new water facilities – extra benefits are certain to come of it (good Karma)