Fuel Transfer Operations Topics

- Significance of scratches
- Holtec operational enhancements
- SCE oversight and sustainability
- Path forward
- Update from NRC Region IV
SIGNIFICANCE OF SCRATCHES
Delivery Robot

- Remote-controlled robot
- Reached 99% of shell
  - Lower part of 3-inch-thick base plate not visible
Camera Inspections

- Precision digital borescope
- Measures depth and length of indications

Borescope (camera)
Observations

• In situ inspections of 8 canisters
  – Canisters identified for inspection included 8/3 and 7/22 canisters
  – Most observed wear was very shallow at 0.000 to 0.005 inches
  – Deepest wear was .026 inches (< thickness of credit card)
  – ASME code conservatively .0625 inches
Conclusions

- Wear marks far below depth that would be a safety concern
- Incidental wear during downloading poses no safety significance
- Passive oxide layer re-forms to protect from corrosion
- Canister containment integrity remains robust
- Inspection & Maintenance program will monitor over time
Links to Important Topics on SONGScommunity.com

- SCE White Paper on Incidental Canister Contact - June 3, 2019

- Drop Analysis of Fully Loaded Multi-Purpose Canister (Model MPC-37)

- Frequently Asked Questions
  - https://www.songscommunity.com/need-to-know/faq

- Q&As from March 28 CEP meeting
HOLTEC OPERATIONAL ENHANCEMENTS AND SUSTAINABILITY
SONGS Spent Nuclear Fuel Storage Program

By: L. Jearl Strickland, P.E.
Executive Director
June 5, 2019
Agenda

Topics

✔ Executive Director Introduction and Background
✔ Response to August 2018 Event
✔ Changes to the SONGS Loading Program
✔ Overview of Holtec International Programs
✔ Summary
✔ Questions
Introduction and Background

Jearl Strickland

✓ 38 plus years with Pacific Gas and Electric
✓ Last Role - Interim VP of Generation Technical Services
  ▪ Strategic projects
  ▪ Regulatory projects
  ▪ Nuclear fuels
  ▪ Geosciences and seismic projects
  ▪ Business, compliance and risk management
  ▪ Nuclear power plant decommissioning
✓ Retired from PG&E in May 2018
✓ Holtec Advisory Board – small modular reactor
Holtec Response to August Event

- Established an Evaluation Team
  - ✔ Assess Holtec and SONGS organizations, culture and project staffing
  - ✔ Development of a detailed root cause evaluation
  - ✔ Development and implementation of corrective actions
  - ✔ Support SCE’s development of an apparent cause evaluation
Holtec Program Changes - SONGS

- Procedures
  - ✔ Development of site specific governance
  - ✔ Detailed review and update to all loading procedures

- Training
  - ✔ Systematic approach to training implemented
  - ✔ Detailed training modules
  - ✔ On the job training (OJT) – skill assessment / verification
Holtec Program Changes – SONGS

- Staffing
  - Training manager, quality manager
  - Additional cask loading supervisors, project managers
  - Vetting process for skilled labor
  - Performance monitoring and assessment program

- Equipment and Downloading Process
  - Improvements
    - Load monitoring, camera, staffing, hold points
Loading Resumption

- Focused on safety
- Performed multiple practice runs to vet procedures
- Will require approximately 6 weeks for mobilization and refresher training
- Single unit loading plan
  - ✔️ Assessment through first 6 MPC’s
Summary

- Holtec is committed to SAFELY completing the transfer of spent nuclear fuel from wet to dry storage.
- Changes to procedures, training, equipment and culture have established a path for long term success.
- Lessons learned are being applied across Holtec site services operations.
- Holtec is committed to supporting the longer term management of SONGS spent nuclear fuel with interim consolidated storage.