

OFFICE OF THE SECRETARY  
CORRESPONDENCE CONTROL TICKET

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ACTION OFFICE: EDO

To: Leeds, NRP

Cys: OEDO  
RIV  
Merzke,  
OEDO

AUTHOR: Bill Hawkins

AFFILIATION:

ADDRESSEE: Chairman Resource

SUBJECT: Concerns San Onofre Nuclear Generating Station restart

ACTION: Appropriate

DISTRIBUTION: RF, SECY to Ack.

LETTER DATE: 04/04/2013

ACKNOWLEDGED Yes

SPECIAL HANDLING: Lead office to publicly release 24 hours after SECY's assignment, via SECY/EDO/DPC.

NOTES:

FILE LOCATION: ADAMS

DATE DUE:

DATE SIGNED:

**Remsburg, Kristy**

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**From:** Bill Hawkins [mailto:billlee123456@gmail.com]

**Sent:** Thursday, April 04, 2013 6:50 PM

**To:** CHAIRMAN Resource; Borchardt, Bill; Leeds, Eric; Howell, Art; Dorman, Dan; Benney, Brian; Hall, Randy

**Subject:** Thought of the day - Personal Observations based on review of audits, work activities and conversations with Anonymous Insiders, SONGS Sad Saga, but True Statistics

Life is a unique opportunity to serve the society. Society needs Energy, which is safe, economical and reliable. Every form of Energy has drawbacks and risks. SCE is responsible for safety, economics and reliability of Unit 2.

These factors will be measured on a scale of 0 to 10, 10 being the best and 0 being the worst rating.

#### Definitions and Ranking

- Highest Safety - Low probability of a tube rupture due to operational transients and main steam line break - 10
- Lowest Safety - Cascading tube ruptures due to operational transients and main steam line break - 0
  
- High Base-Load Reliability - 24/7 uninterrupted 2100 MWt supply to grid with voltage support - 10
  
- No Base Load Reliability - 730 MWt with frequent shutdown and interrupted supply to grid with only 30% of the time voltage support - 0
  
- Best Economics - Nuclear plants are the lowest-cost producer of base-load electricity. The average production cost of 2.19 cents per kilowatt-hour includes the costs of operating and maintaining the plant, purchasing fuel and paying for the management of used fuel. ([www.nei.org](http://www.nei.org)) -10
- Worst Economics - With SONGS Restart, cost is unknown, but will be highest in the nation - 0

#### SONGS Unit 2 Restart Statistics

- Lowest Safety - 0
- Worst Economics -0
- No Reliability - 0
- INPO Rating - 4 (Worst Operating Record of A Nuclear Power Plant)
- General Safety Record - Worst in the USA according to NRC Data

- Fire Safety Record - Unit 3 shutdown for 5 months in 2001, \$100 Million Loss, falsification of fire watch records for 5 years, 250 ignition sources/welding/grinding/procedure violations between 2010-2012
  - Emergency Preparedness Record - Lowest in the nation between 2006-2012, Some of the best Shift Managers, Station Emergency Directors, Corporate Emergency Directors and Plant Operators have resigned, retired or Laid Off
  - Cyber Security Initial Awareness Training - Audit found 1300 site workers, Cyber Security Program Manager, Chief Nuclear Officer and several other Directors out of SONGS not EIX procedure compliance
  - Management Record - Several of the Chief nuclear Officers have retired or resigned, Some of Present Senior Leadership Directors are inefficient, few are inefficient and retaliating, some are inactive and complacent, and the whole team is production/profit oriented rather than safety oriented
  - Steam Generators - 8 Steam generators destroyed by flawed design and mis-operations at a cost of Several Billion Dollars to Rate Payers, Arrangements are on the way to destroy the remaining 2.
  - Future - Depends upon NRC, affects the safety of 8,4 Million Californians
- Steam Generator Repair/replacement Project - Estimated Duration - 5 Years - Cost - Unknown - NRC Report: The U.S. Nuclear Regulatory Commission (NRC) inspection team observed various activities associated with the mock-up tests of a portion of the upper tube bundle. The activities being done by Mitsubishi Heavy Industries, Ltd. (MHI) were conducted to determine if a design modification to repair the San Onofre Nuclear Generating Station (SONGS) steam generators was feasible. The design modification testing consisted of anti-vibration bar insertion tests using three different designs. The three different anti-vibration bar designs were:
    - (1) Thicker – inserted between and parallel to existing anti-vibration bars
    - (2) 30 Degree – inserted at a 30 degree angle to existing anti-vibration bars, forming intersections with existing anti-vibration bars
    - (3) Comb – shaped like a comb and will be inserted into the bundle on every other row and then rotated 90 degrees, locking tubes into place between the "teeth" of the comb.

In discussions with MHI personnel, they indicated that the thicker anti-vibration bar will likely be the least difficult to insert and the comb anti-vibration bar the most difficult to insert due to slight differences in the gaps and arrangement of the tubes.

The last option (3) is beneficial for fluid elastic stability (FEI), but also increases significantly the risk of cascading tube ruptures tube rupture @100%, 1729 MWt per RSG @ MSLB Conditions. The first two options (1) (2) are not beneficial for fluid elastic stability. MHI has does not have the tools, technology or skills to repair/replace these flawed and degraded generators. SCE is only left with only two options, which were recommended a year ago, but were ignored, unless MHI signs a one-time contract with Westinghouse to repair/replace the replacement Steam Generators:

Option 1 – Give a turnkey contract to repair/replace the replacement Steam Generators to Westinghouse/Bechtel, Fire/Retire/Lay Of the Inefficient and retaliating Leaders, and Hire Capable and Human Managers, or

Option 2 – Dismantle and Decommission San Onofre Units 2 & 3.