

Joosten, Sandy

From: Vinod Arora <vinnie48in@gmail.com>
Sent: Friday, June 28, 2013 2:59 PM
To: CHAIRMAN Resource
Subject: Congratulations, NRC Mission and a word of caution on San Onofre

Dear Dr. Macfarlane,

FYI, This is what I wrote to President Obama's Campaign Staff on October 1, 2012, "His Excellency President Obama - My Intuition is Great Sir, that you will be the winner by a Land Slide - Vinnie Arora."

First of all, congratulation on your appointment as the Chairman of the NRC Commission for 5 the years-term. My Intuition and Sixth Sense tells me that due to industry pressure, you will face numerous obstacles in carrying out your safety mission, however, under your able leadership, Nuclear Regulatory Commission will continue to meet high standards and make a sincere effort to apply the lessons learnt from Fukushima, Davis-Besse, Three Mile Island, Browns Ferry and San Onofre to achieve the following objective:

"For Pollution Free energy, Public and Worker Safety, Promotion of Safe and Reliable Nuclear Power in the Aging Nuclear Reactors, Workers in all nuclear power plants and NRC Staff in USA needs to be fully protected by NRC Commission and Other Federal Agencies for prevention of instances of race/employment discrimination, retaliation, insult, intimidation, demotion and personal threats by NRC Officers/Utilities for suppressing nuclear safety concerns in accordance with US Constitution, NRC Rules and Federal Regulations. Under your stewardship, NRC Commission cannot afford the perception of being cozy with utilities and give the impression of providing relaxed reactor oversight and siding with utilities in suppression of race/employment discrimination, retaliation, insult, intimidation, demotion and personal threats for suppressing nuclear safety concerns for maximizing profits, violating federal regulations and compromising Public Safety, as we saw in San Onofre and Davis-Besse."

After 1.5 years of investigation, writing 100's of papers, reviewing all the San Onofre Reports, Records and Documents, numerous interviews with San Onofre Insiders, sending numerous email to you and your staff, I conclude, "Friendly and Relaxed NRC Region IV Reactor Oversight [Endorsement of Defective RSG 10CFR 50.59, Incomplete and Defective NRC AIT Report (A repeat of Defective SCE Unit 3 Root Cause Evaluation), ASLB disapproval of NRC Staff's Confirmatory Action Letter & SONGS Proposed License Amendment] and San Onofre Senior Management Leadership Team inability to defend Unit 2 Return to Service Reports and Fear of Impending Prosecution/Lawsuits from NRC OIG, NRC OII, USDOJ, CPUCDRA, Friends of the Earth resulted in Permanent & Sudden Shutdown of San Onofre Units 2 & 3. Even Elmo Collins said, "The guts of the steam generators look inside completely different."

I told Ted Craver in December 2012 that SCE's Restart Plan was faulty and even, If NRC gave approval, if an accident happens, everybody will be after him. Therefore, he was the wise and final decision maker. He saw the golden light in the San Onofre Senior Management Leadership Team Created Illusionary Safety Sermons & Dark Safety Tunnel, sensed the dangers and wisely shutdown San Onofre Units 2 & 3. That does not mean the impending investigations and prosecutions will disappear in thin air. Silence and No-Action on Part of NRC Commission is admission of guilt, ignorance and yielding to Industry Pressure. Permanent Shutdown of San Onofre

Units 2 & 3 is a set-back to NRC/NEI/INPO/EPRI's goal of promotion of pollution free nuclear power, increase in potential of global warming, erosion of public confidence and a slap in the face of NRC Commission."

As a Fire Protection and Oversight Engineer, I am really concerned about the potential fire/safety violations by contractors during the San Onofre Dismantling/Decommissioning Process welding/cutting/grinding operations. Despite numerous warnings from the SONGS Fire Marshall and Nuclear Oversight Department, SCE and Contract Supervisors have a very poor history of providing quality oversight, following procedures and corrective actions for these operations, just like poor oversight of MHI for San Onofre SCE designed and MHI fabricated 21st Century Safest and Innovative Replacement Steam Generators. Even though these violations do not potentially impact public, offsite emergency preparedness, spent fuel pools and dry cask storage, they increase the risks of fire, worker exposure and contamination. With the San Onofre Fire Department practically reduced to a Skeleton Crew, NRC Inspectors cannot be everywhere supervising and providing oversight of these operations. Therefore, NRC Commission is humbly advised to pay special attention to these concerns.

FYI, the true root of SCE Unit 3 tube leak, was determined by a San Onofre Contractor Root Cause Guru, Arnie Gundersen and a friend of mine, who is a Professional Chemical Engineer, a global expert in chemical engineering and heat transfer operations with a Ph.D. in Chemical Engineering from a very renowned University and Post-Graduate work in two-phase flow from MIT.

Here is the summary of San Onofre Unit 3 tube leak Root Cause and Tube-to-AVB Contact Forces for your benefit:

1. High Void fractions of 99.6%, high steam flows (film boiling), higher thermal reactor power per RSG (RCS Flows, 76 Million lbs./hr., 1737 MWt plus), high in-plane fluid velocities (35-50 feet/sec), poor circulation ratios of 3.3, narrow tube to pitch tube diameter, excessive number of 9,727 tubes, extremely tall tubes (average length of heated tube increased by 50 inches, equivalent to the addition of ~650 tubes), increase in 11,000 square feet of tube heat transfer area, lack of positive in-plane restraints, steam generator operation at too low a pressure (833 psi), insufficient tube-to-AVB contact forces (< 1N per AREVA) and loose supports (larger tube-to-AVB Gaps, Based on ECT Results) caused FEI, Flow-Induced Random Vibrations and Mitsubishi Flowering Effect in Unit 3 @100%RTP. The flow regime in Unit 3 changed from nucleate boiling to film boiling because the Unit 3 RSG heat transfer coefficient was exceeded and the change was attributed to more than 5MWt of SG output in Unit 3 in 4% of the SG U-tube bundle high region of wear on the hot-leg side due to higher RCS flows and lower SG Pressure Operation in Unit 3 RSGs. This disaster happened because for profits and time pressure, SCE and MHI Staff intentionally (If you like, I can show it to you in Black & White) avoided the 10CFR 50.90 Process, Public Hearings, subverted the Federal Regulations and ignored the warnings of Dr. Pettigrew, Dwight Nunn and SCE/AVB Joint AVB Team.

2. Moderate Void fractions of (98-98.9%), higher steam flows (nucleate boiling), higher thermal reactor power per RSG (RCS Flows, 74 Million lbs./hr., 1727 MWt plus), high out-of-plane fluid velocities (25 feet/sec), poor circulation ratios of 3.3, narrow tube to pitch tube diameter, excessive number of 9,727 tubes, extremely tall tubes (average length of heated tube increased by 50 inches, equivalent to the addition of ~650 tubes), increase in 11,000 square feet of tube heat transfer area, lack of positive in-plane restraints, steam generator operation at 942 psi (consistent with NRC AIT Report and SONGS SGM procedure) and questionable tube-to-AVB contact forces (< 2N per AREVA) and better supports (smaller tube-to-AVB Gaps, Based on ECT Results) caused Flow-Induced Random Vibrations and Mitsubishi Flowering Effect in Unit 2 @100%RTP. Unit 2 did not experience FEI, which is consistent with Westinghouse OA and is inconsistent with NRC AIT Report, MHI Technical Report, AREVA OA and SCE Evaluations.

Please free to write me an email or call me at (714) 305-1903, if I can be of further assistance.

Sincerely

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