PRESS RELEASE

Contact: Ray Lutz
National Coordinator, Citizens' Oversight Projects
raylutz@citizensoversight.org / 619-820-5321

Citizens' Oversight Projects (COPs)
771 Jamacha Rd #148
El Cajon, CA 92019
CitizensOversight.org
619-447-3246

FOR IMMEDIATE RELEASE

San Onofre Steam Generator Failure Reviewed by Citizens' Oversight

Stunning revelations of thinner tubes, "exploding" leak, and incorrect plugging threshold

SAN DIEGO (August 1, 2012) -- Citizens' Oversight Projects (COPS) today submitted a set of 87 questions to the Nuclear Regulatory Commission regarding the recent steam-generator failures and the Augmented Inspection Team (AIT) report, released on July 18, as well as the public meeting, conducted on June 18, 2012.

The submission from COPS included a number of stunning revelations, not previously addressed by the NRC or other oversight groups:

- The steam generator tubes were reduced in thickness from 0.048 inches to 0.043 inches. That's only 0.005 inches (5 mils) but represents a 10.4% reduction in tube wall thickness. When applied to all tubes in the generator, it means about 11 tons of steel were removed from the tube bundle, making them substantially thinner, weaker, and subject to increased vibration.

- The tube wall separates the radioactive pressurized water from the lower-pressure non-radioactive side. This dimension must be mentioned in the final safety analysis report or that report is defective. To allow a net of 8 tons of steel to be removed from the design must, by any measure of common sense, require review and approval by the regulating agency. The use of the final safety analysis report as a means to limit liability is a prescription for further design errors and must be corrected to improve regulatory administration.

- The reduction in tube thickness means the quoted criteria of 35% thinning as the criteria to plug the tubes should actually be about 27%, so that the ultimate wall thickness is the same. This is apparently a mistake by the NRC and Edison, and it means that many more tubes will need to be plugged to comply with the same safety margin of the replaced steam generators when they were allowed to degrade to 35% wear indications.

- No restart of the reactors should be allowed with these very thin, weak, and vibrating tubes.

- The oft-quoted leak rate of the broken tube is 75 gal/day. However, the leak increased in size 40% within the first hour of the leak prior to shutdown, estimated at 105 gal/day rate, and the tube was later measured at 104 gal/day. Therefore, the NRC and Edison should discontinue to quote the 75 gal/day rate. In fact, the leak was rapidly expanding and if the leak was allowed to grow, it may have quickly resulted in complete failure of that tube and possible injury to other adjacent tubes, possibly resulting in a loss of cooling accident.

- The operators of the reactor handled the accident very well. This failure did not represent operator human error, but instead design errors and poor modeling, benchmarking, and mock-up testing.

- Although Edison consistently says the cause has been determined, they are only talking of the immediate cause and not the ultimate cause. COPS believes that thinning the tubes by 10.4%, apparently to improve heat transfer, will be one of the key causes of the vibrational instability which is mentioned as the proximal cause of the tube-to-tube wear.

"The thinner tubes is not mentioned as a key cause in the tube wear," said Ray Lutz, the primary investigator on this project at COPS. "Yet the thinner tubes is consistently neglected by the NRC report and by Edison, even in the threshold for plugging tubes. Removing 8 tons of steel from the tube bundle is not insignificant, to be sure, and yet it has all but been ignored. If the plant is to be restarted, nothing less than complete replacement of these faulty steam generators should be considered. Southern California should not be a petri dish for experimentation to see if we can use a known bad design."

The communication to the NRC is attached with this press release, and can be found at this URL: http://www.copswiki.org/Common/M1289

###