



MITSUBISHI NUCLEAR ENERGY SYSTEMS, INC.

1001 19th Street North, Suite 2000
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June 4, 2013
MKT-NSL-130020

Via E-mail Attachment and Post

Peter Dietrich
Senior Vice President & Chief Nuclear Officer
Southern California Edison
P.O. Box 128
San Clemente, CA 92672

Subject: SONGS Replacement Steam Generators

Dear Mr. Dietrich,

This letter responds to your May 13, 2013 letter, which addresses the repair or replacement of the replacement steam generators ("RSGs") for SONGS Units 2 and 3 and responds to my earlier letter to you of February 21, 2013. Unfortunately, your letter contains a number of inaccurate statements that require correction.

First, you assert that to date Mitsubishi "has not provided sufficient documentation to SCE to establish that any of the proposed repair options is safe, effective, and would be approved by the Nuclear Regulatory Commission ('NRC') in a reasonable time." That is plainly not the case. On April 5, 2013, Mitsubishi delivered to SCE a copy of Mitsubishi's technical report "U-Bend Repair Report," Mitsubishi Document No.L5-04GA593 (Rev. 0) (the "Repair Report"). The Repair Report contains a comprehensive description of a repair that Mitsubishi recommends be implemented to stop tube-to-tube wear, prevent the associated in-plane fluid elastic instability conditions, and mitigate tube-to-anti-vibration bar (AVB) wear in the SONGS RSGs. The recommended repair is to install new, thicker AVBs ("Thicker-AVBs") within a "repair zone" in the U-bend region of the RSGs. The Thicker-AVBs will introduce contact forces that are large enough to prevent tube in-plane displacement and tube-to-tube contact. Installation of the Thicker-AVBs also greatly reduces tube wear due to turbulence-induced random vibration.

The Repair Report demonstrates that, with the repair installed and assuming that all currently plugged tubes remain plugged, the RSGs will have sufficient heat transfer capacity to operate within the licensed operating conditions at all power levels up to 100% for the full 40-year operating period. Based on the results of conservative technical analyses of critical factors and the U-bend mockup tests, Mitsubishi has determined that the insertion of Thicker-AVBs is a practical and effective long-term repair that is in full compliance with Mitsubishi's contractual obligations.

Mitsubishi's Repair Report thus amply demonstrates that the proposed repair is viable and appropriate. As a next step, Mitsubishi is preparing for field work and developing a more detailed and extensive procedure that includes items such as: a) Implementation Procedure; b) Level 3 Execution Schedule; c) Radiation Exposure Evaluation; and d) Cost Estimate. Mitsubishi anticipates providing the information above including a cost estimate of bundle replacement to SCE in the near future. Mitsubishi will also confirm the licensability of our repair plan by performing an appropriate evaluation.



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You indicate that the repair proposed by Mitsubishi “does not alter the thermal hydraulic conditions that caused the serious wear conditions in the first place.” As demonstrated in the Repair Report, the proposed repair fully addresses the RSG tube wear, and does so without needing to modify the existing RSG thermal hydraulic conditions. Those conditions are the result of the requirements in the SCE certified design specification, to which Mitsubishi had to design the RSGs. Should SCE choose to modify the thermal hydraulic conditions, such a modification, while unnecessary, may enhance the margin against tube wear and be beneficial so long as it does not adversely affect plant operation or licensing.

We must also again correct your claim that Mitsubishi and SCE “have jointly developed” repair criteria for the RSGs. As stated in my last letter to you, SCE provided its own acceptance criteria for evaluating the steam generator repair or replacement options. The SCE criteria are not consistent with Mitsubishi’s obligations to SCE under the warranty clause in terms of what constitutes an acceptable remedy. Your letter mischaracterizes Mitsubishi’s involvement in the meetings in November and December 2012. During these meetings SCE provided and explained its internal acceptance criteria. Mitsubishi’s comments were limited to seeking clarifications and were not substantive in nature. This can clearly be seen by a review of the attachment of Masanori Toyoda’s e-mail of November 28, 2012. As we have consistently stated, Mitsubishi never agreed to SCE’s criteria.

Regarding the reimbursement of SCE’s expenses, your letter fails to recognize that in December of last year Mitsubishi paid SCE’s first invoice in full, subject to our right to validate the appropriateness of the charges. Despite our repeated requests, it took SCE six months to provide Mitsubishi’s consultants with copies of unredacted AREVA invoices (which Mitsubishi itself is not allowed to view). As you know, within three weeks of receiving those invoices, our consultants presented SCE with a memorandum of questions and list of missing documents based on their review of those invoices, and we are still waiting for a complete response to this memorandum.

We fully intend to communicate which items of expense we believe are properly charged to the Mitsubishi’s warranty obligation once that is determined.

Mitsubishi hopes that SCE will approve the proposed RSG repair program without further delay so that the repair can be carried out expeditiously and both units can be brought back to service in the near future.

Sincerely yours,

Kiyoshi Yamauchi
Chief Executive Director
Mitsubishi Nuclear Energy Systems, Inc.