

Setzer, Thomas

From: Ambrosini, Josephine
Sent: Friday, August 10, 2012 1:41 PM
To: Bellamy, Ronald; Setzer, Thomas; Krafty, James; Haagensen, Brian; DeBoer, Joseph; Keighley, Elizabeth; Kim, James
Subject: RE: UPDATE: Millstone U2 Ultimate Heat Sink Temperature Potential Licensing Actions

Millstone received the requested license amendment. That, coupled with the forecasted rain, should keep them within TS limits for the next day or so. We may be back in this situation again depending on the weather and I will keep everyone informed.

Updates in Red from 0915 Dominion meeting; next update will be issued following their 1200 meeting.

Bottom Line Up Front: Millstone Unit 2 is approaching its Technical Specification (TS) limit for Ultimate Heat Sink (UHS) temperature and is exploring several licensing options, including a potential future NOED.

Background: At UHS temperature > 75 degrees, operators verify that the 24 hour average temperature is \leq 75 degrees once per hour. If UHS temperature > 77 degrees (or the 24 hour average temperature > 75 degrees), operators must take the plant to Hot Standby within 6 hours and in Cold Shutdown within the following 30 hours. (TS 3.7.11)

Current UHS temperature (24 hour average) is approximately 73 degrees, with daily temperatures fluctuating between 70-75 degrees. Millstone has entered the hourly monitoring action statement several times in the past few weeks.

- **Latest data (0930 on August 10) 74.25 degrees 24 hour average (using the highest valid local temp)**
73.97 degrees 24 hour average (using the average of the service water header temps as requested in the license amendment)
- **Sound temperature (24 hour average using the highest valid local temp) is expected to exceed the limit at approximately 1300 today.**
- **Rain is expected this evening, which should help lower the temperatures some.**

Licensee Actions: Millstone licensing held a conference call with NRR and later spoke with the resident inspectors. They are considering four potential actions:

1. TS bases change to adjust where the temperatures are taken. Currently, the highest valid local service water header temperature reading is used to validate the UHS limit. Millstone is requesting to use the average of the service water header temperatures, which is expected to give them approximately 0.3-0.6 degrees margin. This request was submitted on July 17, 2012.
 2. Exigent approval of #1 above, assuming the NRC would not be able to approve a change before the UHS limit is reached.
 3. The long term solution is a TS amendment request to raise the UHS limit to a higher number (approximately 80 degrees). Millstone has not completed their analysis of this change and does not expect to submit an amendment until Spring 2013 at the earliest.
 4. NOED.
- **Millstone has requested an emergency amendment for licensing action #1 above. There is one outstanding technical issue, but NRR is expecting resolution soon.**
 - **When the amendment is received, they have some procedure changes to make and other administrative actions**

- **Licensee is also pursuing an internal procedure change related to instrument accuracy. Currently, their administrative limit is 74.5 degrees for the 24 hour average, in order to ensure compliance with the 75 degree UHS limit. They believe they can gain a few tenths of a degree margin.**

Resident Actions/Assessment: We participated in the call and then had a lengthy discussion with licensing. The NOED path does not appear to be a clear one, based on the lack of completed analysis which would show a raise in UHS temperature would not compromise safety. Millstone is considering proposing a risk-informed extension of allowed outage time for the NOED; i.e. if they reach 77 degrees they would not shut down within 6 hours, but instead would hold off for weather conditions to clear.

Also, there was some question from the licensee on the duration of the NOED, as this condition could potentially exist through the remainder of the summer. NRR seemed less than enthusiastic about the potential for a 60 day-long NOED.

- **Residents to review engineering's attempt to adjust procedure limits to change from 74.5 degrees to ensure compliance with design basis calculations**
- **Still no request expected for NOED at this time**
- **IMPORTANT NOTE: Even if the amendment is approved, and even if they gain margin from eliminating inaccuracy in the instruments, environmental conditions may still warrant a shutdown within the next few days/weeks. These actions are not the long term solution.**

Future Actions: Millstone is in the process of preparing a draft NOED, but does not intend to ask for one at this time. The weather forecast shows decreased temperatures for the next week, so they do not anticipate needing this request immediately. The resident staff will continue to monitor the situation and will keep the region and NRR informed of any new developments.

- **Millstone is reviewing outage scope/duration if it becomes necessary to shut down. This is complicated by the weather (i.e. they would not want to come back online only to be in the same UHS condition a few days later) and also due to end of core life conditions.**
- **Site coverage for weekend: Jim is out of the area this weekend and Brian leaves for training on Sunday. Brian will cover any shutdown activities on Saturday, Jo will cover on Sunday. At this time, we do not require any additional assistance.**

Please call with any questions. Thanks.

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