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**From:** Mark King - *NRR* - *RIT*  
**To:** Scott Freeman; Warren Lyon - *NRR*  
**Date:** Tue, Feb 27, 2007 9:12 AM  
**Subject:** Re: Fwd: OpE: Concerns related to operation "Over the Core Power Thermal Limit "

Scott, / [Warren Lyon]

Scott, RE: your question: the IP referenced in the OpE COMM writeup says they should never exceed 102%, presumably because this is the level assumed in the accident analysis. What is the expectation for PWR plants that have had the 2% uprate due to more precise feedwater measurement?

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That's a good question that I've looked at before. And is under review by the Issue For Resolution we have on this topic currently.

My understanding was the 102% level in the Jordan Memo was based on fairly standard instrument uncertainty / initial accident analysis assumptions at the time.

If licensee's have taken an uprate due to "elimination of this uncertainty" and updated their accident analysis assumptions accordingly then based on these new assumptions the point at which an inspector would engage would therefore now be different.

Example say they took a half percent uprate and removed half percent from their accident analysis starting assumptions due to more precise feedwater measurements (i.e., Caldon LEFM and Westinghouse Cross Flow) for their calometrics then you would assume we would now engage if they ever exceeded 101.5 % (where under the Jordan letter it assumes a 2% accident analysis uncertainty and we don't engage for until an instantaneous power level of 102 % of max thermal rated power is exceeded).

This is now about to get even more interesting because we are getting ready to deny a Calvert Cliffs uprate request using the Westinghouse Cross Flow method (*internal NRC information* - treat accordingly), and resend our previous approvals of this methodology due to inaccuracies associated. These are greater than the product can actually deliver apparently in some applications is my understanding. **Warren Lyon is the Reactor Systems Engineer who is handling this issue is my understanding.**

**Warren**, do you care to weigh in on this topic, I need to get with you and discuss how this affects the "Jordan Memo" guidance and was wondering can we include some information in the RIS related to this "over the core power thermal limit and how licensee's should handle it and how inspectors will inspect it. in the future?? Or is it to late in the process to deal with this concern, should we issue a separate RIS on IN on how all this affects the Jordan Memo guidance? **Warren please give me a call when you can.**

Hope this helps **Scott**, as you can see we have a fairly dynamic condition under review currently. You should review the basis for your licensee's accident analysis related to initial power level / instrument level uncertainty, etc. and can probably make a case for the reduction as discussed above from the guidance in the Jordan Memo. This e-mail represents my review of your question - stay tuned more "official guidance" to follow, but can't say exactly when.

Thanks,  
Mark

>>> Scott Freeman 2/23/2007 9:56 AM >>>

Mark, the IP referenced in the OpE writeup says they should never exceed 102%, presumably because this is the level assumed in the accident analysis. What is the expectation for PWR plants that have had the 2% uprate due to more precise feedwater measurement?

>>> Charles Casto 2/23/2007 7:36:04 AM >>>

Greetings,

I want to highlight institutionalizing knowledge management. The Operating Experience Communication

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below captures an issue that the resident identified at Browns Ferry. This issue is specific to BWRs during coastdown before an outage. So it's limited in scope. That means the issue could be lost for future generations of inspectors. To aid in institutionalizing this piece of knowledge management, Branch 6 decided to forward the issue to the OpE group who developed this comm.

Again, this is one way to capture knowledge management issues. Great job by Branch 6...

>>> Mark King 2/22/2007 4:57 PM >>>

This email is being sent to notify recipients of a new posting on the @Operating Experience Community Forum. The posting describes concerns related to operation "**Over the Core Power Thermal Limit.**"

Recipients are expected to review the posting for applicability to their areas of regulatory responsibility and consider appropriate actions. However, information contained in the posting is not tasking; therefore, no specific action or written response is required. **Information Security Reminder: this link is on NRC's Internal Web site and may contain sensitive information. Please check with the information owner before distributing outside the agency.**

The posting may be reviewed at:

<http://nrr10.nrc.gov/forum/forumtopic.cfm?selectedForum=03&forumId=AllComm&topicId=1489>

It is being provided to the following groups: Human Performance, I & C, New Reactors, Power Uprate, Inspection Programs, and ALL COMMUNICATIONS.

To unsubscribe from this distribution list or to subscribe to a different list on the OpE Community, please visit: <http://nrr10.nrc.gov/rps/dyn/subscription1.cfm>

For more information on the Reactor OpE Program, please visit our OpE Gateway at:

<http://nrr10.nrc.gov/ope-info-gateway/index.html>

Thank you for reviewing and using OpE.

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CC: John Thorp; Robert Pascarelli