

**Summary of Telecons Between NRC Staff and  
Prairie Island License Review Project  
January 22, 23 & 28, 2009**

1/22/09 Telecon Between NRC and PINGP

Attendees: NRC – Rick Plasse, Bob Jackson, Erach Patel, On Yee, Robert Sun, Jim Medoff, and Yang  
PINGP - Gene Eckholt, Scott Marty, Phil Lindberg, Bob Vincent, Bill Roman, Bill O'Brien, Dennis Davis, Greg Travers

Purpose: To address minor issues that needed further discussion for SER generation. The NRC peer reviewer has started his work.

- NRC - In relation to the RAI Response to B2.1.2-1 dealing with the ultrasonic inspection on the bottom of tank. Says PINGP will do a one-time inspection on 1 of 3 condensate storage tanks. What if degradation is found?
  - PINGP - Additional inspections of other tanks will be performed if degradation is found.
  - NRC - PINGP removed the precoat slurry tanks from scope at the same time that the RAI was answered. What was the reason for removing?
  - PINGP - It was removed in response to the RAI. Tanks are normally dry.
  
- NRC - In relation to the RAI Response to B2.1.14-1 (this was just an example) - flexible hoses. Also do physical manipulation on other components?
  - PINGP - Yes we will do physical manipulation on other non-metallic components (polymers) also.
  - NRC - In the next paragraph is the inspection methodology an enhancement or exception? Wolf Creek used that approach. Should have been enhancement. Polymers & elastics should be an enhancement?
  - PINGP - Going beyond GALL is not an enhancement.
  - Action for PINGP: Make sure that physical manipulation is either captured in a commitment, or call it an enhancement or an exception. Stainless steel is covered by GALL, but polymers are not.
  - NRC - Part B last paragraph, not to be an enhancement? This sentence sounds wrong.
  - PINGP - The intent of the enhancement was to update procedures with all components within program scope, not to require an enhancement for adding components beyond steel.
  - Okay per NRC.
  
- NRC - In relation to RAI 3.32-08-01 – What are the temperatures for internal and external environments? Where is the water being supplied from? 95°F appears to be threshold per Section IX of GALL.
  - PINGP - We also used 95° in our approach. For the DG and FP hoses and coolant on the generator, the inside and outside temperatures are the same since the tubing has very little insulation capability. For circulating

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- water systems that enter and exit the condenser, this exceeds 95°F. Also, rubber joints on the condensate pump from the condenser.
- NRC – Okay.
  - NRC - On LRA page 3.4-142, TG & Support, in Table 3.4.2-8, for pump casings – treated water vs. raw water. Something seems incorrect.
    - PINGP - This is for the condensate pit sump pump. Note E was cited, but should have been a different note. Maybe should have also cited note 420?
    - NRC - PINGP has an action to fix this issue. PINGP is to decide how it's appropriate to correct – Amendment? Possible actions could be to update the commitment, fix the two line items on page 3.4-142, or other clarifications. Any of these would be okay.
  - NRC - In relation to RAI B2.1.6-2, the Bolting Integrity Program uses some reference documents that are not in the GALL. The comparisons are okay, but PINGP needs to clarify these extra documents as an exception. An action for PINGP is to add one sentence in the LRA to clear this up. Only one sentence is needed and that will cover all the extra documents.
  - NRC - In Table 3.4.1 item 11, steam & power conversion, includes buried components, but nothing is assigned to the Buried Piping & Tanks Program. Is this correct?
    - PINGP - Because the mechanical tables, Fuel Oil Table 3.3.2-10, is where this is captured on page 3.3-228. This is an auxiliary system compressor that was addressed in the Auxiliary Systems, but the best match was GALL VIII. Maybe it should be written up as a Section 3.3 entry instead of a Section 3.4 entry.
    - NRC - Will address this in SER discussion of Section 3.3 Aux Systems rather than 3.4
  - NRC - In relation to RAI B.2.1.18-1 – has no problem with the response, but is still not clear on the 2 enhancements related to flux thimble.
    - PINGP - We are doing the actions, but they are not explicitly described in procedures. These are administrative changes to put GALL words into the procedures.
    - NRC - We are fine with the explanation, but the program document was thin. 2<sup>nd</sup> enhancement was same issue; enhancing the procedure. Is PINGP using plant specific wear data? PINGP responded yes.
    - PINGP - Enhancements are "rebaselining" procedures – curing a procedural short coming. This is not a process change. 3<sup>rd</sup> enhancement – corrective action – same issue – enhancing procedure.
    - NRC - RAI provided adequate response.

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- NRC - In relation to RAI 4.3.1.1-1 – this RAI response does not provide a lot of explanation. Commitment # 33 – made changes – tracking cumulative fatigue usage – explain how this is done.
  - PINGP - Changes were made to remove implied reference to FatiguePro stress-based monitoring and make reference to fatigue usage monitoring more generic.
  - NRC - Is tracking of cycles a Tech Spec controlled evolution? What software is used to track?
  - PINGP - Using Fatigue Pro based on Cycle Counting – cycle based fatigue calculation.
  - NRC - Tracking (cycle counting) is in Tech Spec?
  - PINGP - Yes.
  - NRC - Is there a procedure to get it into Fatigue Pro?
  - PINGP - Yes, the Tech Spec tracking is done separately.
  
- NRC - In relation to RAI 4.3.1.3-1 – Insurge-Outsurge – read it and not sure what it means. Do you mean you have actual data from 1973 & 74 and didn't know how it applied?
  - PINGP - We went back when the bulletin came out and gathered data from 1<sup>st</sup> heat ups.
  - NRC - You confirmed you had data from 1973?
  - PINGP - Yes we have in hand. We weren't tracking delta T's prior to the IEB.
  - NRC - You didn't have to backfit any data into the analysis? Any work other than analyze? Did you make projections for data you didn't track? You only started tracking delta T's from a certain date forward. Did you estimate the data that you used or was there data there that you were able to use?
  - PINGP - We retrieved temperatures from real data (pressurizer & RC loop). That data was used in WCAP calculations. Did not have to fill in the gaps; had actual data. SP procedure has the complete set of data, historical back to initial heatup up to the present.
  
- NRC - On page 4.3-16, the 2<sup>nd</sup> paragraph from bottom of page – are those values from WCAPs 12839 and 12639? Is the maximum cumulative factor for the surge line from the WCAP?
  - PINGP - Yes, on page 4.3-9, Table 4.3-5, these are design values from prior to IEB 88-08 – from original calculations.
  
- NRC - In relation to RAI 4.3.1.5-1 on RCPs - mentioned article N-415.1 which the NRC could not locate. Action for PINGP, fax this article please. Also, have a bounding question; what bounds what?
  - PINGP - The design transients bound what is shown in the table.

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- NRC - Are there other design transients? Do you have a different set and why did you use them? Why aren't they in the table?
- PINGP - This was a generic evaluation for a Westinghouse reactor coolant pump – umbrella loads. Transients used were beyond PINGP design transients.
- NRC - Action for PINGP, please make it clear – say Westinghouse generic design transients which bounds PINGP design transients. Make a clarification to the RAI response.
  
- NRC - Does Commitment # 35 include the surge line?
  - PINGP - The insurge/outsurge analyses for the surge line is in the bulletin evaluation. Deleted references to stress based fatigue monitoring.
  
- (From follow up phone call) NRC - In response to RAI B2.1.22-1 on page 50 of 12/5/08 letter, the response states that enhanced visual or UT will be used to detect SCC, but commitment does not.
  - Action for PINGP - revise commitment to explicitly state that enhanced visual or UT will be used to detect cracking
  
- NRC - Okay. That's it for specific clarifications. Will come up with an updated list of items for a phone call later.

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PINGP - Gene Eckholt, Scott Marty, Bill Roman, Bill O'Brien, Ron Hepp, Greg Travers, Joe Ruether

- NRC - In the 12/11/08 RAI Response Letter related to the FP air compressor - In Table 2.3.3-17, what about the air compressor housings?
  - PINGP - Statements of Considerations & Rule exclude air compressors, therefore the housing is excluded - 54.21(a)(1)i.
  - NRC - NRC will look at and get back to PINGP – Tabled
  
- NRC - AMR RAI – In the RAI 3.2.2.2.4.2-01 Response related to heat exchangers in ECCS System - Table 3.2-1 requires further evaluation to include Water Chemistry & One-Time Inspection. No One-Time Inspection is called out by PINGP. Fouling – Treated Borated Water – but LRA says fouling is possible in this environment. SRP 3.3
  - PINGP - Heat exchangers in demin water need One-Time Inspection, but not those in borated water. Because the heat exchangers are in ECCS, the environment must be treated borated water. GALL Chap VA, 27 & 28, distinguishes between Demin & Treated Borated Water.
  - NRC - Does 2.1-21 of SRP line items 59 & 60 shed any light on this issue? NRC tabled the item pending discussion internally with peer reviewer.
  
- NRC - In the RAI 3.3.2.2.4.1-01 Response – the SRP is clear that the program should include eddy current testing.
  - PINGP - We are doing One-Time Inspection instead (but probably not on these heat exchangers).
  - NRC - How can PINGP justify this?
  - PINGP - We evaluated what other plants did. For the Non-Regen Heat Exchangers, cycling loading is addressed in the TLAA section. The intent is to address cracking there.
  - NRC - Okay with this insight – can deal with it.
  - NRC - The NRC will discuss this issue with the peer reviewer and get back to PINGP.
  
- NRC - On E6 Program, PINGP needs to spell out the exception for each attribute in the program. Use format similar to TMI. PINGP needs to evaluate against the current GALL. The NRC has no issue with the AMP; it is just a formality to spell out the exceptions for each attribute. The NRC agrees that the technical basis is the draft ISG.

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- PINGP has an action to provide the exception information as requested. PINGP has reviewed the TMI format and will provide similar format, but will not be taking an exception to element 7 as TMI did.

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1/28/09 Telecon Between NRC and PINGP

Attendees: NRC - Rui LI, Duc Nguyen, Rick Plasse  
PINGP - Gene Eckholt, Joe Ruether, Ron Hepp, Bob Vincent

Purpose: Discuss follow up questions on RAI responses in letter dated 1/20/09.

RAI 3.6-1 Response

NRC - Response states that there are no aging effects for transmission conductor connections but does not explain why. Are connections aluminum?

PINGP confirmed that connections are aluminum & therefore not subject to aging effects.

NRC agreed that there would be no aging effects in PINGP situation. Wants the response clarified to specifically explain to NRC why PINGP transmission conductor connections are not subject to aging effects.

Final outcome is that PINGP agreed to supplement response with the explanation. Considered a minor clarification. No RAI will be issued.

RAI 3.6-2 Response

NRC - Response on page 38 provides an example of a power cable aging assessment using a charging pump motor. How was the current value of 145 amps calculated?

PINGP explained that the value was the full load current value from the nameplate and was not calculated.

NRC would like clarification that states 145 amps was nameplate value.

NRC - The second paragraph under Ampacity talks about motors which start and run in response to DBA. Example only addresses run condition. Response does not state how the start condition was addressed.

PINGP explained that the start condition is a very short term transient that would not contribute significantly to heating and aging of cables, and need not be considered.

NRC agreed that run current is the issue but needs some explanation why starting current is not an issue for aging of unspaced power cables.

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Final outcome is that PINGP agreed to supplement response to specifically state that 145 amps is the nameplate full load value, and to explain why starting surge current is not a concern for cable aging. Considered minor clarifications. No RAI will be issued.