

FAQ Log 01/07

TempNo.	PI	Topic	Status	Plant/ Co.
62.1	MSPI	Component Boundary	7/19 FAQ Introduced 7/19 Discussed 8/15 Revised 8/16 Discussed 9/14 Discussed 10/24 Industry to provide revised version 12/05 Revised version provided & tentatively approved with additional changes. 01/17 Final Approval Pending	N/A
64.1	MSPI	Updates to MSPI coefficients	9/14 Introduced 10/24 Tentative Approval 12/05 Approved with change Additional change for consistency noted after meeting. Will reconfirm approval. 01/17 Final Approval Pending	N/A
64.3	IE03	Plant Specific Environmental	9/14 Introduced 9/14 Discussed, clarifications requested 10/24 Decision Pending 12/05 NRC to write-up response 01/17 Final Disapproval Pending	Oyster Creek
66.2	1E03	Unplanned Power Change Exemption	10/24 Introduced, NRC to discuss with Resident 12/05 NRC to write-up 01/17 Final Disapproval Pending	Calvert Cliffs
66.3	SSFF	Revise NEI 99-02, Reporting Date	10/24 No action 12/05 Introduced & discussed & NRC to provide write-up. Tentative approval. 01/17 Final approval Pending	N/A (Ginna)
66.5	1E02	Unplanned Scrams with LNHR PI	10/24 Introduced & Discussed 12/05 Tentative approval 01/17 Final Approval Pending.	Callaway
67.2	MSPI	PRA Updates	12/05 Introduced & discussed 01/17 Pending approval decision.	Perry

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TempNo.	PI	Topic	Status	Plant/ Co.
67.3	MSPI	EDG B High Jacket Water Temperature	12/05 Introduced & discussed 01/17	Seabrook
67.4	MSPI	Failures	12/05 Introduced & discussed. Revision requested. 01/17 Revision provided. Final Approval Pending.	Vogtle
68.2	MS06-10	Generic Run Hours	01/07 To be introduced & discussed	Generic
68.3	MS06-10	Start Demand	01/07 To be introduced & discussed	Generic
68.4	MS06-10	Cascading Unavailability	01/07 To be introduced & discussed	Generic

FAQ 62.1

Plant: Generic
Date of Event: NA
Submittal Date: July 18, 2006
Licensee Contact: John Butler

Performance Indicator: MSPI
Site Specific FAQ? No

FAQ requested to become effective when approved.

Question Section

Pages F-18, lines 8-10 and F-19, line 1 state: *“For control and motive power, only the last relay, breaker or contactor necessary to power or control the component is included in the monitored component boundary. For example, if an ESFAS signal actuates a MOV, only a relay that receives the ESFAS signal in the control circuitry for the MOV is in the MOV boundary. No other portions of the ESFAS are included.”*

Licensees have expressed difficulty interpreting the guidance as written.

Response Section

The definition of a supporting component as described in the EPIX guidance, INPO 98-001 provides a better description of the intent for component boundaries with respect to control circuits. For control and motive power, if the relay, breaker or contactor that fails is solely used to support the operation of a single monitored component, it should be considered part of the component boundary, regardless of the physical location of the component. If the relay, breaker or contactor supports multiple monitored components, it should not be considered as part of any monitored component boundary.

Example 1: If a limit switch in an MOV fails to make-up, which fails an interlock and prevents a monitored pump from starting, and the limit switch has no other function, a failure to start should be assigned to the pump. If the limit switch prevents both the pump and another monitored valve from functioning, no MPSI failures would be assigned.

Example 2: If a relay prevents an MOV from closing and the relay performs no other function, an MOV failure would be assigned, assuming failure to close is a monitored function of the valve. If the MOV also has a limit switch interlocked with another monitored component, the presence of the limit switch should not be interpreted as the relay having multiple functions to preclude assigning a failure. If, in addition to the relay failure, there were a separate failure of the limit switch, both an MOV and pump failure would be assigned.

Example 3: If a relay/switch supports operation of several monitored components, failure of relay/switch would not be considered an MSPI failure. However, failure of individual

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contacts on the relay, which each support a single monitored component, would be considered a failure of the monitored component.

Proposed wording of guidance for inclusion in the next revision to NEI 99-02:

This FAQ will apply to all failures that occur following the approval date.

Pages F-18, lines 8-10 and F-19, line 1 will be changed to:

“For control and motive power, supporting components as described in INPO 98-01 should be included in the monitored component boundary. In other words, if the relay, breaker or contactor exists solely to support the operation of the monitored component, it should be considered part of the component boundary. If a relay, breaker or contactor supports multiple components, it should not be considered as part of the monitored component boundary. If a relay/switch supports operation of several monitored components, failure of relay/switch would not be considered an MSPI failure. However, failure of individual contacts on the relay/switch, which each support a single monitored component, would be considered a failure of the monitored component.”

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Plant: All
Date of Event: N/A
Submittal Date: 09/14/2006
Licensee Contact: John Butler (NEI) **Tel/email:** (202)739-8108, jcb@nei.org
NRC Contact: **Tel/email:**

Performance Indicator: MSPI (MS06 – MS10)

Site-Specific FAQ (Appendix D)? No

Question Section

NEI 99-02, Revision 4 states on page 26, line 37, “*Updates to the MSPI coefficients developed from the plant specific PRA will be made as soon as practical following an update to the plant specific PRA. The revised coefficients will be used in the MSPI calculation the quarter following the update. Thus, the PRA coefficients in use at the beginning of a quarter will remain in effect for the remainder of that quarter.*”

Should changes to the CDE database that reflect changes to the plant specific PRA or plant specific MSPI basis document be completed before the beginning of a quarter in order for the changes to apply to the quarter?

Response Section

No. The MSPI coefficients used to support MSPI calculations for a quarter should reflect the plant specific PRA of record at the beginning of the reporting quarter. Changes to the CDE database and MSPI basis document changes that are necessary to reflect changes to the plant specific PRA of record should be incorporated as soon as practical but need not be completed prior to the start of the reporting quarter. Changes to the MSPI coefficients (using the plant specific process for updates) should be completed prior to making the quarterly data submittal for the quarter in which they become effective. The quarterly data submittal should include a comment that provides a summary of any changes to the MSPI coefficients.

For example, if a plant’s PRA model of record is approved on September 29 (3rd quarter), MSPI coefficients based on that model of record should be used for the 4th quarter. The calculation of the new coefficients should be completed (including a revision of the MSPI basis document if required by the plant specific processes) and input to CDE prior to reporting the 4th quarters data (i.e., completed by January 21).

Proposed wording of guidance for inclusion in the next revision to NEI 99-02:

Add to end of paragraph on page 27, line 2:

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Changes to the CDE database and MSPI basis document that are necessary to reflect changes to the plant specific PRA of record should be incorporated as soon as practical but need not be completed prior to the start of the reporting quarter in which they become effective. The quarterly data submittal should include a comment that provides a summary of any changes to the MSPI coefficients.

For example, if a plant's PRA model of record is approved on September 29 (3rd quarter), MSPI coefficients based on that model of record should be used for the 4th quarter. The calculation of the new coefficients should be completed (including a revision of the MSPI basis document if required by the plant specific processes) by October 21, and input to CDE prior to reporting the 4th quarters data (i.e., completed by January 21).

FAQ 64.3

Plant: Oyster Creek

Date of Event: 8/6/2005

Submittal Date: 9/6/2006

Licensee Contact: Frank Meyer

Tel/email: 609-971-4827 / Francis.Meyer@Exeloncorp.com_

NRC Contact: Marc Ferdas Tel/email: _609-971-4978/_msf2@nrc.gov

Performance Indicator: Unplanned Power Changes Per 7,000 Critical Hours (IE03)

Site-Specific FAQ (Appendix D)? Yes

FAQ requested to become effective when approved.

Question Section:

NEI 99-02 Guidance needing interpretation (include page and line citation):

Page 17 line 42 through page 18 line 5:

Anticipated power changes greater than 20% in response to expected environmental problems (such as accumulation of marine debris, biological contaminants, or frazil icing) which are proceduralized but cannot be predicted greater than 72 hours in advance may not need to be counted unless they are reactive to the sudden discovery of off-normal conditions. However, unique environmental conditions, which have not been previously experienced and could not have been anticipated and mitigated by procedure or plant modification, may not count, even if they are reactive. The licensee is expected to take reasonable steps to prevent intrusion of marine or other biological growth from causing power reductions. Intrusion events that can be anticipated as a part of a maintenance activity or as part of a predictable cyclic behavior would normally be counted unless the down power was planned 72 hours in advance. The circumstances of each situation are different and should be identified to the NRC in a FAQ so that a determination can be made concerning whether the power change should be counted.

Event or circumstances requiring guidance interpretation:

An intake structure sea grassing event occurred on 8/6/2005 resulting in an abnormal low level in the north side of the intake structure and a subsequent unplanned downpower from 100% power to approximately 41% power for a duration of approximately 40 hours. The event was reported as Unplanned, excluded per NEI 99-02.

Oyster Creek had been maintaining the intake structure in a summer seasonal readiness condition that was consistent with conditions in previous summer seasons. Appropriate preventive maintenance had been performed on the intake traveling screens. Daily flushing of the screen wash headers and periodic header cleaning had been instituted, in accordance with plant procedures and monitoring practices for summer readiness. These were expected conditions that the plant is forced to deal with during summer seasons. However, this event involved larger amounts of submerged sea grass than had been seen in the past.

Higher than normal levels of grass were experienced between 2300 hours on August 6, 2005 and 0235 hours on August 6, 2006 at the intake structure. At approximately 0235 hours the Control Room received a report from the operator at the intake that intake level on the north

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side of the intake structure downstream of the screens was at < 1.4 psig as sensed by the bubbler indicator. This equates to a level of <-2.0 ft Mean Sea Level (MSL) and required entry into Abnormal Operating Procedure ABN-32, Abnormal Intake Level. This required more frequent grass removal from intake structure components. Backwashing, raking and screen cleaning were in progress prior to the event, in accordance with plant procedures. At approximately 0305 hours, an unexpected large influx of submerged sea grass (*Gracilaria*) entered the North Side of the intake structure resulting in a collapse of the Trash grates. The grass loading caused each screen's shear pin on the #1, 2, & 3 screens to break, as designed to provide a measure of protection for the intake structure. The three screens on the South Side of the intake structure were not affected during the entire event. Water level downstream of the screens on the North Side lowered due to operation of #1 and #2 Circulating Water Pumps, #1 New Radwaste Service Water Pump and #1 Service Water Pump. The Control Room Unit Operator was informed by the Shift Manager at the intake that level on the North Side of the intake was 0 psig on the bubbler gage at the Screen Wash Control Panel (which corresponds to -5.13' Mean Sea Level). This level exceeded the Alert threshold for EAL HA3. At 0330 hours Emergency Service Water (ESW) System 1 pumps were declared inoperable and Technical Specification LCO 3.4.C.3. (7-day clock) was entered. The sudden, unexpected, large influx of submerged grass impacted the North Side of the Intake Structure resulting in a collapse of the Trash grates and the #1, 2 & 3 Intake Screen shear pins had broken. The Trash Rake was caught in #1 Bay. The shear pin for #1 Screen was replaced but sheared immediately.

Both the 1-1 and the 1-2 Main Circulating Water Pumps were secured due to the low intake level resulting in pump cavitation, which required the power reduction to approximately 40%.

If licensee and NRC resident/region do not agree on the facts and circumstances explain:

NEI 99-02, Revision 4 states that environmental problems, which result in downpowers greater than 20% should be identified to the NRC in a FAQ to determine if the power change should be counted. AmerGen has not previously submitted an FAQ in accordance with the guidance to determine if the August 6, 2005 downpower event, or similar past conditions should be counted. The Senior Resident Inspector (SRI) identified this during performance of the performance indicator verification procedure in May 2006. The SRI believes that more proactive actions should have been taken to monitor intake conditions and improve intake equipment reliability, and that actions to downpower should have been taken earlier in the event. This is addressed in the following section.

Additionally, the SRI believes that operating experience from the Brunswick Nuclear Station from 06/23/05 had not been effectively implemented to further mitigate this event. The Brunswick OPEX (OE 21234) identified a condition where plant procedures lacked guidance for actions to take for an influx of grass. Oyster Creek procedures have been previously developed to provide appropriate guidance to mitigate sea grass intrusion events. The Brunswick OPEX (OE 21234) also identified the value of the addition of another upstream 'filtering' location. The existing Oyster Creek proceduralized actions have been shown to mitigate sea grass intrusion events, and additional filtering mechanisms are still susceptible to damage and would not be cost beneficial.

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Potentially relevant existing FAQ numbers:

The following FAQs related to IE03 are relevant to the Oyster Creek event:

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Approved FAQ # 383

Archived FAQ # 274, 294, and 295

Response Section:

This event was reported as 'excluded' because the > 20% downpower was in response to expected environmental conditions (sea grass intrusion) at Oyster Creek during summer operation. The power change is proceduralized but cannot be predicted greater than 72 hours in advance. Prior to this event, summer intake operation support actions had been implemented. These actions included intake screen backwashing, raking, and more frequent screen cleaning. Additional staff augmentation had been provided at the intake structure to support these actions. Prior to this event, additional proactive actions were taken which included equipment operator training to reinforce expectations for operation, maintenance, and cleaning of the intake structure. Existing procedures were followed to address the grass intrusion event, further proceduralized actions were taken to mitigate the influx of additional grass, intake parameters were being monitored and a power reduction was taken per plant operating procedures after other measures were taken to mitigate the event. The downpower was started at 0235 when the Intake operator reported the low level and the abnormal operating procedure was entered. The volume of incoming grass resulting from this event was significantly more than previously experienced (17 dumpsters of grass were removed from this one event, which is more than a typical summer total). At 0305, the Trash rakes had collapsed due to the unusually heavy build up of grass and a more rapid power reduction was commenced to support securing affected Circulating Water Pumps.

Proposed Resolution of "FAQ":

The downpower that is described in this FAQ does count. The facility has not developed a specific procedure to proactively monitor for environmental conditions that would lead to sea grass intrusion, to direct proactive actions to take before the intrusion, and actions to take to mitigate an actual intrusion that are appropriate for the station and incorporate lessons learned. Development and use of a such a procedure in the future, instead of standing orders, may provide the basis for a future FAQ allowing excluding a downpower >20% for this PI.

No change to PI guidance is needed.

FAQ 66.2

Plant: Calvert Cliffs Nuclear Power Plant – Unit 1

Date of Event: July 7, 2006

Submittal Date: August 10, 2006

Licensee Contact: Kenneth Greene, Tel/email: (410) 495-4385 / ken.greene@constellation.com

NRC Contact: John Giessner, Tel/email: (410) 405-4683 / jbg@nrc.gov

Performance Indicator: Unplanned Power Changes per 7,000 Critical hours

Site Specific FAQ? Yes

FAQ requested to become effective when approved.

Question Section

NEI 99-02 Guidance needing interpretation: Page 17 Lines 42 through Page 18 line 5

Event or circumstances requiring guidance interpretation:

NEI 99-02 requests FAQs be submitted in the following circumstances:

'Anticipated power changes greater than 20% in response to expected environmental problems (such as accumulation of marine debris, biological contaminants, or frazil icing) which are proceduralized but cannot be predicted greater than 72 hours in advance may not need to be counted unless they are reactive to the sudden discovery of off normal conditions... . The licensee is expected to take reasonable steps to prevent intrusion of marine or other biological growth from causing power reductions... . The circumstances of each situation are different and should be identified to the NRC in a FAQ so that a determination can be made concerning whether the power change should be counted.'

During summer months, under certain environmental conditions, Calvert Cliffs can experience instances of significant marine life impingements which can cause high differential pressure across our Circulating Water (bay water) System traveling screens, restricting flow capability of our Circulating Water (CW) pumps which could ultimately result in a plant derate or trip due to being unable to maintain sufficient condenser vacuum.

In anticipation of these potential marine life impingement conditions, the site has proceduralized actions to be taken within an Abnormal Operating Procedure (AOP). The actions to be taken in these circumstances include placing travel screens in manual mode of operation and using the intake aerator and fire hoses to disperse the fish population. Although instances of biological blockages are expected, neither the time of, nor the severity of the intrusions, can be predicted. During July 2006 the site had been periodically dealing with instances of jellyfish intrusions which had challenged maintaining sufficient CW flow, but had not been severe enough to threaten plant full power operation. On July 7, 2006 the site experienced a severe jellyfish intrusion and implemented the applicable AOP. This time the actions were unable to ensure sufficient CW flow to maintain Unit 1 at 100% power and a rapid power reduction was initiated on Unit 1, which ultimately reduced power to 40%. When the jellyfish intrusion was controlled, sufficient CW flow was restored, and power was restored to 100%. Given that the circumstances of this jellyfish intrusion was beyond the control of the plant, and that appropriate site actions have been proceduralized, should this event be exempted from counting as an unplanned power change? In addition, can this exemption be applied to future, similar marine life impingements at Calvert Cliffs, where the site carries out the approved actions designed to counter act these conditions, without submittal of future FAQs?

Potentially Relevant Existing FAQ numbers: 389, 383, 409

Response Section

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The downpower that is described in this FAQ does count. The facility has not developed a specific procedure to proactively monitor for environmental conditions that would lead to jelly fish intrusion, to direct proactive actions to take before the intrusion, and actions to take to mitigate an actual intrusion that are appropriate for the station and incorporate lessons learned: e.g.: staging equipment, assigning additional personnel or watches, implementing finer mesh screen use, use of hose spray to ward off jelly fish. Development and use of a such a procedure in the future, instead of standing orders, may provide the basis for a future FAQ allowing excluding a downpower >20% for this PI.

No change to PI guidance is needed.

FAQ 66.3

Plant: R.E Ginna
Date of Event: 4/8/2005
Submittal Date: 10/12/2006
Licensee Contact: Tom Harding Tel/email: 585-771-3384

 thomas.harding@constellation.com
NRC Contact: _____ Tel/email: _____

Performance Indicator: SAFETY SYSTEM FUNCTIONAL FAILURES

Site-Specific FAQ (Appendix D)? Yes or **No**

FAQ requested to become effective when approved or 12/31/2006

Question Section

NEI 99-02 Guidance needing interpretation (include page and line citation):

Page 23, line 34, *Reporting date*: the date of the SSFF is the Report Date of the LER.

Event or circumstances requiring guidance interpretation:

With regards to safety system functional failures, most events are normally discovered shortly after they occur and the associated LER is submitted within 60 days. Some events though may not become apparent until a later date. If the reporting date of historical functional failures was the LER report date then a utility could potentially exceed the four quarter threshold as the result of the cumulative affect of events that are up to three years old.

On September 6, 2006, a condition was identified during the review of a previous issue discovered on April 18, 2005. The current review was being performed in response to NRC inspection questions regarding the previous issue.

On April 18, 2005, while at 100% power, both trains of standby auxiliary feed water (AFW) flow transmitters were found isolated. The plant had entered Mode 3 on April 8, 2005 for a routine startup after a refueling outage. The transmitters were restored to their normal operational alignment promptly when the condition was identified.

Both of the flow transmitters perform several functions including control room indication of standby AFW discharge flow and valve control functions for the pump discharge valve and pump recirculation valve.

Ginna did not report the event at the time the isolated transmitters were discovered because the transmitters' control function was not recognized to

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interact in an unanalyzed manner with the resulting unavailable control room indication, concurrent with the low pressure steam generator condition associated with the HELB event. This event has since been determined to be Safety System Functional Failure.

NUREG-1022 revision 2 states that for any event that could have prevented fulfillment of the safety function at any time within three years of the date of discovery an LER is required.

It would appear that the previously submitted indicator data should be amended as the result of the newly identified historical functional failure as discussed in the "Guidance for Correcting Previously Submitted Performance Indicator Data", on page 3 of NEI 99-02, and not tied to the reporting quarter of the LER.

If licensee and NRC resident/region do not agree on the facts and circumstances explain

When the Region was posed this question they recited the line 34 from NEI 99-02 with regards to Reporting date (LER date) and stated that NEI should be contacted for any further information.

Potentially relevant existing FAQ numbers

None found.

Response Section

Proposed Resolution of FAQ

This event should be counted on the date the LER was submitted, which is the first time this event was reported. This situation is not considered correction of previously submitted PI data.

If appropriate, provide proposed rewording of guidance for inclusion in next revision.

PI Guidance will be changed as follows: Page 21 line 40. Data Reporting Elements:

- The number of safety system functional failures reported during the previous quarter

FAQ 66.5

Plant: Callaway Plant

Date of Event: September 25, 2006 – 3Q2006 Integrated Inspection Exit Meeting

Submittal Date: October 20, 2006

Licensee Contact: Justin Hiller Tel/email: 573-676-4259 / jwhiller@cal.ameren.com

NRC Contact: David Dumbacher, Callaway RI Tel/email: 573-676-3181/ ded@nrc.gov

Performance Indicator: IE02 - Unplanned Scrams with Loss of Normal Heat Removal

Site-Specific FAQ (Appendix D)? No

FAQ requested to become effective when approved.

Question Section

Does loss of feedwater as the initiator for the reactor scram require reporting under this PI?

NEI 99-02 Guidance needing interpretation (include page and line citation):

Unplanned SCRAMs with Loss of Normal Heat Removal (LNHR) Performance Indicator (IE02)

An on-going NRC review (IP 71151, Performance Indicator Verification) of performance indicator data submitted by Callaway Plant has raised a question regarding the treatment of certain SCRAMs under the IE02 PI - Unplanned SCRAMs with Loss of Normal Heat Removal.

The purpose of this document is to provide Callaway Plant's position on application of the guidance in NEI 99-02 and frequently asked questions (FAQs) associated with the IE02 PI.

The data reporting element is defined in NEI 99-02 as follows (lines 16-19, page 13):

- The number of unplanned automatic and manual scrams while critical in the previous quarter that were either caused by or involved a loss of the normal heat removal path prior to establishing reactor conditions that allow use of the plant's normal long term heat removal systems.
-

In addition, the following terms are defined (lines 36-41, page 13, lines 1-2, page 14):

Loss of the normal heat removal path: when any of the following conditions have occurred and cannot be easily recovered from the control room without the need for diagnosis or repair to restore the normal heat removal path:

- complete loss of all main feedwater flow
- insufficient main condenser vacuum to remove decay heat
- complete closure of at least one MSIV in each main steam line
- failure of turbine bypass capacity that results in insufficient bypass capability remaining to maintain reactor temperature and pressure

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Examples of a complete loss of all main feedwater flow (lines 24-31, page 14):

- loss of all feedwater pumps during startup or while operating at reduced power;
- loss of all startup and auxiliary feedwater pumps normally used during plant startup;
- loss of all operating feed pumps following a scram due to trips caused by low suction pressure, loss of seal water, or high water level (BWR reactor level or PWR steam generator level);
- unplanned scram due to loss of all operating feed pumps; manual scram in response to feed problems characteristic of a total loss of feedwater flow but prior to automatic reactor protection system signals; and
- inadvertent isolation or closure of all feedwater control valves prior to an unplanned scram.

The specific question raised by the NRC review is why SCRAMs that were caused, or would have been caused by, a high steam generator (S/G) water level were not counted under the IE02 PI. Callaway's application of the guidance in NEI 99-02 does not automatically cause these types of SCRAMs to be included under the IE02 PI. The determining factors for including a SCRAM in the IE02 PI are;

1. the interim heat removal path established prior to use of the plant's normal long term heat removal systems; and
2. availability of main feedwater system components.

As stated in NEI 99-02, the *Normal heat removal path* is (lines 30-34, page 13):

“the path used for heat removal from the reactor during normal plant operations. It is the same for all plants – the path from the main condenser through the main feedwater system, the steam generators (PWRs) or reactor vessel (BWRs), the main steam isolation valves (MSIVs), the turbine bypass valves, and back to the main condenser”.

The Callaway Plant design is such that a normal plant trip response (dependent on initial conditions) results in a feedwater isolation and initiation of the safety related feedwater source, Auxiliary Feedwater. As such, the auxiliary feedwater portion of the main feedwater system is considered to be the applicable portion with respect to the normal heat removal path established prior to long term heat removal. In addition, the availability of main feedwater components is evaluated. Although plant design would normally limit the use of main feedwater pumps under post-trip conditions, Callaway Plant considers the main feedwater components to be available under this PI as long as there is not a need for diagnosis or for repair. Basically, if the normal heat removal path, as defined in NEI 99-02, is established and main feedwater components are available without the need for diagnosis or repair, then the SCRAM is not counted under this PI regardless of the cause of the SCRAM or the order of events during the transient.

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The guidance states that unplanned automatic and manual scrams while critical are counted if they were either caused by or involved a loss of the normal heat removal path. The loss of normal heat removal path includes two criteria.

- The first criterion includes specific conditions
 - complete loss of all main feedwater flow;
 - insufficient main condenser vacuum to remove decay heat;
 - complete closure of at least one MSIV in each main steam line;
 - failure of turbine bypass capacity that results in insufficient bypass capacity remaining to maintain reactor temperature and pressure
- The second criterion includes recovery of the heat removal path.

For the specific question being raised, the NEI 99-04 guidance describes several examples of the complete loss of all main feedwater flow including:

- the loss of all operating feed pumps following a scram due to....high water level (...PWR steam generator level) (line 26-28, page 14)
- an unplanned scram due to loss of all operating feed pumps.(line 28, page14)

However, these conditions are not counted under the PI unless they also meet the second criterion associated with the loss of normal heat removal path. The guidance states that for PI applicability any of the four conditions has occurred **and** “cannot be easily recovered from the control room without the need for diagnosis or repair to restore the normal heat removal path” (lines 37-38, page 13). If the control room can use trip recovery procedures to clear trip and isolation signals, open/manipulate valves, and start pumps, etc., without the need for diagnosis or repair, then the loss of normal heat removal path condition is considered to be easily recoverable and not counted in the IE02 PI.

Event or circumstances requiring guidance interpretation:

SCRAMs being questioned by NRC:

- LER 2004-005 Inadequate Feedwater Heating During Startup (P-14 FWIS);
 - ULNRC04980, dated April 9, 2004
- LER 2006-004-01 Turbine Trip with Rods In Auto Leads to Manual Rx Trip and FWIS (P-14 FWIS)
 - ULNRC05324, dated August 10, 2006

Both of these SCRAMS were initiated by steam generator high level trip setpoints being reached (P-14), with the resulting isolation of feedwater, but did not result in a condition where feedwater could not have been easily recovered from the control room without the need for diagnosis or repair.

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If licensee and NRC resident/region do not agree on the facts and circumstances explain

The NRC resident inspectors have initiated a feedback form, as of the September 25, 2006 exit meeting, because they do not believe these SCRAMs were correctly reported. Feedback from the resident inspectors indicated they were told by NRR staff, the intent of the PI was to include loss of feedwater events that were SCRAM initiators.

From MC0612, 07.02, if the inspector disagrees with the licensee's data or the licensee's interpretation of the reporting guidance, the issue will be resolved using the inspection feedback process or PI frequently asked questions (FAQs) process and should be identified as an unresolved item. This appears to be inconsistent with the guidance of IP 71151, which does not require documentation of the discrepancy unless it could potentially cause the PI to cross a threshold.

The inspectors exited this issue as an unresolved item. However, even if these SCRAMs were counted, the issue would not be more than minor, because the Green-White threshold would not be crossed. Callaway Plant would be obligated to submit a change report, if the inputs should have been counted under IE02.

Potentially relevant existing FAQ numbers

Callaway Plant believes that this position is supported by several NRC approved FAQs including: 385, 379, 303, 282, 264, 249, 248, 204, 180 and 65.

Response Section

No change is proposed to the NEI guidance or the data reported by Callaway Plant.

Proposed Resolution of FAQ

The two trips described in the LERs above should not count in this PI. A loss of main feedwater did occur; however, it was deemed that the main feedwater system was considered "easily recoverable from the control room without the need for diagnosis or repair."

If appropriate, provide proposed rewording of guidance for inclusion in next revision.

N/A

FAQ Template

Plant: Perry
Date of Event: October 13, 2006
Submittal Date: _____
Contact: Robin Ritzman Tel/email 330-315-6777,
ritzman@firstenergycorp.com
NRC Contact: Mark Franke Tel/email: _____

Performance Indicator: MSPI (MS06-10)

Site-Specific FAQ (Appendix D)? No

FAQ requested to become effective when approved.

Question Section

NEI 99-02 Guidance needing interpretation (include page and line citation):

Page 3, lines 2 through 4 state:

“In instances where data errors or a newly identified faulted condition are determined to have occurred in a previous reporting period, previously submitted indicator data are amended only to the extent necessary to correctly calculate the indicator(s) for the current reporting period.”

Page 3, lines 14 through 20 state:

“If a performance indicator data reporting error is discovered, an amended “mid-quarter” report does not need to be submitted if both the previously reported and amended performance indicator values are within the “green” performance indicator band. In these instances, corrected data should be included in the next quarterly report along with a brief description of the reason for the change(s). If a performance indicator data error is discovered that causes a threshold to be crossed, a “mid-quarter” report should be submitted as soon as practical following discovery of the error.”

Page 26, line 35 through Page 27, line 2, states:

“The MSPI calculation uses coefficients that are developed from plant specific PRAs. The PRA used to develop these coefficients should reasonably reflect the as-built, as-operated configuration of each plant. Updates to the MSPI coefficients developed from the plant specific PRA will be made as soon as practical following an update to the plant specific PRA. The revised coefficients will be used in the MSPI calculation the quarter following the update. Thus, the PRA coefficients in use at the beginning of a quarter will remain in effect for the remainder of that quarter.”

FAQ 67.2

Tentatively Approved FAQ 64.1 states:

“Changes to the CDE database and MSPI basis document that are necessary to reflect changes to the plant specific PRA of record should be incorporated as soon as practical but need not be completed prior to the start of the reporting quarter in which they become effective.”

Event or circumstances requiring guidance interpretation:

On October 13, 2006, it was discovered that the most current revision (i.e., Revision 3) of the calculation DB-004 for initiating event frequencies had not been incorporated into the approved Parameter File Calculation (DB-014).

The Basic Event Database generated for the PRA model is based on the Parameter File generated by calculation DB-014. The values generated by DB-014 were used to update the PRA model.

The current revision to calculation DB-004 was approved in February 2006, and it was intended that the current revision to calculation DB-004 would provide input for the PRA model revision to be used in the MSPI Basis Document. Calculation SQ-001 documents the sequence quantification of the PRA model and contains a list of calculations and their specific revisions used to quantify the PRA model. Calculation SQ-001 included the current revision of calculation DB-004 as part of the list of calculations used in the quantification; however, the prior revision of calculation DB-004 was actually used. As a result, the PRA model of record for the PRA coefficients used in the calculation for the second and third quarter 2006, MSPI submittals referenced the current revision of DB-004; however, the prior revision was used as the input.

NEI 99-02 describes how data errors are to be corrected. NEI 99-02 and tentatively approved FAQ 64.1 describe the process for updating MSPI coefficients in a going-forward manner. Should this occurrence be considered a data error and a mid quarter report be submitted, or should the occurrence be considered as an update to MSPI coefficients with the revised coefficients being used in the MSPI calculations in the quarter following the update, or is there another category (e.g. error in MSPI coefficient) that should be created to address situations like this?

If licensee and NRC resident/region do not agree on the facts and circumstances, explain.

The NRC resident inspector agrees with the facts as described in the “Event or circumstances requiring guidance interpretation” section. The NRC resident believes that this situation should be considered to be a data error because Revision 3 to calculation DB-004 was the approved calculation in effect at the beginning of the second quarter of 2006, which is the quarter in question.

FAQ 67.2

Potentially relevant existing FAQ numbers

FAQ 64.1

Response Section

Proposed Resolution of FAQ

Since MSPI is a performance indicator that is dependent on the PRA model, MSPI coefficients should reflect the output values from the PRA model.

An error in an MSPI coefficient is limited to misapplication (e.g. transposition) of the numbers from the PRA output document or misuse of the NEI 99-02 guidelines. This type of error must be corrected for the historical data.

PRA models typically contain inputs from several calculations and various assumptions. Much of this information is based on estimates or recent (although not necessarily current) plant history. Although PRA updates are performed periodically, the plant history in PRA is never completely current. As a result, the PRA model represents a good faith estimate of the as-built, as-operated plant (e.g. operating practices, unavailability times, initiating event frequencies). Since it is recognized that this type of information is somewhat subjective, updates to either the calculations that are used as input to the PRA or changes to values that are physically entered into the PRA computer model should not be considered to be errors that need to be corrected historically. They are examples of changes that should be incorporated as soon as practical and are effective on a going forward basis.

The example described in this FAQ should be treated as a PRA update and should be incorporated on a going forward basis. However, if it would have resulted in a color change the PRA model and CDE input must be corrected before the next reporting period.

If appropriate, provide proposed rewording of guidance for inclusion in next revision.

Add the first three paragraphs in the response section to page 27, beginning on line 3.

REACTOR OVERSIGHT PROCESS
ROP Working Group Action List – Status January 2007

Action Item	Description	Task	Responsible Org/Individual	Target Date
06-01	Planned Unavailability			
	<p>Issue: Planned unavailability is an insignificant contributor to the overall MSPI indicator. Furthermore, the issue of planned vs. unplanned unavailability continues to result in confusion and continuous discussion.</p>	<p>Industry to develop and present for NRC discussion proposed guidance changes to NEI 99-02 to remove planned unavailability as an element of MSPI.</p>	<p>NEI ROPTF Roy Linthicum</p>	<p>Feb 2007</p>
	<p>Status: 10/24/06: Draft white paper. 12/06 Draft white paper reviewed and discussed. Glenn to give industry to Roy to expand and Roy to finalize paper. 1/06 Date does not support proposed change. Roy work with Glen and Jerry and will gather data and explore using a constant baseline for unavailability</p>			
06-02	Actual ESF Demands			
	<p>Issue: Actual ESF Demands are an insignificant contributor to the overall MSPI indicator. Furthermore, there is indication of confusion among those reporting the data as to what is an Actual ESF Demand versus Operational/Test demands or invalid demands.</p>	<p>Industry to develop and present for NRC discussion</p>	<p>NEI ROPTF Ken Heffner</p>	<p>Feb 2007</p>
	<p>Status: 10/06: White paper to be developed by January. 1/06: Ken will get data from Glen and revise.</p>			
06-04	Complicated Scrams Indicator			
	<p>Issue: Determine repeatability of answers given LER and any associated information</p>	<p>Obtain tabletop results and develop action plan as needed.</p>	<p>NEI ROPTF Julie Keys</p>	<p>Jan. 2007</p>
	<p>Status: 10/24/2006: Lenny Sueper and Bill Mookhoek to select LERs for study. Mark Tonacci to select LERs too. 12/06 Waiting tabletop responses. Provide results to TF and NRC upon receiving responses. Develop action plan if responses not</p>			

Action Item	Description	Task	Responsible Org/Individual	Target Date
	acceptable. 1/07: Reviewing results and developing action plan. 1/06: Determine if changes needed to the guidance as a result of the tabletop and develop/revise implementation schedule. Develop plan to communicate change to industry.			
06-05	RCS Leakage			
	Issue: BWR & PWR Owners Groups to develop standard methodology for measuring leak rate.	BWR & PWR Owners Groups to develop standard methodology for measuring leak rate.	NEI ROPTF Julie Keys/Mark Tonacci	Feb. 2007
	Status: 10/16/06 Determine status. Meet with Mark Tonacci. Determine charter and redirect task team. 12/06: Mark to determine if owners group methodology is adaptable to PI's.			
06-06	MR & MSPI			
	Issue: Align MR & (NUMARC 93-01) with MSPI		NEI ROPTF Julie Keys	Jan 2007
	Status: 12/06: Meet with Tony and determine direction. 1/07: Discussed with Tony. Action to submit change to change to NUMARC 93-01 Appendix B to define the definition of unavailability.			
06-07	Discovered Conditions			
	Issue: Human errors in MSPI (see white paper)		NEI ROPTF Julie Keys Ken Heffner	Feb. 2007
	Status: 12/06: Develop plan with Ken. 1/07: Outcome will depend on Vogtle FAQ			
06-08	Data Transfer			
	Issue: NRC FAQ readability on website	Follow issue to ensure NRC/INPO resolution	NEI ROPTF Glenn Masters	Jan. 2007
	Status: 12/06: Mark Tonacci to follow up with NRC IT personnel and INPO.			
06-09	Safety Culture Web board			
	Issue: Information is being captured by CERTREC and does not need to be posted on the web board any longer	Communicate to Utilities that they do not need to provide the information to NEI any longer	NEI ROPTF Julie Keys	Jan. 2007
	Status: 12/06: Determine method to inform utilities they no longer need to provide information to NEI. 1/07: Information			

Action Item	Description	Task	Responsible Org/Individual	Target Date
	captured by CERTREC may be different than Web board. Continue posting information on web board per John Butler. This item is closed.			
06-10	ROP Newsletter Issue: Need way to disseminate information to the industry on ROP issues, plans, goals, etc.	Draft ROP Newsletter and send to Licensing Managers	NEI ROPTF Julie Keys	Jan. 2007
	Status: 12/06: Determine method to inform utilities they no longer need to provide information to NEI. 1/07: Draft News and Information letter in process.			
06-11	FAQ Process Map Issue: Need to streamline FAQ process.	Develop FAQ process map from the time they come to the TF until final disposition.	NEI ROPTF Julie Keys	Feb. 2007
	Status: 12/06: Draft map and get TF and NRC input. 1/07: Map drafted. Pending TF and NRC input.			
06-12	EDG White Paper Issue: EDG Owners Group Request	Revisit EDG max mission time to use a weighted avg. time.	NEI ROPTF Roy Linthicum	Mar. 2007
	Status:			