March 1, 2007

(b)(7)c

Mr. Michael Peck
Senior Resident Inspector
Nuclear Regulatory Commission

Mr. Peck:

On October 21, 2003 Callaway Plant was shutting down to MODE 3 to comply with T/S 3.8.7. At approximately 0938, with the plant in MODE 1, 8% power, a secondary plant transient began when the Turbine and MSR Drains were opened per OTN-AC-00001. This transient lasted approximately 25 minutes and resulted in RCS temperature dropping below the Minimum Temperature for Critical Operation for approximately 10 minutes between 1000 and 1013. The resulting pressurizer level transient caused a letdown isolation and entry into OTO-BG-00001. Note the following:

- The cause of the temperature transient was not captured in the Callaway Action Request System on the day the event occurred. The event was eventually documented in the Callaway Action Request System 38 days later by an (b)(7)c (b)(7)c as Adverse Condition (b)(7)c This training instructor stated to me that the Shift Supervisor for the event was very defensive about the event and did not want the issue documented with a CAR.

- There is no record in the Shift Supervisor Log nor in the Callaway Action Request System of passing below the Minimum Temperature for Critical Operation or of entering T/S 3.4.2.

At 1013 the turbine was tripped and the crew logged entry into MODE 2; Delta T Power was 4.9%, Tavg was 552°F, IRNI power was 1.4E-5 ica and SUR was -0.01 dpm. One minute later (1014) Delta T Power was 4%, Tavg was 555°F, IRNI power was 1E-5 ica and SUR was -0.16 dpm. The 3°F temperature rise resulted in a negative reactivity insertion which caused the reactor to shutdown. At 1018, OTO-BG-00001 was exited; Delta T power was 2.4%, Tavg was 557°F, IRNI power was 2.4E-6 ica and SUR was -0.16 dpm.

By 1025 Delta T power was approximately stable, indicating reactor power had lowered below the Point of Adding Heat; Delta T power was 1.8%, Tavg was 560°F, IRNI power was 7.34E-8 ica and SUR was -0.28 dpm. By the time 1E-8 ica was reached (1028) the maximum negative start up rate (for the transient) of -0.29 dpm had already been reached; Delta T Power was 1.8%, Tavg was 560°F. By 1046 reactor power was approximately stable (power would drop less than half a decade in the next 75 minutes) at 6.22E-11 ica. At 1125 the Channel 2 SRNI energized, reading 3044 cps and at 1138 the Channel 1 SRNI energizes reading 2593 cps. Control Rods were not inserted until 1204.

There is no indication in the control room log as to what prevented control rod insertion in the 106 minutes between exiting OTO-BG-00001 and finally beginning control rod insertion. There is a log entry at 1137 for exiting OTO-NN-00001. OTO-NN-00001 had been entered earlier in the shift due to problems with inverter NN11. It is unlikely the remaining actions of OTO-NN-00001 were distracting the crew from inserting control rods. Several routine entries were being made during this time period such as starting and completing I&C surveillances or starting and stopping secondary plant equipment.

I have spoken with [(b)(7)c] regarding what activities might possibly delay inserting the control rods for over 90 minutes. None of these [(b)(7)c] could think of any evolution which would delay inserting the control rods. All of these individuals did state, in some manner, that they could not evaluate whether or not the delay was appropriate without knowing what all was occurring on shift that day. I have not spoken with any of the crew members on shift at the time [(b)(7)c] The Reactor Operator is deceased.

At the time the reactor shutdown (it was unrecoverable by 1025) the crew was supposed to be maintaining MODE 2 in the event NN11 was repaired and a shutdown was not necessary. It appears the control rods remained out because the crew did not want the Outage Control Center to know they had lost control of reactor power.

It is not my intent to allege that reactor safety was violated on October 21, 2003. Nor is it my intent to allege that plant operating procedures were not followed. Note the following:

- After the reactor shut down because of the negative reactivity inserted by the +3°F upon tripping the turbine, the reactor was in a stable condition.
- Although shutdown margin was not yet met, negative reactivity was increasing the entire time due to Xenon buildup and the control and shutdown banks were trippable in the event of a transient induced positive reactivity insertion.
- Although all the steps of OTG-ZZ-00005 prior to the step for inserting "control rod banks into the core" implicitly assume the reactor is still critical and although some steps of OTG-ZZ-00005 were not performed (e.g. taking 1E-8 data), there was no explicit deviation from plant operating procedures.

Based on my personal experience with the individuals involved, it appears to me there was an intentional 90 minute delay in inserting control rods to avoid scrutiny of the crew's actions. Purposefully delaying insertion of the control banks, not logging entry into T/S 3.4.2 and not documenting significant operational transients in the Corrective Action Program are dishonest and negligent omissions. This behavior is contrary to the cornerstone of Problem Identification and Resolution.

I am not certain the above events rise to a level which warrant NRC investigation since nuclear safety does not appear to have been in jeopardy. If they do, I would like the NRC to investigate these events as I am not capable of investigating them further. Note the following:

- The events were documented as part of CARS [redacted]. The specific allegation above was not as strongly stated in CARS [redacted]. At the time CARS [redacted] was written, I was unaware of [redacted] problems in getting CARS [redacted] documented.

- CARS [redacted] was screened as a Sig 4 (Corrective Action Only) meaning the Lead Responder need not investigate anything – his task is merely to develop corrective actions to improve our poor performance of MODE 2 operations. At the CARS Screening Committee meeting which assigned this significance level, I expressed my concern that the events of the 2003 NN11 outage needed additional investigation.

- I do not have a good relationship with [redacted] and I do not feel comfortable interviewing him concerning these events.

- The [redacted] Due to his personal relationship with [redacted] I do not feel confident [redacted] would give this matter a fair investigation.

- I have consulted the [redacted] and was unimpressed with their performance and their pursuit of the issues. I view the ECP process at Callaway as merely a program to placate employees who have indicated they have concerns which they intend to address with the NRC and have no confidence they would appropriately address this issue.

- I have no reason to doubt the integrity of th [redacted] and th [redacted] However, I have had unfavorable dealings in the past with [redacted] For this reason, I do not feel comfortable addressing these concerns with my management above Operations.

- Finally, I have no confidence that anyone in the Callaway Corrective Action Program has the requisite interrogation skills to competently conduct the interviews with the involved individuals.

I can be reached away from the plant at [redacted] is unaware I am bringing this allegation to you. If you wish to contact him, he can be reached at [redacted] [redacted] was the [redacted] for the NN11 shutdown. He is unaware I am bringing this allegation to you. If you wish to contact him, he can be reached at [redacted]

Very respectfully,

[redacted]