

Baca, Bernadette

From: Jayroe, Peter
Sent: Tuesday, April 19, 2011 1:31 PM
To: Baca, Bernadette
Subject: 2011-157
Attachments: Document.pdf

-----Original Message-----

From: SONGS HP [<mailto:SONGS.HP@nrc.gov>]
Sent: Tuesday, February 22, 2011 3:51 PM
To: Jayroe, Peter
Cc: Reynoso, John
Subject: SONGS NRC CONCERNS inverters

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Response to NRC Concerns of Inverter Operability

On November 1, 2010 the NRC raised questions/concerns with the U3 CRS regarding the Operability status of 3Y004 (captured in NNs 201181864 & 201183395). Control Room Supervisor was not able to fully address the concerns raised by the NRC.



Background

Oct 14th, Vital Bus Y04 was placed on the Alt Source and 3Y004 was removed from service for planned maintenance.

- Procedure requires Y004 be declared INOP while on Y01 on Alt Source. EDMR written, log entry made, but weak

NN 201197739

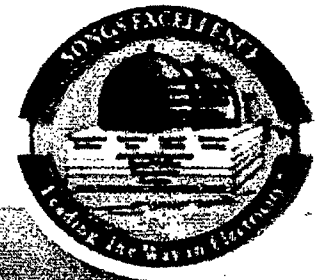
- ✧ Oct 18th, Discovered a problem with the DC supply breaker (chipped) during maintenance (NN 201159165).
- ✧ Oct 23rd, Discovered a problem with the DC supply breaker (Sticky reset) during maintenance (NN 201168011).
- Oct 26th, The Inverter was placed into service on as if it was OPR. The control room was unaware of operability status of 3Y004.

Currently IOD remains INOP, EOC is complete.



NRC Concerns

1. When OPS placed 3Y004 back into service on 10/26 and moved fuel was SONGS in compliance with TS 3.8.8?
2. What process does OPS use to control the configuration of the plant? Was OPS using the EDMR process to track 3Y004? How did OPS place 3Y004 back into service given it was INOP?
3. What is the Extent of Condition? The NN indicates other breakers may be susceptible to the same condition, but the NN is a Sig 4 indicating it is a broke/fix condition.



NRC Concern #1: Inverter Operability

When OPS placed 3Y004 back into service on 10/26 and moved fuel was SONGS in compliance with TS 3.8.8?

LCO 3.8.8 Inverters – Shutdown

- Required inverters shall be OPERABLE to support Class 1E AC vital bus electrical power distribution subsystem(s) required by LCO 3.8.10, "Distribution Systems – Shutdown."
- Applicable Modes 5 & 6, During Movement of Irradiated Fuel
- Basis implies that 2 of the 4 inverters are required at all times
- SR 3.8.8.1 Verify correct inverter voltage and alignment to required AC vital bus



NRC Concern #1: Inverter Operability

LCO 3.8.10 Distribution Systems – Shutdown

- The Necessary portion of the AC, DC, and Vital bus electrical power distribution system shall be OPERABLE to support equipment to be OPERABLE.
- Applicable Modes 5 & 6, During Movement of Irradiated Fuel
- At least one of the Inverters must be Y001 or Y002 which supply the vital buses for FHIS, CPIS, & CRIS (required for fuel movement by SO23-5-1.8 & SO23-3-2.11)

Conclusion: At all times during LCO applicability, at least two inverters were OPERABLE and one of them was Y002 and the LCO was met.

