

Power Reactor

Event # 44732

|   |                       |   |  |
|---|-----------------------|---|--|
| <b>Site:</b> MCGUIRE                        |                       | <b>Notification Date / Time:</b> 12/18/2008 15:54 (EST) |  |
| <b>Unit:</b> 1 2                            | <b>Region:</b> 2      | <b>State :</b> NC                                       | <b>Event Date / Time:</b> 12/18/2008 (EST) |
| <b>Reactor Type:</b> [1] W-4-LP, [2] W-4-LP |                       | <b>Last Modification:</b> 12/22/2008                    |  |
| <b>Containment Type:</b> ICE COND ICE COND  |                       |   |  |
| <b>NRC Notified by:</b> JIM EFFINGER        |                       | <b>Notifications:</b> JAY HENSON R2                     |  |
| <b>HQ Ops Officer:</b> MARK ABRAMOVITZ      |                       | WILLIAM RULAND NRR                                      |  |
| <b>Emergency Class:</b> NON EMERGENCY       |                       | PART 21 GROUP   |  |
| <b>10 CFR Section:</b>                      |                       |   |  |
| 21.21                                       | UNSPECIFIED PARAGRAPH |   |  |

  

| Unit | Scram Code | RX Crit | Init Power | Initial RX Mode | Curr Power | Current RX Mode |
|------|------------|---------|------------|-----------------|------------|-----------------|
| 1    | N          | Yes     | 100        | Power Operation | 100        | Power Operation |
| 2    | N          | Yes     | 100        | Power Operation | 100        | Power Operation |

**DEFECTIVE OPTICAL ISOLATORS**

"Duke Energy Carolinas, LLC (Duke) herein makes the following notification under 10CFR21.21(d)(3)(i) of defective digital optical isolators. The isolators are Commercial Grade Items dedicated by Duke. Failure analysis conducted by the manufacturer determined that a manufacturing defect with the isolator capacitor will cause the output voltage to drop when the isolator is not energized and there is a very light load on the output. The subject digital optical isolators are Model 175C180, manufactured by E-max Instruments (also known as Electro-Max) 13 Inverness Way, South Englewood, CO 80112. These digital optical isolators could be utilized in a variety of applications at Duke's McGuire and Catawba nuclear stations. There are no known applications for these digital optical isolators at Oconee.

"Initial Safety Significance: None. Defective digital optical isolators were never installed. Duke protocols require the conduct of a pre-installation bench test and a post installation test to assure these isolators perform satisfactorily in service. E-max Instruments has issued a Model 175C180 recall for all uninstalled isolators. Duke has returned all uninstalled digital optical isolators to the supplier. Duke is the only known nuclear utility purchasing E-max Instruments Model 175C180 digital optical isolators.

"The McGuire and Catawba Senior NRC Resident Inspectors were notified of this Part 21 notification on Dec 18, 2008."

\*\*\* UPDATE FROM JIM EFFINGER TO PETE SNYDER AT 0810 ON 12/22/08 \*\*\*

McGuire Nuclear Station clarified that one of the defective digital optical isolators mentioned in the second paragraph above was scrapped, one was sent to Westinghouse Electric of Pittsburgh for a compatibility test program and the rest of the defective digital optical isolators were returned to the supplier. Even if Westinghouse

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returns the digital optical isolator given to them, it will not be installed.

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The licensee will notify the NRC Resident Inspector. Notified R2DO (Henson), NRR EO (Mike Cheok), and Part 21 Group.

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