

backup scram algorithms plus the licensed scram feature of the existing Option III system. The DSS-CD system does not interact with equipment whose failure could cause an accident. Scram setpoints in the DSS-CD will be established so that analytical limits are met. The reliability of the DSS-CD will meet or exceed that of the existing system. No new challenges to safety-related equipment will result from the DSS-CD solution. Because an instability event would reliably terminate in an early scram without impact on other safety systems, there is no significant increase in the probability of an accident.

Proper operation of the DSS-CD system does not affect any fission product barrier or Engineered Safety Feature. Thus, the proposed change cannot change the consequences of any accident previously evaluated. As stated above, the DSS-CD solution meets the requirements of GDC 10 and 12 by automatically detecting and suppressing design basis thermal-hydraulic oscillations prior to exceeding the fuel SLMCPR.

Based on the above, the operation of the DSS-CD solution within the framework of the Option III OPRM hardware will not increase the probability or consequences of an accident previously evaluated.

(2) Will the change create the possibility of a new or different kind of accident from any accident previously evaluated?

The DSS-CD solution operates within the existing Option III OPRM [Oscillation Power Range Monitor] hardware. No new operating mode, safety-related equipment lineup, accident scenario, system interaction, or equipment failure mode was identified. Therefore, the DSS-CD solution will not adversely affect plant equipment.

Because there are no hardware design changes * * *, there is no change in the possibility or consequences of a failure. The worst case failure of the equipment is a failure to initiate mitigating action (*i.e.*, scram), but no failure can cause an accident of a new or different kind than any previously evaluated.

Based on the above, the proposed change to the DSS-CD solution will not create the possibility of a new or different kind of accident from any accident previously evaluated.

(3) Will the change involve a significant reduction in a margin of safety?

The DSS-CD solution is designed to identify the power oscillation upon inception and initiate control rod insertion to terminate the oscillations prior to any significant amplitude growth. The DSS-CD solution algorithm will maintain or increase the margin to the SLMCPR for anticipated instability events. The safety analyses in NEDC-33075P * * * demonstrate the margin to the SLMCPR for postulated bounding stability events. As a result, there is no impact on the MCPR [minimum critical power ratio] Safety Limit identified for an instability event.

The current Option III algorithms (Period Based Detection, Amplitude Based, and Growth Rate) are retained (with generic setpoints) to provide defense-in-depth protection for unanticipated reactor instability events.

Based on the above, the proposed change will not involve a significant reduction in the margin of safety.

Conclusions: The DSS-CD stability solution has been investigated. The BSEP licensing requirements have been evaluated and it has been demonstrated that the DSS-CD stability solution can be accommodated:

- Without a significant increase in the probability or consequences of an accident previously evaluated,
- Without creating the possibility of a new or different kind of accident from any accident previously evaluated, and
- Without exceeding any presently existing regulatory limits or acceptance criteria applicable to the plant, which might cause a reduction in a margin of safety.

Having made negative declarations regarding the 10 CFR 50.92 criteria, this assessment concludes that the DSS-CD stability solution does not involve a Significant Hazards Consideration.

The NRC staff has reviewed the licensee's analysis and, based on this review, it appears that the three standards of 10 CFR 50.92(c) are satisfied. Therefore, the NRC staff proposes to determine that the amendment request involves no significant hazards consideration.

Attorney for licensee: William D. Johnson, Vice President and Corporate Secretary, Carolina Power & Light Company, Post Office Box 1551, Raleigh, North Carolina 27602. *NRC Section Chief:* Allen G. Howe.

Duke Energy Corporation, Docket Nos. 50-269, 50-270, and 50-287, Oconee Nuclear Station, Units 1, 2, and 3, Oconee County, South Carolina

Date of amendment request: June 7, 2002, supplemented by letter dated January 8, 2003.

Description of amendment request: The proposed amendments would revise the Updated Final Safety Analysis Report to eliminate credit for the flow path from the spent fuel pool to the high pressure injection pump as one source of primary system makeup following a tornado. The proposed amendments would also credit the Standby Shutdown Facility as the assured means of achieving safe shutdown for all three Oconee units following a tornado. By letter dated January 8, 2003, Duke Energy Corporation provided a revised No Significant Hazards Consideration (NSHC) that supercedes the NSHC that was noticed in the **Federal Register** on July 23, 2002 (67 FR 48216).

Basis for proposed no significant hazards consideration determination: As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration, which is presented below:

Pursuant to 10 CFR 50.91, Duke Energy Corporation (Duke) has made the determination that this amendment request involves a No Significant Hazards Consideration by applying the standards established by the NRC regulations in 10 CFR 50.92. This ensures that operation of the facility in accordance with the proposed amendment would not:

1. Involve a significant increase in the probability or consequences of an accident previously evaluated.

The changes being requested in this amendment request involve (1) the elimination of the Spent Fuel Pool (SFP) as a suction source to a High Pressure Injection (HPI) pump for primary system make-up, and (2) to fully credit the Standby Shutdown Facility (SSF) as the primary assured means of achieving safe shutdown of all three units following a tornado. Following the modification to fully tornado protect the SSF, this facility becomes the station's assured flow path for both primary make-up and secondary decay heat removal for all three units.

Although the probability of a severe tornado strike at the station does not change, new tornado insights gained from a review of the current external event risk analysis have resulted in an enhanced risk model that more accurately characterizes station tornado damage risk. The proposed changes are part of the revised tornado mitigation strategy that provides for an assured, deterministic success path rather than the current strategy that is based on risk insights and diversity for achieving safe shutdown. This effort has resulted in an overall reduction in tornado risk at the station and consequently, would not result in a significant increase in the consequences of an accident previously evaluated.

Other than the fortification of walls of existing structures to harden them against tornado damage, there are no physical changes to the plant structures, systems, or components (SSCs), nor are there any changes to safety limits or set points. Also, no new radiological release pathways are created.

2. Create the possibility of a new or different kind of accident from any accident previously evaluated.

The changes being proposed in this amendment request do not create the possibility of a new or different kind of accident from any accident previously evaluated. The initial placement of the SFP-HPI flow path into the LB [licensing basis] was based on 1989 risk analyses that showed a potential need for primary make-up due to inventory losses from a reactor coolant pump (RCP) seal loss-of-cooling accident (LOCA). The upgrade of the RCP seals has significantly reduced the probability of a seal LOCA and subsequently, alleviated the initial reliance on the SFP-HPI flow path for primary make-up. If multi-unit primary make-up and decay heat removal are required following an event, the tornado protected SSF RBMU [sic] [(RCMU) reactor coolant makeup] or SSF ASW [auxiliary service water] pumps have the capabilities to perform these functions for all three units.

3. Involve a significant reduction in a margin of safety.