

appropriate action (*e.g.*, correct failures and adjust treatment processes). Thus, it would be expected that degradation or problems affecting a component type would be detected and dealt with before multiple failures becomes likely. For many RISC-2 SSCs, failures tend to be self-revealing (as it is initiation of a transient as a result of failure of many RISC-2 SSC that makes them significant). For RISC-3 SSCs, requirements exist for design and procurement for any replacement components to meet their design conditions, thus making it unlikely that unsuitable components would be installed. Further, for the RISC-3 SSCs, evaluations will be performed, assuming significantly increased failure rates for large number of components occurring simultaneously to show that there is no more than a small (potential) change in risk. Therefore, the Commission believes appropriate regulatory attention has been given to the potential for multiple simultaneous failures.

The Commission also considered the question as to whether notification of component defects should be required from the perspective of other potentially-affected licensees. The set of SSCs that are RISC-2 would vary from site to site, because it depends upon specifics of plant design and operation, particularly for the balance-of-plant which typically differs more from plant to plant than does the nuclear steam supply part. Further, the suppliers of these components would then also vary. Therefore, the specific type of notifications under Part 21, for the purposes of NRC assessment of generic implications of component defects and to assure notification of licensees with the same components in service, would not fulfill a useful regulatory function. The Commission notes that although Part 21 and § 50.55(e) (component defect) reporting will not be required for RISC-2 SSCs, proposed § 50.69(g) contains enhanced reporting requirements applicable to loss of system function attributable to, *inter alia*, failure or lack of function of RISC-2 SSCs. This is discussed in greater detail in Section III.5.

The Commission does not believe that any changes to Part 21 are necessary to accomplish the Commission's proposal, and that this proposal is consistent with the statutory requirements in Section 206 of the ERA. Section 206 does not contain any definition of "substantial safety hazard," but contains a direction to the Commission to define this term by regulation. Nothing in the legislative history suggests that Congress had in mind a fixed and unchanging concept of "substantial safety hazard," or that the

term was limited to deterministic regulatory principles. Hence, the Commission has broad discretion and authority to determine the appropriate scope of reporting under Section 206. The Commission believes that the current definition of "substantial safety hazard" in § 21.3 is broadly written to permit the Commission to determine that a RISC-2 SSC does not represent a "substantial safety hazard" as defined in § 21.3 in the context of a risk-informed regulatory approach.

Therefore, because of the more supporting role that the RISC-2 SSCs play with respect to ensuring critical safety functions, a noncompliance or defect in a RISC-2 SSC would not result in a safety hazard such that immediate licensee and NRC evaluation of the situation and implementation of necessary corrective action is necessary to ensure adequate protection. Thus, the Commission believes that a noncompliance or defect in a RISC-2 SSC does not constitute a substantial safety hazard for which reporting is necessary under Part 21. Accordingly, the Commission proposes that reporting requirements to comply with Section 206 of the ERA are not necessary for RISC-2 SSCs and that the scope of part 21 and § 50.55(e) reporting requirements should exclude RISC-2 SSCs.

The Commission also proposes that RISC-3 SSCs should not be subject to part 21 and § 50.55(e) reporting. A failure of a properly-categorized RISC-3 SSC should result in, at most, only a small change in risk, and should not result in a major degradation of essential safety-related equipment (see NUREG-0302, Rev. 1).<sup>2</sup> As discussed above, the body of regulatory requirements (the retained requirements and the requirements contained in this proposed rule) are sufficient such that simultaneous failures in multiple systems (as would be necessary to lead to a substantial safety hazard involving RISC-3 SSCs) would not occur. Thus, there is little regulatory need for the NRC to be informed of instances of noncompliance and defects with RISC-3 SSCs. This is consistent with the NRC's current position that a

"substantial safety hazard" involves a major degradation of essential safety-related equipment (see NUREG-0302). Accordingly, the Commission proposes that RISC-3 SSCs should not be subject to reporting requirements of part 21 and § 50.55(e).

In sum, the Commission proposes that part 21 reporting requirements should extend only to SSCs classified as RISC-1 SSCs, since these SSCs are those that are important in ensuring public health and safety and minimizing risk. RISC-2 SSCs should not be subject to reporting because play a lesser role than RISC-1 SSC in protection of public health and safety and no regulatory purpose would be served by part 21 reporting (as discussed above). RISC-3 and RISC-4 SSCs have little or no risk significance and no regulatory purpose would be served by subjecting RISC-3 and RISC-4 SSCs to part 21 and § 50.55(e).

The Commission does not believe that any changes to part 21 or § 50.55(e) are necessary to accomplish the Commission's proposals with respect to RISC-2 and RISC-3 SSCs, and that this proposal is consistent with the statutory requirements in Section 206 of the ERA. As discussed above, Section 206 does not contain any definition of "substantial safety hazard," but contains a direction to the Commission to define this term by regulation. Nothing in the legislative history suggests that Congress had in mind a fixed and unchanging concept of "substantial safety hazard," or that the term was limited to deterministic regulatory principles. Hence, the Commission has broad discretion and authority to determine the appropriate scope of reporting under Section 206. The Commission believes that the current definition of "substantial safety hazard" in § 21.3 is broadly written to permit the Commission to interpret it as applying, in the context of a risk-informed regulatory approach, only to RISC-1 SSCs. As discussed earlier, § 50.69 embodies a risk-informed regulatory paradigm which is different in key respects from the Commission's historical deterministic approach, and applies the risk-informed approach to classifying a nuclear power plant's SSCs according to the SSC's risk significance. SSCs that are classified as RISC-1 are those that represent the most important SSCs from both a risk and deterministic standpoint: They perform the key functions of preventing, controlling and mitigating accidents and controlling risk. Failure of RISC-1 SSCs represent, from a risk-informed regulatory perspective, the most important and significant safety concerns (*i.e.*, a

<sup>2</sup> NUREG-0302, "Remarks Presented (Questions and Answers Discussed) At Public Regional Meetings to Discuss Regulations (10 CFR part 21) for Reporting of Defects and Noncompliances." Copies of NUREGs may be purchased from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington DC 20013-7082. Copies are also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. A copy is also available for inspection and/or copying for a fee at the NRC Public Document Room, One White Flint North, 11555 Rockville Pike, Public File Area O1-F21, Rockville, MD.