

cooled and non water-cooled reactors. The industry group also noted that the proposed language, the draft regulatory guide, and the proposed change to the Standard Review Plan incorrectly assume that all new reactor designs will be light-water reactors and will present the same combustible gas hazard. Future reactors, whether light-water or non-light-water may use different materials, cooling, or moderating mediums that may not result in the production of the same combustible gases, or quantities of combustible gas as the current light-water reactor designs. The NRC agrees. For the reasons given above, the final rule, the regulatory guide, and the standard review plan have all been modified to clarify their applicability to future reactor designs.

#### *N. Equipment Qualification/ Survivability*

A licensee suggested adding a clarifying statement to the SOC concerning equipment survivability for Mark III and ice condenser plants. The commenter requested a statement clearly stating that no new equipment survivability requirements are being imposed and that existing equipment survivability and environmental analyses remain valid for compliance with the revised rule. The NRC agrees with commenter that the rule does not impose any additional equipment survivability requirements on licensees; existing equipment survivability and environmental analyses remain valid. The hydrogen and oxygen monitoring systems are required by the rule to be functional, reliable, and capable of continuously measuring the appropriate parameter in the beyond design-basis accident environment.

This licensee also noted that, due to the reclassification of the hydrogen and oxygen monitors from RG 1.97 Category I to lower categories, these monitors no longer have to be qualified in accordance with 10 CFR 50.49. The NRC agrees that the monitoring equipment need not be qualified in accordance with § 50.49. The hydrogen and oxygen monitoring systems are still required by the rule to be functional, reliable, and capable of continuously measuring the appropriate parameter in the beyond design-basis accident environment.

The licensee suggested that the NRC clarify that the revised rule will not affect the requirements or environmental conditions used by licensees to demonstrate compliance with § 50.49. The NRC agrees with the commenter that existing licensee analyses and environmental conditions used to establish compliance with 10 CFR 50.49 will not be affected by the

amended rule and that no new analyses or environmental conditions are imposed by these amendments to § 50.44.

#### **V. Petitions for Rulemaking—PRM-50-68**

The NRC received a petition for rulemaking submitted by Bob Christie of Performance Technology, Knoxville, Tennessee, in the form of two letters dated October 7, 1999, and November 9, 1999. The petition requested that the NRC amend its regulations concerning hydrogen control systems at nuclear power plants. The petitioner believes that the current regulations on hydrogen control systems at some nuclear power plants are detrimental and present a health risk to the public. The petitioner believes that similar detrimental situations may apply to other systems as well (such as the requirement for a 10-second diesel start time). The petitioner believes his proposed amendments would eliminate those situations associated with hydrogen control systems that present adverse conditions at nuclear power plants. The petition was docketed as PRM-50-68 on November 15, 1999. On January 12, 2000 (65 FR 1829), the NRC published a notice of receipt of this petition in the **Federal Register** that summarized the issues it contains.

Specifically, the petitioner performed a detailed review of the San Onofre Task Zero Safety Evaluation Report (Pilot Program for Risk-Informed Performance-Based Regulation) conducted by the NRC staff and dated September 3, 1998, concerning that plant's hydrogen control system. The petitioner requested that the NRC:

1. Retain the existing requirement in § 50.44(b)(2)(i) for inerting the atmosphere of existing Mark I and Mark II containments.

2. Retain the existing requirement in § 50.44(b)(2)(ii) for hydrogen control systems in existing Mark III and PWR ice condenser containments to be capable of handling hydrogen generated by a metal/water reaction involving 75 percent of the fuel cladding.

3. Require all future light water reactors to postulate a 75 percent metal/water reaction (instead of the 100 percent required by the current rule) for analyses undertaken pursuant to § 50.44(c).

4. Retain the existing requirements in § 50.44 for high point vents.

5. Eliminate the existing requirement in § 50.44(b)(2) for a mixed atmosphere in containment.

6. Eliminate the existing requirement for hydrogen releases during design basis accidents of an amount equal to

that produced by a metal/water reaction of 5 percent of the cladding.

7. Eliminate the requirement for hydrogen recombiners or purge in LWR containments.

8. Eliminate the existing requirements for hydrogen and oxygen monitoring in LWR containments.

9. Revise GDC 41—Containment Atmosphere Cleanup—to require systems to control fission products and other substances that may be released into the reactor containment for accidents only where there is a high probability that fission products will be released to the reactor containment.

10. Issue an interim policy statement applicable to all NRC staff to ensure that the NRC Executive Director for Operations was promptly notified whenever staff discovered cases where compliance with design-basis accident requirements was detrimental to public health.

The NRC received five comment letters on PRM-50-68. The commenters included two nuclear power plant licensees, a nuclear reactor vendor, a nuclear power plant owners group, and the Nuclear Energy Institute (NEI). Copies of the public comments on PRM-50-68 are available for review in the NRC Public Document Room, 11555 Rockville Pike, Rockville, Maryland. All commenters were supportive of some of the issues raised by the petition. One of the reactor licensees commented that analytical and risk bases exist to support the proposed changes for Mark I Boiling Water Reactor containments. The other licensee endorsed the comments submitted by NEI. The reactor vendor commented that the petitioner's proposal simplifies the language and requirements of the regulation while retaining an equivalent level of safety. However, the vendor also noted that the proposal does not appear to address the structural integrity of the containment as in the existing language at § 50.44(c)(3)(iv). The owner's group commented that the changes requested by the petitioner for large, dry containments were also applicable to ice condenser containments and suggested that the requirement for all hydrogen control measures in § 50.44 be reexamined and made "consistent with many other portions of plant operation and maintenance." The NEI agreed with the petitioner that the San Onofre hydrogen control licensing actions could be applied generically for pressurized water reactors with large, dry (including subatmospheric) containments. One licensee, the reactor vendor and the NEI disagreed with the petitioner's position that an interim policy statement is necessary to instruct