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NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

RIN 3150–AG36

List of Approved Spent Fuel Storage Casks: PSNA VSC–24 Revision

AGENCY: Nuclear Regulatory Commission.

ACTION: Final rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) is amending its regulations to revise the Pacific Sierra Nuclear Associates (PSNA) VSC–24 cask system listing within the ''List of approved spent fuel storage casks'' to include Amendment No. 1 to the Certificate of Compliance. Amendment No. 1 will modify the present cask system design to permit a licensee to store burnable poison rod assemblies in the VSC–24 cask system with the spent fuel under a general license.

EFFECTIVE DATE: This final rule is effective on May 30, 2000.

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SUPPLEMENTARY INFORMATION:

Background

Section 218(a) of the Nuclear Waste Policy Act of 1982, as amended (NWPA), requires that ''[t]he Secretary [of the Department of Energy (DOE)] shall establish a demonstration program, in cooperation with the private sector, for the dry storage of spent nuclear fuel at civilian nuclear power reactor sites, with the objective of establishing one or more technologies that the [Nuclear Regulatory] Commission may, by rule, approve for use at the sites of civilian nuclear power reactors without, to the maximum extent practicable, the need for additional site-specific approvals by the Commission.'' Section 133 of the NWPA states, in part, that ''[t]he Commission shall, by rule, establish procedures for the licensing of any technology approved by the Commission under Section 218(a) for use at the site of any civilian nuclear power reactor.''

To implement this mandate, the NRC approved dry storage of spent nuclear fuel in NRC-approved casks under a general license by publishing a final rule in 10 CFR part 72 entitled ''General License for Storage of Spent Fuel at Power Reactor Sites'' (55 FR 29181, July 18, 1990). This rule also established a new Subpart L within 10 CFR part 72, entitled ''Approval of Spent Fuel Storage Casks,'' containing procedures and criteria for obtaining NRC approval of spent fuel storage cask designs. The NRC subsequently issued a final rule on April 7, 1993 (58 FR 17948) that approved the VSC–24 design and added it to the list of NRC-approved cask designs in § 72.214 as Certificate of Compliance Number (CoC No.) 1007.

Discussion

On December 30, 1998, the certificate holder (PSNA) submitted an application to the NRC to amend CoC No. 1007 to permit a Part 72 licensee to store burnable poison rod assemblies (BPRAs) with Babcock & Wilcox (B&W) 15×15 spent fuel assemblies in the VSC–24 system. A BPRA is a reactor core component that is inserted inside a fuel assembly during core refueling. BPRAs provide a means of controlling reactor power distribution and do not contain fissile material. No other changes to the VSC–24 system design were requested in this application. The NRC staff performed a detailed safety evaluation of the proposed CoC amendment request and found that the addition of the BPRAs to the B&W 15×15 fuel does not reduce the VSC–24 safety margin. In addition, the NRC staff has determined that the storage of BPRAs in the VSC–24 does not pose any increased risk to public health and safety.

This final rule revises the VSC–24 design listing in § 72.214 by adding Amendment No. 1 to CoC No. 1007. The amendment consists of changes to the Technical Specifications (TS) for the VSC–24 design that will permit a Part 72 licensee to store BPRAs with B&W 15×15 spent fuel assemblies in a VSC–24 system. The particular TS that are changed are identified in the NRC staff's Safety Evaluation Report (SER) for Amendment No. 1.

The title of the safety analysis report (SAR) will be changed from ''Safety Analysis Report for the Ventilated Storage Cask System'' to ''Final Safety Analysis Report for the Ventilated Storage Cask System.'' This action is being taken to ensure that the SAR title is consistent with the approach taken in new § 72.248, recently approved by the Commission (64 FR 53582; October 4, 1999). Additionally, other minor, nontechnical, changes have been made to CoC No. 1007 to ensure consistency with the NRC's new standard format and content for CoCs.

The NRC finds that the amended PSNA VSC–24 system, as designed and when fabricated and used under the conditions specified in the CoC, meets the requirements of Part 72, Subpart L. Thus, use of the PSNA VSC–24 system, as approved by the NRC, will continue to provide adequate protection of public health and safety and the environment. With this final rule, the NRC is approving the use of Amendment No. 1 to the PSNA VSC–24 system under the general license provisions in 10 CFR part 72, subpart K [holders of power reactor operating licenses under 10 CFR part 50]. Simultaneously, the NRC is issuing a final SER and CoC that will be effective on May 30, 2000. Single copies of the CoC and SER are available for public inspection and/or copying for a fee at the NRC Public Document Room, 2120 L Street, NW. (Lower Level), Washington, DC 20003–1527.

Summary of Public Comments on the Proposed Rule

The NRC received one comment letter on the proposed rule from a member of the public. A copy of the comment letter is available for review in the NRC Public Document Room. The NRC's response to the issues raised by the commenter are discussed below.

As stated in the proposed rule (64 FR 51270), the NRC considered this rulemaking to add Amendment No. 1 to the VSC–24 system design to 10 CFR 72.214 to be a noncontroversial and routine action. Therefore, the NRC published a direct final rule concurrent with the proposed rule. The NRC indicated that if it received a

''significant adverse comment'' on the proposed rule, the NRC would publish a notice withdrawing the direct final rule and subsequently publish a final rule that addressed comments made on the proposed rule. The NRC believes that at least one of the issues raised by the commenter was a ''significant adverse comment.'' Therefore, the NRC published a notice withdrawing the direct final rule (64 FR 72019; December 23, 1999). This subsequent final rule addresses the issues raised by the commenter that were within the scope of the proposed rule, including the issue that was determined to be a ''significant adverse comment.''

Comments on Amendment No. 1 to the VSC–24 System

The comments and responses have been grouped into five subject areas: general, weight considerations, radiation protection, design, and miscellaneous issues. The commenter provided specific comments on the draft CoC, the NRC staff's preliminary SER, and the TS. To the extent possible, all of the comments on a particular subject are grouped together. The listing of the VSC–24 system within 10 CFR 72.214, ''List of approved spent fuel storage casks,'' has not been changed as a result of the public comments. A minor correction to the CoC was made in response to one of the comments, but no changes were made to the TS or SER. A review of the comments and the NRC staff's responses follow:

A. General

Comment A.1: The commenter stated that the proposed action should be called an ''amendment'' rather than a ''revision'' of the List of Approved Spent Fuel Storage Casks.

Response: The NRC disagrees with the comment. The NRC is issuing Amendment No. 1 to CoC No. 1007 to allow for the storage of BPRAs in the VSC–24 system; therefore, changes are required to both the CoC and the TS. Because each approved Part 72 CoC is listed under 10 CFR 72.214, the NRC is also required to revise the language in § 72.214 to reflect the approval and applicability of Amendment No. 1. Therefore, to promote clarity the NRC is using both the term ''amendment to CoC No. 1007'' and ''revision to § 72.214'' in this rule.

Comment A.2: The commenter stated that the **Federal Register** should not call the action a ''Direct Final Rule.'' Streamlining the rulemaking process in this manner de-emphasizes safety concerns. The commenter also disagreed with NRC's characterization of the amendment as being ''noncontroversial and routine'' because this is the first amendment to a dry cask generic CoC and it raised many concerns.

Response: The NRC believed no new technical issues would arise from the storage of BPRAs coincident with spent fuel, because: (1) BPRAs are safely used within spent fuel in a reactor; (2) operating conditions inside a reactor are harsher than storage conditions inside a VSC–24 system; and (3) the NRC has previously reviewed the technical issues associated with the operation and storage of BPRAs in dry casks. Additionally, the proposed rule to amend the VSC–24 design was not the first amendment to a Part 72 cask design. A proposed rule to amend the Transnuclear West cask design (CoC No. 1004) was published in the **Federal Register** before this proposed rule was published (see 64 FR 41050; July 29, 1999). Consequently, the NRC considered the storage of BPRAs with spent fuel to be a noncontroversial and routine action. The NRC continues to believe that the use of the direct final rule process was appropriate. Furthermore, the NRC also believes that the public's opportunity to comment on the proposed amendment to the VSC–24 design was not adversely impacted by the use of the direct final rule process. The withdrawal of the direct final rule—in response to receipt of a significant adverse comment—and publication of this final rule containing responses to all public comments demonstrate the NRC's commitment to provide the public the opportunity to comment on direct final rules.

Comment A.3: The commenter objected ''. . . to use of new Sec. 72.48 as it muddies the waters as to all change processes and just adds confusion as to how to keep documents current and to who is supposed to do what and be liable for what.''

Response: This comment on the revised § 72.48 is beyond the scope of this rule which is focused solely on whether to amend the VSC–24 cask design. The revision to § 72.48 was addressed in a separate rulemaking (64 FR 53582; October 4, 1999).

Comment A.4: The commenter asked for the regulatory justification for allowing the amendment of a CoC and renaming the SAR to FSAR (Final SAR). The commenter also asked why the VSC–24 CoC was not amended to include a process for making amendments. The commenter questioned why the ''effective date'' of the initial certificate was not included in the CoC ''to begin with'' which would have precluded the need to amend the CoC. The commenter questioned whether the VSC–24 has received ''special treatment'' since other CoCs (*e.g.*, NUHOMS CoC Condition 9) have to be changed. The commenter stated that the SAR should not be renamed an FSAR because it is not a ''final'' document if changes are continually allowed. The commenter further noted that the language in the CoC does not refer to the ''final'' SAR, nor does it contain the date or revision number of the SAR. This is inconsistent with NRC's objective to change the SAR to an FSAR.

Response: As stated in the proposed rule, the authority to approve a CoC for a spent fuel storage cask design is contained in Sections 218(a) and 133 of the NWPA. Inherent with the NRC's authority under the NWPA to approve a spent fuel storage cask design is the authority to amend a previously approved cask design. The NRC regulations on amending a Part 72 cask design are contained in §§ 72.244 and 72.246 (see 64 FR 53582). With respect to the comment to add language to the CoC to include a process for amending the cask design, this is unnecessary because of the regulations contained in §§ 72.244 and 72.246. Furthermore, Condition No. 9 of CoC No. 1004 for the NUHOMS–24P and –52B cask design is intended to allow that certificate holder to make minor changes to the cask design without obtaining prior NRC approval. It was not intended to define a process for submitting an amendment to the certificate. Furthermore, this provision is not necessary for the VSC–24 CoC because the recent change to § 72.48 included certificate holders.

The NRC has not previously added the effective date for a CoC to the list contained in § 72.214 because the NRC believed the public and industry had adequate information on the effective date for a new CoC in the **Federal Register** notice that published the final rule [approving a specific cask design]. However, with the issuance of amendments, the NRC determined that it is necessary to identify the effective date of a CoC amendment because the CoC amendment may require certain changes, or may not permit certain actions, for casks that were put in service before the effective date of the amendment. The use of an effective date in § 72.214 for both the amendment and the original CoC will improve clarity and ensure that both the industry and public understand the standard to which a specific cask has been manufactured or loaded. For example, an amendment to a hypothetical cask design that changes a material specification or a welding detail in a fuel support basket would not automatically be applied to casks that

have been already fabricated, loaded with spent fuel, and sealed because this would impose an unreasonable burden on the licensees who are using the cask. For the VSC–24 design, the effective date of the amendment is listed in this notice. A licensee can not use a VSC–24 cask under the Part 72 general license to store BPRAs before the effective date of Amendment No. 1.

The NRC recently added a new regulation in § 72.248 on the submission and updating of the FSAR for each approved cask design (see 64 FR 53582). Consequently, the term FSAR is used in both § 72.214 and the CoC to ensure consistency with the language contained in § 72.248. The NRC agrees with the commenter that the word ''Final'' was inadvertently omitted from the proposed CoC. However, the proposed rule text did include the term ''final safety analysis report.'' Therefore, the final CoC has been corrected to include the term ''Final Safety Analysis Report.''

The date of the FSAR and the revision number will be included in the document itself, as required by § 72.248. However, the FSAR revision number and date of issuance will not be included in the CoC because § 72.248 requires the certificate holder to update the FSAR every two years. Therefore, the NRC has chosen to omit this information from the CoC to prevent confusion between the rule language and the current FSAR. The NRC also notes that the certificate holder is required by § 72.248 to submit an updated ''FSAR'' within 90 days of the issuance of this amendment to reflect any changes made to the CoC or TS. For this certificate holder, this process will convert the current SAR into an FSAR.

Comment A.5: The commenter stated that the original rulemaking [approving the VSC–24 design] should have addressed the changes since the desire for these changes (*e.g.*, inclusion of BPRAs) were well known at the time. However, there was a ''big push'' allowed by the NRC to get the VSC–24 certified ''as is,'' so this action was not taken.

Response: The specific design features of the VSC–24 system are within the purview of the applicant. The NRC's review of a cask design is intended to ensure that the submitted cask design provides reasonable assurance that public health and safety and the environment will be protected. As such, the NRC's review is limited to the cask design submitted by the applicant and does not consider potential future optional features or different designs. Rather, changes to the design (*e.g.*, to store BPRAs) are considered by the NRC in subsequent amendments to the cask design, if and when they are submitted by the certificate holder.

Comment A.6: The commenter noted that the casks used at Palisades were built ''by exemption'' before the design was certified.

Response: Comments on previously built VSC–24 casks [*e.g.*, those used at the Palisades Nuclear Power Plant] that do not identify any issues relative to the storage of BPRAs are beyond the scope of the proposed rule.

Comment A.7: The commenter has favored the action the NRC is now taking, *i.e.*, to ensure that changes to the cask design be reflected in the various documents including the CoC.

Response: No response necessary.

Comment A.8: The commenter urged the NRC staff to think creatively about different problems including the effects of added weight and added dose. The NRC staff should also ''visualize'' the potential for accidents by considering the entire process, from removal of BPRAs to their storage in Yucca Mountain.

Response: The NRC staff has evaluated the storage of BPRAs within B&W 15×15 Mark B fuel assemblies for storage in the VSC–24 system, including added weight and dose, and found it acceptable. Unloading of fuel containing BPRAs is not expected to be any more challenging than unloading of fuel without BPRAs. Use of the VSC–24 at Yucca Mountain is beyond the scope of this rule.

Comment A.9: The commenter disagreed with the assertion that it will cost utilities more time and money to pursue exemptions to permit storage of BPRAs. In the long run, these site-specific actions will be more effective than ''one big generic exemption'' because they will result in fewer inspections and enforcements.

Response: The NRC disagrees with the comment. NRC regulates licensees by compliance with the Federal regulations rather than exemptions to the regulations. Multiple exemption requests for the same issue are a cost and resource burden to both NRC and licensees. In this case, since multiple licensees are expected to request storage of BPRAs, this provision is more effectively addressed by rulemaking to amend the CoC and TS.

Comment A.10: The commenter recommended that the utilities should remove the BPRAs and dispose of them in separate containers as low level waste. Using [spent fuel storage] casks to dispose of BPRAs is a waste of cask space and repository space that should be used for high level waste.

Response: The NRC disagrees with the comment. BPRAs are reactor core components that are inserted into fuel assemblies during core refueling. A BPRA is physically located within a fuel assembly; therefore, no additional space is required to store or dispose of a spent fuel assembly with a BPRA also stored within the spent fuel assembly. Thus the presence of BPRAs will not affect the number of spent fuel assemblies that can be stored in a spent fuel storage cask.

Comment A.11: The commenter asked why no other agencies (e.g., DOE, NWTRB) were apparently contacted regarding the environmental assessment. Further, the commenter is concerned about the potential cumulative effect on the environment of many ''insignificant'' incremental changes.

Response: The agencies mentioned by the commenter are notified of the proposed rule in the same manner as the public. Therefore, the NRC did not believe it was necessary to specifically solicit their input. Furthermore, the Environmental Assessment covering the proposed rule, as well as the Finding of No Significant Impact, prepared and published for this rulemaking, fully comply with NRC's environmental regulations in 10 CFR part 51. The Commission's environmental regulations in Part 51 implement the National Environmental Policy Act and are consistent with the guidelines of the Council on Environmental Quality.

Comment A.12: The commenter questioned if the use of Regulatory Guide 3.61 is appropriate for this amendment request since both the CoC and the SAR are being amended. Also, the commenter questioned the designation of LAR 98–01 [License Amendment Request] as a ''supplemental document,'' and asks for whom (SNC, ANO) it is supplemental. The commenter also asked how NRC will assure that LAR 98–01 will be considered with Rev.0 of the SAR.

Response: Regulatory Guide 3.61, ''Standard Format and Content for a Topical Safety Analysis Report for a Spent Fuel Dry Storage Cask'' is incorporated into NUREG–1536, ''Standard Review Plan for Dry Cask Storage Systems.'' The NRC staff used the guidance in NUREG–1536 for this amendment. LAR 98–01 was referred to as a supplemental document in the SER because it must be considered with information provided in Revision 0 of the SAR. Revision 0 of the SAR will be revised to incorporate the information in LAR 98–01 in the FSAR submitted by the applicant upon completion of this rulemaking.

Comment A.13: The commenter disagreed that unloading procedures

should ''be left up to licensees to do after the casks are certified.'' These procedures should be put in the PDR because they are of great interest and concern to the public. The commenter is specifically concerned about changes needed in the unloading procedures to address BPRAs.

Response: The NRC disagrees with the comment. NRC reviews a licensee's programs for compliance with the regulations by inspecting the adequacy and implementation of licensee procedures. Licensees are not required to submit implementing procedures to NRC on the public docket. Each licensee is required to review the adequacy of its procedures as a result of changes to the cask design or operational parameters. Further, BPRAs are integral to the fuel assembly and few, if any, changes should be needed in the unloading procedures.

Comment A.14: The commenter generally criticized industry's (Nuclear Energy Institute and the plants) waste management policy. Industry is interested in moving the waste into casks as fast as possible and shipping it to Nevada for disposal. The commenter expressed concern about the amounts of waste that are being generated, the potential need for more repositories, and the lack of sound science to justify the storage and disposal of waste.

Response: These comments are beyond the scope of this rule, which is focused solely on whether to amend the VSC–24 cask design.

Comment A.15: The commenter stated that the NRC should always look out for workers and the public because it is NRC's job.

Response: The NRC agrees with the comment. The NRC's highest priority is to protect the health and safety of both the public and workers at nuclear facilities.

Comment A.16: The commenter was sympathetic with the NRC staff which has had to deal with problems caused by licensees, vendors, and subcontractors.

Response: No response necessary.

Comment A.17: The commenter stated that vendors are not responsible enough in QA procedures and that licensees should be responsible.

Response: The NRC staff disagrees with the comment. The CoC holder is required to have and implement a Quality Assurance (QA) program approved by the NRC as part of the CoC issuance process. This QA program must meet the requirements of 10 CFR part 72, subpart G for cask design and fabrication activities. The cask user is ultimately responsible for ensuring that the fabricator's QA programs comply with 10 CFR part 72, subpart G. NRC inspects licensee performance and takes enforcement actions as appropriate.

B. Weight Considerations

Comment B.1: The commenter stated that the added weight from the BPRAs poses a big concern and should not be allowed.

Response: The NRC disagrees with the comment. The overall weight of the Multi-Assembly Sealed Basket (MSB), Ventilated Concrete Cask (VCC), and MSB Transfer Cask (MTC) with the BPRAs included remains below the weight discussed in the SAR. Revision 0 of the SAR specifies the maximum design weight of the MSB as 118,630 lbs. The weight of the MSB with BPRAs is 6130 pounds less than this maximum weight.

Comment B.2: The commenter stated that the safety margin is being reduced because the [VCC maximum] 80-inch lift height is being reduced to 60 inches. This reduction (due to increased stress in vertical drop) will be difficult to enforce and will create confusion and future problems.

Response: The NRC disagrees with the comment. The maximum lifting height of the VCC outside of the spent fuel pool building was reduced from 80 to 60 inches because all supporting calculations in the SAR were based on a 60-inch drop height. Consequently, previous use of an 80-inch drop height was inappropriate. Therefore, this reduction in the administratively controlled lift height will effectively increase the safety margin since the maximum lift height will now be lower.

Comment B.3: The commenter asked whether the additional 60 lbs. more weight per assembly means that there will be an additional $24 \times 60 = 1440$ lbs. per cask, which seems like a significant increment. The commenter further asked if this additional weight would have an effect on the pad, the loading area floor, the pool liner, transporter, sling, etc.

Response: The addition of a BPRA to a B&W Mark B 15X15 fuel assembly increases the weight of the fuel assembly from 1516 lbs. to 1576 lbs. For a cask fully loaded with 24 fuel assemblies containing BPRAs, the cask weight would increase by 1440 lbs., approximately 4 percent of the cask weight. This increase in weight was found by the NRC to be acceptable for complying with the normal use and accident conditions evaluated under the provisions of Part 72. Furthermore, each licensee using a VSC–24 cask is required by §§ 50.59, 72.48, and 72.212 to evaluate whether the additional weight of a cask will have an unacceptable adverse effect on structures, systems, or components, such as the ISFSI pad, the loading floor area, or the pool liner. The cask cannot be used if the licensee identifies an unacceptable adverse impact. [See also response to Comment No. B.1.]

Comment B.4: The commenter stated that the proposed amendment reduces the VSC–24 safety margin and increases the risk to public and worker health and safety. The doses are larger, stresses are more, drop height is reduced, shielding on MTC is reduced, and weight is increased.

Response: The NRC disagrees in part with the comment. The reduction in drop height for a loaded VCC increases the safety margin by ensuring that the VCC is not able to fall through more than 60 inches (rather than 80 inches) in the vertical orientation. Although the stresses associated with a vertical drop of the VCC increase 6 percent, these stresses comply with the ASME Code limits. Regarding the MTC, the shielding in the bottom doors of the MTC was reduced to compensate for the increased weight of the loaded MSB. The MTC weight reduction was required to maintain the lift load within a predetermined crane lift load capacity. Issues related to increased dose are discussed in response to Comment No. C.4.

C. Radiation Protection

Comment C.1: The commenter stated that it is not acceptable to have an increase of 7.5 percent in offsite and direct skyshine dose rate to the public, even if the resulting doses are within the limits. The commenter questioned if the combined dose from ''a full cask array'' or ''several full cask arrays'' would be acceptable to the public or to workers. For workers, in particular, the NRC needs to take into account the future cumulative effect of years of worker exposure resulting from inspections of the casks. The commenter disagreed that the projected 13 percent increase in ''potential cask dose rates'' does not constitute an increased risk to health and safety. The commenter noted that the highest projected dose is at ''top center'' of the cask, and would like to know, since dosimeters are not located there, what the real dose would be (from a full cask array right above the casks on the pad) for a surveillance worker who needs to check outlets at the top of the casks.

Response: The NRC disagrees with the comment. The increase in offsite dose at 1500 feet from an array of 68 VSC–24 casks with 5-year cooled spent fuel represents a conservative bounding estimate of the effect of BPRAs on offsite

doses. The actual offsite dose to the public from an Independent Spent Fuel Storage Installation (ISFSI) is affected by many factors, including the number of casks, specific placement of fuel assemblies within each cask, cask positioning, if the fuel is cooled beyond 5 years, and the presence of natural shielding features such as earthen berms and buildings that are not credited in design safety offsite dose calculations. Each ISFSI licensee is required to demonstrate that offsite public annual whole body doses remain below the § 72.104 limit of 25 mrem/year.

The NRC determined that the addition of BPRAs will result in an increase of approximately 7.5 percent in the calculated offsite direct and skyshine dose rate to the public as calculated and presented in Revision 0 of the SAR. The potential annual dose to the public at 1500 feet from an array of 68 VSC–24s loaded with 5-year cooled spent nuclear fuel would increase from 0.039 mSv/year to 0.042 mSv/year (3.9 mrem/year to 4.2 mrem/year), which remains well below the 0.25 mSv/year (25 mrem/year) limit in § 72.104. The estimated annual occupational exposure for routine activities such as visual surveillance of cask air inlets/outlets and radiation protection surveys on a cask filled to design capacity would be $7\times10-6$ person-Sv/year/cask (0.0007 person-rem/year/cask.) Based on these expected occupational activities, the NRC has reasonable assurance that individual exposures will be below the annual occupational limit of 0.05 Sv (5 rem) specified in § 20.1201.

Comment C.2: The commenter is concerned about where the dosimeters are placed in relation to the height of the casks. They should be placed at the ''top height'' where the dose is expected to be the highest. If the dosimeters are not placed in this position, the commenter would like an explanation.

Response: ISFSI licensees are required by § 72.104(a) to ensure that dose rates do not exceed 0.25 mSv/year (25 mrem/year) at the controlled area boundary. ISFSI licensees typically place radiation monitoring devices (dosimeters) at various locations around the ISFSI perimeter fence at approximately the chest height of an average worker standing at the ISFSI perimeter fence. This dosimetry is used to monitor the actual dose from the ISFSI and to determine the dose at the controlled area boundary. A dosimeter placed at the top of a cask would not provide useful information for the determination of dose to a member of the public or a worker. A worker that is within the ISFSI perimeter fence and performing an activity at the top of a cask would be subject to the licensees' 10 CFR part 20 Radiation Protection Program requirements, including controls to limit exposure and the placement (i.e., wearing) of personal dosimetry. [See also response to Comment No. C.1.]

Comment C.3: The commenter questioned why the maximum increase of cask dose rate is evaluated at the air inlets rather than at the outlets and top of the cask where the highest dose rate is expected. Also, the commenter asked about the increase in reflected radiation ''from cask to cask in full cask array,'' and if it is still correct to assume a center-to-center distance of 15 ft.

Response: The maximum dose rate due to the inclusion of B&W 15x15 BPRAs in the VSC–24 was calculated for all locations on and around the VSC–24 storage cask, including the air outlets and the top of the cask. Although the dose rates also increased at the air outlets and top of the cask, the SER specifically delineated the increase in dose rate at the air inlets because this was the largest percent increase and is a significant contributor to worker doses during required daily air inlet/outlet surveillance of the VSC–24. The NRC determined that the increase in reflected radiation from cask-to-cask in a full 68 cask array was insignificant and that the existing center-to-center cask distance of 15 feet was acceptable.

Comment C.4: The commenter stated that to accommodate the added weight, changes have been made that reduce the safety margin and are inconsistent with ALARA. In particular, by reducing the MTC shielding, the potential occupational dose rate increases from 300 to 1932 mrem per hour. This should not be allowed because of the impact on workers. The commenter also questioned NRC's statement that workers are ''not expected'' to be in the area where they could receive an occupational dose of 1932 mrem/hr.

Response: The NRC disagrees in part with the comment. Although there is some increase in the potential dose to workers, the likelihood of such an exposure is very low. Operations for loading the MSB, placing it into the MTC, and loading the MSB into the VCC from the MTC do not involve the presence of workers in or around the bottom of the MTC. Under the requirements for movement of heavy loads such as the MTC, personnel are prohibited from the area directly below the load when it is lifted or being moved. ALARA (''as low as reasonably achievable'') practices implemented by licensees include sound radiation protection principles and procedures for monitoring actual dose rates, using additional temporary shielding (when appropriate), and restricting the location and time of workers in various radiation fields to minimize doses.

Comment C.5: The commenter asked how BPRAs in the cask and worker dose are affected by the fact that drain down is necessitated before UT [ultrasonic testing] of structural welds is finished.

Response: Drain down of the cask has no effect on the BPRAs. [See also Comment No. D.4.] The issue of the effect of drain down on worker dose during the performance of UT on a structured weld is beyond the scope of the proposed rule.

D. Materials

Comment D.1: The commenter stated that a big concern is materials' interactions. Consequently, it is important to know what materials are present in the BPRAs and what interactions (chemical and physical) they could have with the materials in a VSC–24. In particular, the commenter would like to know what coating will be used in the sleeves holding the BPRA assemblies, the proximity of the coating to the materials in the BPRA, and the dimensions and density of the BPRA material versus regular fuel rods. The commenter asked for a full description of all the materials that comprise a BPRA because such a description does not exist in the documentation reviewed.

Response: BPRAs are composed of stainless steel hardware supporting sealed zircalloy rods containing aluminum oxide and boron carbide pellets. During normal nuclear power plant operation, some spent fuel assemblies operate with BPRAs inserted into their usually empty guide tubes. There are no coatings used in the zircalloy guide tubes of the B&W Mark B 15x15 fuel assemblies that would interact with the BPRA. No adverse interactions between the materials in a BPRA and the VSC–24 are expected. Description of a fuel assembly and a BPRA, including relevant dimensions, is contained within the SAR and its reference documents. These documents are available in the PDR.

Comment D.2: The commenter questioned if ''all reactor BPRAs'' are the same (materials, size, weight, susceptibility to corrosion, cracks, pinhole leaks, etc.) and if they should be treated genericlly. Further, the commenter asked what criteria (*i.e.,* TS) have been established for determining which BPRAs are to be allowed in the cask. This is based on concern over the storage of BPRAs that might be produced in the future. The commenter objected to the decision to accept BPRAs with cladding failures because of

concerns over depressurization including deterioration, collapse and ''getting stuck,'' crumbling and clogging of spaces in other sleeves, reactions of decayed BPRAs with other cask materials (coatings).

Response: The only BPRAs approved for storage under this rulemaking are those to be stored in B&W Mark B 15x15 fuel assemblies. BPRAs with cladding failures were analyzed and determined to be acceptable for loading in the VSC–24. A failed BPRA loaded in the VSC–24 would be depressurized and actually present a lower MSB accident pressure than that of an intact BPRA. Any release from a failed BPRA would not have an adverse effect on the internals of the MSB or the fuel assemblies stored in the MSB. [See also Comment Nos. D.1 and D.3.]

Comment D.3: The commenter expressed concern about the possibility of leaks from a BPRA that is inserted inside a fuel assembly. Since BPRAs cannot be observed, the commenter wondered how leaks can be detected, how they react to vacuum drying of fuel rods, and if retainment of water (causing added weight and possible corrosion) could be a problem.

Response: The NRC evaluated the postulated accident assuming all 24 BPRAs in a VSC–24 MSB failed. This analysis showed that the maximum MSB pressure due to the simultaneous failure of all 24 BPRAs and all 24 stored spent nuclear fuel assemblies resulted in MSB stresses that remained below the American Society of Mechanical Engineers (ASME) Code allowable values and therefore, would not affect the MSB confinement boundary. A failed BPRA would release helium gas, which is already present, to the MSB internals. A BPRA would not present more problems in vacuum drying the MSB than the spent fuel assembly itself.

Comment D.4: The commenter asked how BPRAs change as they ''dry out'' and questioned whether any tests have been conducted regarding this issue. For example, could the materials lose their structural integrity which would cause a problem in unloading or shipping. This could be compounded by the effects of heat, radiation, and chemical reactions (e.g. with ''pool water chemicals'').

Response: Vacuum drying will not reduce the structural integrity of a BPRA. The BPRA will continue to maintain the same structural integrity as the fuel assembly in which it is secured.

Comment D.5: The commenter recommended that the next amendment should prohibit the use of ''flammable plastic tube'' and ''duct tape'' to prevent the release of hydrogen. In addition, the commenter recommended additional criteria that requires coatings that do not create hydrogen and stipulated the use of stainless steel. The commenter questioned how BPRAs could be affected by hydrogen generation.

Response: Comments on future amendments are beyond the scope of the proposed rule. [See Comment No. D.1 on material composition of BPRAs.] Regarding the question of hydrogen generation, the NRC staff determined that the potential presence of hydrogen gas during VSC–24 loading activities has an insignificant effect on the BPRAs.

Comment D.6: The commenter recommended the use of the term ''carbon steel,'' rather than ''steel'' when it is appropriate.

Response: If there were different types of steel used in the VSC–24 design, the NRC would agree with the comment. The NRC typically specifies the variety or grade of a steel when presenting information if there is a potential for misunderstanding. However, all of the steel used in the VSC–24 design is of the carbon steel variety. [See also Comment No. D.1.]

E. Design

Comment E.1: The commenter stated that the amendment should be a site-specific design request and technical evaluation from Entergy for the Arkansas Nuclear One (ANO) ISFSI instead of a generic amendment. The commenter further stated that Entergy should be liable and responsible for future problems, but that apparently BNF [British Nuclear Fuel Limited] wants to be responsible. Although the NWPA calls for approval of generic cask designs ''to the maximum extent practicable,'' the commenter believes the current action ''calls for site-specific approval at each plant and is not practicable to be a generic amendment'' ''A generic cask CoC should not have to be amended to suit the site specific need of one licensee.'' In particular, the commenter is critical of the actions of ANO with respect to their use of the change process in § 72.48, and stated that ANO should have gotten [applied for] a site specific license ''right from the beginning.''

Response: The NRC does not agree that a site-specific approval is needed to store BPRAs in the VSC–24 cask design. The VSC–24 cask design was approved in a final rule (58 FR 17948; April 7, 1993) under the NRC's Part 72 regulations that implement Sections 218(a) and 133 of the NWPA. Section 218(a) directed the NRC to approve one or more spent fuel dry storage technologies for use at civilian nuclear power reactors ''without, to the maximum extent practicable, the need for additional site-specific approvals by the Commission.'' Therefore, the NRC believes that the VSC–24 cask design, and any amendments to the cask design (i.e., storage of BPRAs), may be used by all Part 72 general licensees without obtaining an additional NRC site-specific approval. [See also response to Comment No. A.5.]

The NRC understands that ANO is expected to be the first Part 72 general licensee to utilize the provisions of Amendment No. 1 to store BPRAs in a VSC–24 cask. However, irrespective of which Part 72 general licensees may wish to use this provision to store BPRAs, the certificate holder is ultimately responsible for the cask design and for submitting any applications to amend the cask design. In submitting such an application, the certificate holder must demonstrate to the NRC's satisfaction that the proposed amendment will not adversely affect public health and safety and the environment.

Comment E.2: The commenter questioned how the length of the B&W 15x15 assemblies fit in with BPRAs. In particular, if the cask design and procedures must accommodate a difference in length, what are the ramifications? The commenter also questioned if there are any problems in unloading BPRAs and stated that, perhaps, there should be ''tests for BPRAs before the first loading at the plant.''

Response: A BPRA is secured [located] within a fuel assembly so no additional space is required in a VSC–24 cask to store a spent fuel assembly with a BPRA. Consequently, handling operations such as loading or unloading of a spent fuel assembly containing a BPRA are not expected to present any more difficulty than for a spent fuel assembly without a BPRA. Licensee users are required to perform dry runs and training exercises of the cask loading and unloading activities before performing the actual operation.

Comment E.3: The commenter recommended that the information on hydraulic roller skids and skid openings be removed [from the cask design] since nobody uses them.

Response: The NRC disagrees with the comment. The applicant did not request an amendment to the information on the hydraulic roller skids and skid openings; therefore, this comment is beyond the scope of this rule and the information was not revised in this CoC amendment.

Comment E.4: The commenter asked whether the basket supports have been

evaluated (over time and when dry) for extra weight, size, and stress.

Response: The NRC reviewed the structural adequacy of the MSB including basket supports for the additional weight of the BPRAs and found that all stresses were less than the ASME Code allowable stress limits.

Comment E.5: The commenter asked if the BPRAs can be drained effectively and if tests have been done to confirm this.

Response: Vacuum drying the BPRA is not expected to present any more difficulty in vacuum drying the MSB than for the spent fuel assembly itself. The geometrical features of BPRAs that could retain water are equivalent to or less complex than the fuel assemblies themselves.

F. Miscellaneous

Comment F.1: The commenter asked why the CoC, EA [Environmental Assessment], and SER inconsistently reference the certificate holder. Is it SNC or PSNA?

Response: The entity that requested the CoC amendment was Sierra Nuclear Corporation (SNC). SNC is owned by Pacific Sierra Nuclear Associates (PSNA). PSNA is the registered owner of the VSC–24 design. The documents have been modified for consistency.

Comment F.2: The commenter asked how a plant reports what is placed in each cask because this documentation may be crucial in the future.

Response: The VSC–24 users are required to document pertinent information on each fuel assembly stored in the cask (including whether it contains a BPRA) under §§ 72.76, 72.78, and 72.212(b)(8)(i). This information is required to be maintained by the licensee user until termination of the license.

Comment F.3: The commenter asked about the process for notifying manufacturers, users, and potential users of problems in storing BPRAs in casks. This is important so that the same mistakes are not repeated. The commenter stated that the CoC holder should be held liable for not informing users of potential concerns.

Response: Certificate holders are required by the recently revised § 72.242(d) to notify the NRC of ''a design or fabrication deficiency, for any spent fuel storage cask which has been delivered to a licensee, when the design or fabrication deficiency affects the ability of structures, systems, and components important to safety to perform their intended safety function.'' (64 FR 56114; October 15, 1999). The NRC expects that the certificate holder will provide a copy of this report to any affected licensees. If such a report is received by the NRC, the NRC can verify through inspections that all affected cask users are aware of the information.

Comment F.4: The commenter stated that the term ''double-closure'' weld, used in the EA, is not correct. In the commenter's opinion, it is not possible to count the shield lid as a closure weld because it is not UT tested. The CoC should be amended to say that there is only one closure weld (i.e., the structural lid weld).

Response: The NRC disagrees with the comment. VSC–24 cask users are required to perform nondestructive examination of both the shield lid to MSB shell weld and the structural lid to MSB shell weld. Both of these welds are considered closure welds. The CoC and TS require cask users to perform liquid penetrant examination of both of these welds.

Comment F.5: The commenter stated that the sabotage evaluations for dry casks are outdated and need to be redone because of the increased threat of terrorist activity.

Response: This comment is beyond the scope of the current rule.

Comment F.6: The commenter asked why the name of the valve manufacturer has now been deleted from the amendment and believed this should have been done long ago.

Response: The NRC agrees with the comment. The name of the valve manufacturer is not required for operational activities of the VSC–24 and has been deleted.

Comment F.7: The commenter questioned whether there will be specific ''checks,'' documented in procedures, for boron concentration to eliminate potential confusion if a plant uses VSC casks to store both BPRAs and non-BPRAs.

Response: The storage of BPRAs in the VSC–24 cask does not require a change in the boron concentration of the water inside the MSB. Technical Specification 1.2.6 controls the boron concentration inside the MSB during loading and unloading operations.

Comment F.8: The commenter stated that ''dry runs don't seem to be effective in troubleshooting,'' and asked what other actions need to be taken.

Response: Changes to the requirement to conduct dry runs of cask operations are beyond the scope of the proposed rule.

Comment F.9: The commenter asked what ''wet helium'' is and how tests can be conducted for it.

Response: The NRC does not recognize the term ''wet helium,'' as used by the commenter; consequently, this comment is not addressed.

Summary of Final Revisions

Section 72.214 List of Approved Spent Fuel Storage Casks

Certificate No. 1007 is revised by adding the effective date of the initial certificate, the effective date of Amendment Number 1, and revising the title of the SAR submitted by PSNA to ''Final Safety Analysis Report for the Ventilated Storage Cask System.''

Agreement State Compatibility

Under the ''Policy Statement on Adequacy and Compatibility of Agreement State Programs'' approved by the Commission on June 30, 1997, and published in the **Federal Register** on September 3, 1997 (62 FR 46517), this rule is classified as compatibility Category ''NRC.'' Compatibility is not required for Category ''NRC'' regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act of 1954, as amended, or the provisions of Title 10 of the Code of Federal Regulations. Although an Agreement State may not adopt program elements reserved to NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State's administrative procedure laws, but does not confer regulatory authority on the State.

Finding of No Significant Environmental Impact: Availability

Under the National Environmental Policy Act of 1969, as amended, and the Commission's regulations in Subpart A of 10 CFR part 51, the NRC has determined that this rule is not a major Federal action significantly affecting the quality of the human environment and therefore, an environmental impact statement is not required. This final rule amends the PSNA VSC–24 CoC, and accordingly revises the VSC–24 system listing within the list of approved spent fuel storage casks in § 72.214. Power reactor licensees can use these approved casks to store spent fuel at reactor sites without additional site-specific approvals from the Commission. The amendment modifies the present cask system design to permit a Part 72 licensee to store BPRAs in the VSC–24 system design along with the spent fuel. The environmental assessment and finding of no significant impact on which this determination is based are available for inspection at the NRC Public Document Room, 2120 L Street NW. (Lower Level), Washington, DC. Single copies of the environmental assessment and finding of no significant impact are available from Richard

Milstein, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415–8149, email rim@nrc.gov.

Paperwork Reduction Act Statement

This final rule does not contain a new or amended information collection requirement subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). Existing requirements were approved by the Office of Management and Budget, Approval Number 3150–0132.

Public Protection Notification

If a means used to impose an information collection does not display a currently valid Office of Management and Budget control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

Voluntary Consensus Standards

The National Technology Transfer Act of 1995 (Pub. L. 104–113) requires that Federal agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or otherwise impractical. In this final rule, the NRC would revise the PSNA VSC–24 system design listed in § 72.214 (List of NRC-approved spent fuel storage cask designs). This action does not constitute the establishment of a standard that establishes generally-applicable requirements.

Regulatory Analysis

On July 18, 1990 (55 FR 29181), the NRC issued an amendment to 10 CFR part 72. The amendment provided for the storage of spent nuclear fuel in cask systems with the designs approved by the NRC under a general license. Any nuclear power reactor licensee can use cask systems with designs approved by the NRC to store spent nuclear fuel if it notifies the NRC in advance, the spent fuel is stored under the conditions specified in the cask's CoC, and the conditions of the general license are met. A list of NRC-approved cask designs is contained in § 72.214. On April 7, 1993 (58 FR 17948), the NRC issued an amendment to Part 72 that approved the VSC–24 design, added it to the list of NRC-approved cask designs in § 72.214, and issued CoC No. 1007. On December 30, 1998, the certificate holder (PSNA), submitted an application to the NRC to amend CoC No. 1007 to permit a Part 72 licensee to store BPRAs with B&W 15x15 spent fuel assemblies in the VSC–24 system.

This final rule will permit the storage of certain reactor core components (i.e., BPRAs) that do not contain fissile material in the VSC–24 system. The alternative to this action is to withhold approval of this amended cask system design and issue an exemption to each general license that proposes to use the casks to store BPRAs. This alternative would cost both the NRC and the utilities more time and money because each utility would have to submit a request for an exemption and NRC would have to review each request.

Approval of the final rule will eliminate the problem described above and is consistent with previous Commission actions. Further, the final rule will have no adverse effect on public health and safety. This final rule has no significant identifiable impact on or benefit to other Government agencies. Based on this discussion of the benefits and impacts of the alternatives, the NRC concludes that the requirements of the final rule are commensurate with the Commission's responsibilities for public health and safety and the common defense and security. No other available alternative is believed to be as satisfactory; and thus, this action is recommended.

Small Business Regulatory Enforcement Fairness Act

Under the Small Business Regulatory Enforcement Fairness Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs, Office of Management and Budget.

Regulatory Flexibility Certification

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 605(b)), the Commission certifies that this rule will not, if promulgated, have a significant economic impact on a substantial number of small entities. This final rule affects only the licensing and operation of nuclear power plants, independent spent fuel storage facilities, and PSNA. The companies that own these plants do not fall within the scope of the definition of ''small entities'' set forth in the Regulatory Flexibility Act or the Small Business Size Standards set out in regulations issued by the Small Business Administration at 13 CFR part 121.

Backfit Analysis

The NRC has determined that the backfit rule (10 CFR 50.109 or 10 CFR 72.62) does not apply to this final rule because this amendment does not involve any provisions that would impose backfits as defined in the backfit rule. Therefore, a backfit analysis is not required.

List of Subjects in 10 CFR Part 72

Administrative practice and procedure, Hazardous waste, Nuclear materials, Occupational safety and health, Penalties, Radiation protection, Reporting and recordkeeping requirements, Security measures, Spent fuel, and Whistleblowing.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 552 and 553; the NRC is adopting the following amendments to 10 CFR part 72.

PART 72—LICENSING REQUIREMENTS FOR THE INDEPENDENT STORAGE OF SPENT NUCLEAR FUEL AND HIGH-LEVEL RADIOACTIVE WASTE

1. The authority citation for Part 72 continues to read as follows:

Authority: Secs. 51, 53, 57, 62, 63, 65, 69, 81, 161, 182, 183, 184, 186, 187, 189, 68 Stat. 929, 930, 932, 933, 934, 935, 948, 953, 954, 955, as amended, sec. 234, 83 Stat. 444, as amended (42 U.S.C. 2071, 2073, 2077, 2092, 2093, 2095, 2099, 2111, 2201, 2232, 2233, 2234, 2236, 2237, 2238, 2282); sec. 274, Pub. L. 86–373, 73 Stat. 688, as amended (42 U.S.C. 2021); sec. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846); Pub. L. 95–601, sec. 10, 92 Stat. 2951 as amended by Pub. L. 10d–48b, sec. 7902, 10b Stat. 31b3 (42 U.S.C. 5851); sec. 102, Pub. L. 91–190, 83 Stat. 853 (42 U.S.C. 4332); secs. 131, 132, 133, 135, 137, 141, Pub. L. 97–425, 96 Stat. 2229, 2230, 2232, 2241, sec. 148, Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10151, 10152, 10153, 10155, 10157, 10161, 10168).

Section 72.44(g) also issued under secs. 142(b) and 148(c), (d), Pub. L. 100–203, 101 Stat. 1330–232, 1330–236 (42 U.S.C. 10162(b), 10168(c), (d)). Section 72.46 also issued under sec. 189, 68 Stat. 955 (42 U.S.C. 2239); sec. 134, Pub. L. 97–425, 96 Stat. 2230 (42 U.S.C. 10154). Section 72.96(d) also issued under sec. 145(g), Pub. L. 100–203, 101 Stat. 1330–235 (42 U.S.C. 10165(g)). Subpart J also issued under secs. 2(2), 2(15), 2(19), 117(a), 141(h), Pub. L. 97–425, 96 Stat. 2202, 2203, 2204, 2222, 2244, (42 U.S.C. 10101, 10137(a), 10161(h)). Subparts K and L are also issued under sec. 133, 98 Stat. 2230 (42 U.S.C. 10153) and sec. 218(a), 96 Stat. 2252 (42 U.S.C. 10198).

2. Section 72.214, Certificate of Compliance No. 1007 is revised to read as follows:

§ 72.214 List of approved spent fuel storage casks.

* * * * *

Certificate Number: 1007.

Initial Certificate Effective Date: May 7, 1993.

Amendment Number 1 Effective Date: May 30, 2000.

SAR Submitted by: Pacific Sierra Nuclear Associates.

SAR Title: Final Safety Analysis Report for the Ventilated Storage Cask System.

Docket Number: 72–1007.

Certificate Expiration Date: May 7, 2013.

Model Number: VSC–24.

* * * * *

Dated at Rockville, Maryland, this 12th day of April, 2000.

For the Nuclear Regulatory Commission.

Frank J. Miraglia, Jr.,

Acting Executive Director for Operations.

[FR Doc. 00–10392 Filed 4–26–00; 8:45 am]

BILLING CODE 7590–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 99–NM–56–AD; Amendment 39–11700; AD 2000–08–14]

RIN 2120–AA64

Airworthiness Directives; Boeing Model 747 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD), applicable to certain Boeing Model 747 series airplanes, that requires repetitive inspections or checks to detect broken H–11 steel bolts at the wing rear spar side-of-body on the lower chord splice plate and kick fitting; and corrective actions, if necessary. This AD also requires eventual replacement of the existing bolts with new Inconel bolts, which constitutes terminating action for the repetitive inspections. This amendment is prompted by a report of broken bolts at the wing rear spar side-of-body on the lower chord splice plate. The actions specified by this AD are intended to prevent cracking of the bolts due to stress corrosion, which could result in reduced structural integrity of the wing-to-body joint structure.

DATES: Effective June 1, 2000.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of June 1, 2000.

ADDRESSES: The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P. O. Box 3707, Seattle, Washington 98124–2207. This information may be examined at the Federal Aviation Administration (FAA), Transport Airplane Directorate, Rules Docket, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Tamara L. Anderson, Aerospace Engineer, Airframe Branch, ANM–120S, FAA, Transport Airplane Directorate, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055–4056; telephone (425) 227–2771; fax (425) 227–1181.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to certain Boeing Model 747 series airplanes was published in the **Federal Register** on September 2, 1999 (64 FR 48120). That action proposed to require repetitive inspections or checks to detect broken H–11 steel bolts at the wing rear spar side-of-body on the lower chord splice plate and kick fitting; and corrective actions, if necessary.

Comments

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

Request To Reference Revised Service Bulletin

One commenter requests that the FAA revise paragraph (d) of the notice of proposed rulemaking (NPRM) to allow accomplishment of the terminating action in accordance with either the original issue of Boeing Alert Service Bulletin 747–57A2309, dated February 25, 1999 (which is referenced as the appropriate source of service information in the NPRM), or Boeing Service Bulletin 747–57A2309, Revision 1, dated December 22, 1999.

The FAA concurs with the commenter's request. Since the issuance of the NPRM, the FAA has reviewed and approved Boeing Service Bulletin 747–57A2309, Revision 1. The procedures specified in that service bulletin are substantially similar to those in the original issue. Among other things, Revision 1 of the service bulletin references kits with cadmium-plated nuts instead of passivated nuts and revises jacking instructions. The FAA finds that use of either the original issue or Revision 1 of the service bulletin is acceptable for compliance with all actions specified in this AD. Therefore, the FAA is revising paragraphs (a), (b), and (d), of this final rule to reference Revision 1, as well as the original issue of the service bulletin.

In addition, no new airplanes are added to the effectivity listing in Revision 1 of the service bulletin, but the effectivity listing does show changes in airplane operators. Therefore, for clarity, the applicability statement of this final rule has been revised to refer to airplanes listed in Revision 1 instead of the original issue of the service bulletin.

Request To Revise Paragraph (c)

One commenter requests that paragraph (c) of the proposed AD be revised to refer not only to paragraph (b), as specified in the proposal, but also to paragraph (d)(1). The commenter points out that paragraph (c) of the proposal only refers to cracks found during accomplishment of corrective action required by paragraph (b), but paragraph (d)(1) of the proposal also refers to accomplishment of necessary corrective actions in accordance with paragraph (c). The commenter recommends that paragraph (c) of this AD be revised to read as follows: ''If any crack is detected during any corrective action required by paragraph (b) of this AD or during terminating action required by paragraph (d)(1) of this AD. * * *'' The FAA concurs with the commenter's request, and has revised paragraph (c) of this final rule accordingly.

Request To Clarify Number of Fasteners

One commenter requests that the FAA revise paragraphs (d)(1) and (d)(2) of the proposed rule to accurately state the correct number of fasteners for all groups of airplanes listed in the service bulletin. The commenter points out that airplanes in Group 2 have only four high strength H–11 steel bolts common to the rear spar lower chord splice plate, while airplanes in Groups 1, 3, 4, and 5 have eight high strength H–11 steel bolts common to the rear spar lower chord splice plate.

The same commenter requests that the FAA revise paragraphs (d)(1) and (d)(2) of the proposed AD to also explicitly state that the number of high strength H–11 steel bolts listed in those paragraphs of the AD are the numbers for each side. The commenter states that this change is necessary for clarity.

The FAA partially concurs with the commenter's request. The FAA acknowledges that airplanes in Group 2 have only four high strength H–11 steel bolts common to the rear spar lower chord splice plate, while airplanes in