This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each week.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50
[Docket No. PRM–50–76]

Robert H. Leyse; Denial of Petition for Rulemaking

AGENCY: Nuclear Regulatory Commission.

ACTION: Petition for rulemaking; denial.

SUMMARY: The Nuclear Regulatory Commission (NRC) is denying a petition for rulemaking submitted by Mr. Robert H. Leyse (PRM–50–76). The petitioner requests that the NRC’s regulations concerning the specified evaluation methods, or data used to support ECCS performance evaluations. NRC’s technical safety analysis demonstrates that current procedures for evaluating ECCS performance are based on sound science and that no amendments to the NRC’s regulations and guidance documents are necessary.

ADDRESSES: The NRC is making the documents identified in the table below available to interested persons through the NRC’s letter of denial to the petitioner, public comments received, and the NRC’s letter of denial to the petitioner, may be viewed electronically via the NRC rulemaking Web site at http://ruleforum.llnl.gov.

Publicly available documents created or received at the NRC after November 1, 1999, are also available electronically at the NRC’s Electronic Reading Room at http://www.nrc.gov/reading-rm/adams.html. From this site, the public can gain access into the NRC’s Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC’s public documents. If you do not have access to ADAMS or if you have problems in accessing the documents in ADAMS, contact the PDR reference staff at (800) 387–4209 or (301) 415–4737 or by e-mail to pdr@nrc.gov.

FOR FURTHER INFORMATION CONTACT:
Timothy A. Reed, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone (301) 415–1462, e-mail TAR@nrc.gov.

SUPPLEMENTARY INFORMATION:

Background

The petition for rulemaking designated PRM–50–76 was received by the NRC on May 1, 2002. A notice of receipt of the petition and request for public comment was published in the Federal Register (FR) on August 9, 2002 (67 FR 51783). The notice of receipt requested comment on two questions: (1) Are the petitioner’s three concerns about ECCS cooling valid, and if so, do these concerns constitute a significant safety concern? (2) Are there actions available to the Commission other than rulemaking that would effectively address the concerns raised by the petitioner?

The Petition

The petition, PRM–50–76, covers three broad issues: (1) Amending Appendix K to Part 50 of the Commission’s regulations, (2) amending Regulatory Guide (RG) 1.157, and (3) the need for further analysis of the 10 CFR Part 50, Appendix K, backup data.

Issue 1: Amending Appendix K to Part 50

The petitioner describes at length alleged technical deficiencies in Appendix K Section I.A.5, “Metal-Water Reaction Rate.” The petitioner claims that Section I.A.5 does not accurately describe the extent of zirconium-water reactions that may occur during a LOCA. The petitioner states that the

Federal Register
Vol. 70, No. 171
Tuesday, September 6, 2005
Baker-Just equation, which is used to calculate the metal-water reaction in assessing ECCS performance, does not include any allowance for the complex thermal-hydraulic conditions during a LOCA, including the potential for very high bulk fluid temperatures within the cooling channels of the zirconium-clad fuel elements.

The petitioner cites the abstract of a report by L. Baker and J. L. Just, May 1962, which states that the results of the MiniZWOK test at 1832 °F led to the temperature overshoot of the MaxiZWOK test at 1832 °F, and that would have led to very substantially greater temperature overshots and likely destruction of the Zircaloy tubing. The petitioner concludes that the investigators’ conclusions include a statement that “overlooks the very substantially greater mass transfer coefficients that accompany the so-called appropriate heat transfer coefficients.” The petitioner further identifies WCAP Section 1973) and notes the Commission’s statement that NUREG–17 is not applicable to the calculation of the metal-water reaction and shows that the Baker-Just equation (referenced in Section I.A.5 of Appendix K for calculating the metal-water reaction) is not conservative. The petitioner states that the data in WCAP–7665, which includes test run 9573, includes the complex thermal-hydraulic conditions and Zircaloy-water reactions that characterize the reflood portion of the LOCA transient. The petitioner states that the conditions are not found in the narrow test procedures of ANL–6548 or NUREG–17. The petitioner states that a pertinent description of the complexities of thermal-hydraulic conditions during reflood, including negative heat transfer coefficients, is included in Section 3.2.3 of WCAP–7665 and that this description applies to data collected with FLECHT bundles with stainless steel cladding. The petitioner feels that another FLECHT Zircaloy bundle test, run 8874, is also pertinent to issues raised in this petition.

The petitioner further identifies WCAP–7665, Section 5.11, “Materials Evaluation,” as misleading because they imply that stainless steel heat transfer coefficients may be used as a conservative representation of Zircaloy behavior. The petitioner believes that the differences in behavior for various test runs are explained by the differences in the thermal-hydraulic conditions leading to a different combination of heat transfer and mass transfer factors, and are not due to inconsistency of the data, as implied by the report.

The petitioner also finds WCAP–7665 is on the cover page of WCAP–7665. The petitioner further identifies several aspects of the data supporting the document entitled “Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Cooled Nuclear Reactors—Opinion of the Commission,” (Docket No. RM50–1, December 28, 1973) and notes the Commission’s conclusion: “It is apparent, however, that more experiments with Zircaloy cladding are needed to overcome the impression left from run 9573.” The petitioner finds that there has been a lack of appropriate response to the Commission’s expressed wish for more...
experiments, and believes that at the very least, run 9573 should have been repeated. The petitioner emphasizes that although at least $1 billion had been expended on other analytical efforts, there has been no reported analysis of FLECHT run 9573.

The petitioner states that the test programs discussed in the petition were funded by Government agencies. He believes that most of the programs were firmly controlled by those "who were indoctrinated in the methods of the tightly regimented Naval Reactors Program." The petitioner finds that the "biased reporting of WCAP–7665 may be traced to these controls" and believes that "the lack of application of the MaxiZWOK apparatus beyond 1832 °F in NUREG–17 may likely be traced to rigid restrictions by management at the NRC." The petitioner further contends that while the Argonne work in ANL–6548 was likely less impacted by these controls, the controls likely did inhibit further analysis or reporting of FLECHT run 9573.

The petitioner notes that he has made several requests to the Knolls Atomic Power Laboratory for report KAPL–1534 and that his requests have been ignored.

**Public Comments on the Petition**

Six letters of public comment were received on the petition in response to the request for public comment. Three of these letters were from the petitioner. These letters are summarized below.

By letter dated September 11, 2002, the petitioner provided comments that did not raise new issues. The petitioner stated that the Baker-Just equation and the Cathcart-Pawel equation in NUREG–17 have been grossly misapplied by the NRC. According to him, it is fundamentally important that the determinations of LOCA transient chemical kinetics include the geometry of the stationary Zircaloy reactant in combination with the thermal-hydraulic conditions of the flowing water/steam reactant. In addition, he repeated in his letter that there are deficiencies in RG 1.157, since it references documents such as NUREG–17 that do not consider the complex thermal-hydraulic conditions during LOCAs, including the potential for very high fluid temperatures. The petitioner also stated that the Commission should provide a rational basis for regulation of ECCS performance and perform additional experiments with Zircaloy cladding due to the cladding failure reported in Westinghouse report WCAP–7665.

By letter dated October 23, 2002, Westinghouse submitted comments opposing the proposed changes. Westinghouse commented that runaway oxidation is prevented by the 2200 °F peak cladding temperature limit. Additionally, Westinghouse commented that the Baker-Just correlation is known to be conservative, over-predicting the zirconium-water reaction by as much as 30 percent at the limiting temperature (2200 °F). Westinghouse stated that the conditions of FLECHT run 9573 (high power and high initial temperatures) were extremely severe, intentionally beyond design basis for ECCS performance. Westinghouse stated that the Cathcart-Pawel tests had adequate steam flow so that the zirconium-water reaction rate was not limited by the availability of steam, and as a result, the tests were valid. Westinghouse commented that differences between ECCS test conditions and reactor core fluid conditions during postulated LOCAs do not prevent the current zirconium-water reaction database from being applicable to ECCS analysis.

By letter dated October 25, 2002, the Nuclear Energy Institute (NEI) submitted comments supporting the Westinghouse comments, stating that extensive testing and analysis by the nuclear industry and national laboratories indicate that the Cathcart-Pawel correlation test is conservative. The NRC notes that the Cathcart-Pawel correlation is intended to be a best estimate, and is not intended to conservatively bound metal-water reaction rates. NEI commented that the test run, FLECHT 9573, was intentionally performed under very severe, beyond design basis conditions, that post-test evaluations showed oxidation was within the expected range, and that runaway oxidation did not occur until the cladding temperature was well beyond 2300 °F. NEI further commented that the petitioner’s concerns do not constitute a significant safety concern and thus, there is no need to revise Appendix K to Part 50 or RG 1.157.

By letter dated November 6, 2002, the petitioner responded to STARS but raised no new issues. On December 14, 2002, the petitioner responded to Westinghouse and NEI comments by discussing runaway oxidation in the WCAP–12610 report and severe fouling of fuel cladding during a LOCA. The petitioner stated that no allowance for higher temperatures due to fouling was made in run 9573, and repeated his request for more experiments with Zircaloy cladding.

**NRC Requirements for ECCS Evaluations**

Section 50.46 specifies the performance criteria against which the ECCS must be evaluated. The criteria include the maximum peak cladding temperature, the maximum cladding oxidation thickness, the maximum total hydrogen generation, and requirements to assure a coolable core geometry and abundant long-term cooling. This regulation also states that the ECCS cooling performance following postulated LOCAs must be calculated in accordance with either a conservative (also called a best-estimate) evaluation model that accounts for uncertainty or a conservative evaluation model that conforms with the required features of appendix K to 10 CFR part 50. If a licensee elects to calculate ECCS performance using an Appendix K evaluation model, then one important feature of that model is the way the metal-water reaction is calculated. For this calculation, Appendix K prescribes the use of the Baker-Just equation from ANL report ANL–6548 (L. Baker, L.C. Just, “Studies of Metal Water Reactions at High Temperatures, III. Experimental and Theoretical Studies of the Zirconium-Water Reaction” May 1962). The metal-water reaction, which is predicted to occur during the LOCA and which is calculated using the Baker-Just equation, is the subject of much of this petition. The Baker-Just equation calculates a conservative rate of hydrogen generation and fuel cladding oxidation during the LOCA transient. Additionally, for licensees electing to use best-estimate calculations to evaluate ECCS performance, NRC RG 1.157 provides guidance for such evaluations. RG 1.157 allows the use of data from NUREG–17 for the calculation of the metal-water reaction.

**NRC Technical Evaluation**

The NRC reviewed the petitioner’s request and concluded that none of the issues raised by the petitioner justified the initiation of rulemaking. The NRC’s response to the technical issues raised by the petitioner is based largely on a technical study by the Office of Nuclear Regulatory Research (RES) "Technical
The NRC compares the Baker-Just equation with the Cathcart-Pawel equation presented in the Cathcart-Pawel report. The NRC disagrees with the petitioner's statement that the limited test conditions described in the Cathcart-Pawel experiments are not applicable to LOCA/ECCS conditions and that only steam was applied at very low velocities for the main test series. The NRC states that there was no documented heat transfer from the Zircaloy surface to the slow-flowing steam and that the conditions of the small-scale laboratory tests were not typical of the complex thermal-hydraulic conditions that prevail during a LOCA.

The petitioner suggests that without liquid water, the tests are invalid. The NRC disagrees. The presence of liquid water would invalidate the tests. Accurate steady-flow measurements would be extremely difficult. The droplets or liquid film would make it difficult to achieve the relatively constant sample temperatures that are necessary in these reaction kinetics tests. However, adequate steam flow is a concern. If the flow is too low, the reaction becomes steam starved. Otherwise, it is unnecessary to have steam flow typical of LOCA/ECCS conditions. These are not heat transfer tests. Once a reaction rate model is developed using data from experiments like these, the model should be validated against transient tests under LOCA conditions, as in the four Zircaloy tests described in WCAP–7665 and the transient tests described in the Cathcart-Pawel report.

Calculations were performed to assure that there was adequate steam flow for the MiniZWOK experiments used to derive the Cathcart-Pawel correlation in NUREG–17. These calculations are described in the RES technical study. As an important aspect for the absence of steam starvation is how the isothermal Cathcart-Pawel experiments
described in NUREG–17 give consistent results that support the parabolic/Arrhenius behavior. This is also discussed in the RES technical study.

Much of the petitioner’s criticism of the Cathcart-Pawel work is related to a comparison of MiniZWOK and MaxiZWOK experimental conditions. MiniZWOK was used to develop a consistent set of data for correlation development. Controlling sample temperature by adjusting heater power (MiniZWOK) was much more successful than adjusting steam flow (MaxiZWOK). As the petitioner notes, temperature overshoot was a problem with MaxiZWOK and at high temperatures could have led to temperature runaway. As noted previously, temperature control is absolutely necessary in reaction kinetics experiments such as these. The petitioner implies that the experimenters abandoned MaxiZWOK in favor of MiniZWOK. Actually, the isothermal MiniZWOK experiments were essentially complete before the MaxiZWOK experiments were begun. Results from MaxiZWOK between 1652°F and 1832°F agreed well with MiniZWOK data at the same temperatures. Cathcart and Pawel state that:

‘‘The very good agreement between these two data sets is regarded as evidence that steam flow rate and steam insertion temperature do not affect significantly the kinetics of the steam oxidation of Zircaloy, at least in this temperature range. Certainly, with steam velocities at least an order of magnitude greater in MaxiZWOK than MiniZWOK, the potential for more rapid gas phase diffusion of steam to the sample surface ‘‘mass transfer’’ is greater for MaxiZWOK. But clearly this is not the limiting phenomenon. This was demonstrated by the good agreement between MiniZWOK and MaxiZWOK data and the good agreement of MiniZWOK data to parabolic/Arrhenius behavior. There is no evidence to suggest that high ‘‘mass transfer coefficients’’ in MaxiZWOK caused temperature overshoot in MaxiZWOK at 1832°F, as the petitioner proposes. It is true, as the petitioner suggests, that ‘‘[i]t is not possible to achieve an isothermal rate of oxidation of Zircaloy-4 if the Zircaloy-4 is exposed to LOCA fluid conditions at elevated conditions,’’ but not for the reasons postulated by the petitioner. Rather, large-break LOCA reflood conditions are characterized by constantly decreasing power (decay heat) and increasing heat transfer coefficients after a few seconds. Under these conditions, isothermal conditions are impossible. WCAP–7665 showed that this kind of heat transfer and power behavior was universal for all tests done under design basis conditions, and as a result, these heat transfer tests did not exhibit isothermal cladding temperature behavior.

The petitioner implies that Cathcart and Pawel’s statement, that scoping tests on the effect of steam pressure were in progress, is an admission of inapplicability of their work. On the contrary, the scoping work was completed and subsequent work by others has been undertaken to examine pressure effects. The petitioner’s notion that the authors’ statement about ongoing work applies to very low steam velocities is also unsupported.

Work in this area did not end in 1977. The NRC, foreign partners, and the industry have continued to conduct and evaluate experimental and analytical programs on fuel cladding behavior. As in the case with many other research activities and their link to the agency’s regulatory framework, an important objective of this work is the confirmation of current § 50.46 criteria and models and the development of more realistic, performance-based, and contemporary criteria and models. An important link to the current work is the extensive research reported by Cathcart and Pawel.

The NRC disagrees with the petitioner’s assertion that the disclaimer in the introduction to NUREG–17 causes the technical work to be inapplicable to reactor regulation. The disclaimer protects the United States Government from potential litigation. It is not intended to discredit the technical validity of the work documented in NUREG–17. As such, the disclaimer is irrelevant to whether the NUREG–17 work is an adequate basis for reactor regulation. That is a question that should be decided solely on the technical merits of the work.

The NRC found no technical basis in the petition nor in NRC records to support the assertion that the Regulatory Guide 1.157 conditions for acceptance of the use of ORNL/NUREG–17 information result in flawed evaluation of ECCS performance.

**Issue 3: Need for Further Analysis of Appendix K Backup Data**

In Section 3.4 of his petition, the petitioner quotes from the AEC decision on the ECCS rulemaking [See Rulemaking Hearing, Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Cooled Nuclear Power Reactors, RM–50–1, CLI–73–39, 6AER, N–52897 Federal Register 30, No. 220, December 26, 1975, pp. 7663–7665] that the increased heat transfer coefficients and the associated heat generation rate. At 21 locations on 19 rods among the four Zircaloy tests, post-test oxide thickness measurements were made. Westinghouse applied the Baker-Just correlation to each temperature transient measured at or very near to each oxide thickness measurement. The comparison between predicted and measured oxide thickness was presented in Figure B–12 of WCAP–7665. The Baker-Just correlation overpredicts the data by about 60 percent, which is quite conservative.

The NRC obtained tabular time/temperature data from Westinghouse for 19 of the 21 locations analyzed by Westinghouse for the four Zircaloy FLECHT tests. The Baker-Just correlation was applied to these 19 data sets as a check on the analysis in WCAP–7665. The RES technical study clearly demonstrates that the analysis in WCAP–7665 is correct and that the
Baker-Just correlation is conservative even under the severe conditions of run 9573.

The petitioner asserts that a detailed thermal-hydraulic analysis of run 9573, including evaluation of the heating from Zircaloy-water reactions, was never performed. Contrary to that assertion, not only was an evaluation of the heating from Zircaloy-water reaction performed for run 9573, it was done for all four Zircaloy tests. Unfortunately, using the conservative Baker-Just correlation to estimate the zirconium-water heat release results in an overestimation of the derived heat transfer coefficients. Thirty-five years later, it would be difficult to replicate the DATAR code, substitute a better metal-water model, and re-derive the heat transfer coefficients. The difficulty would be in addition to the significant monetary expense of conducting high-temperature Zircaloy tests and would have marginal benefit in terms of increased understanding of large-break LOCA heat transfer and metal-water reaction kinetics. The current programs being conducted at Pennsylvania State University and Argonne National Laboratory are far more cost-effective.

When high-temperature tests similar to run 9573 would require rod bundle powers well outside the range of operation of any current or proposed pressurized water reactors (PWRs) and would produce very little useful heat transfer information. Therefore, the NRC does not believe that such tests are necessary. The petitioner states that more experiments with Zircaloy cladding have not been conducted on the scale necessary to overcome the impression left from run 9573. The NRC disagrees. In fact additional Zircaloy tests have been performed. In the early 1980s, the NRC contracted with National Research Universal (NRU) at Chalk River, Ontario, Canada to run a series of LOCA tests in the NRU reactor. More than 50 tests were conducted to evaluate the thermal-hydraulic and mechanical deformation behavior of a full-length 32-rod nuclear bundle during the heatup, reflood, and quench phases of a large-break LOCA. The NRC is reviewing the data from this program to determine its value for assessing the current generation of codes such as TRAC-M (now renamed TRACE).

In assessing the need for further experiments like the Zircaloy-clad FLECHT tests, it is important to understand the past and current role of rod bundle reflood heat transfer tests. In the late 1960s, a mechanistic understanding of reflood heat transfer did not exist. To develop heat transfer models as expeditiously as possible, the Atomic Energy Commission (AEC), Westinghouse, and Electric Power Research Institute (EPRI), cooperatively developed the PWR FLECHT program. The principal objective was to determine reflood heat transfer coefficients as a function of key initial and boundary conditions, rod elevation, and time after the beginning of reflood and to develop empirical correlations based on that dependency. As long as a sufficiently large matrix of tests was performed with full-scale rod bundles, there was no great need for a comprehensive mechanistic understanding. The key parameters were:

A. Pressure  
B. Peak power  
C. Decay power  
D. Flooding rate  
E. Inlet subcooling  
F. Initial temperature  
G. Bundle size  
H. Cladding material  
I. Heating temperature

When nuclear plant behavior and design conditions are outside the envelope defined by these test parameters or the design of the experimental system, there is no basis for extrapolation, since the derived heat transfer models are not necessarily based on the physical models governing the reflood heat transfer processes. For the very empirical process used in the early FLECHT experiments, limited effort was expended obtaining data needed for development of mechanistic physical models. It would have been impractical to obtain sufficient Zircaloy heat transfer coefficient data for the empirical process used with the early FLECHT experiments. As the FLECHT program and other rod bundle reflood heat transfer programs have progressed over the last 30 years, more information appropriate for mechanistic model development has been obtained. As better mechanistic models are developed, careful extrapolation has a better chance of success, and the role of experiments like FLECHT has shifted from model development to developmental assessment. In fact, many of the FLECHT-SEASET experiments are used to assess the new code models. As mentioned previously, the NRC is reviewing the NRU Zircaloy-clad nuclear fuel bundle test results to establish their value for further code assessment.

Conclusions

The NRC investigated each of the petitioner’s key concerns. The NRC concludes that Appendix K of 10 CFR Part 50 and the existing guidance on best-estimate ECCS evaluation models are adequate to assess ECCS performance for U.S. light water reactors (LWRs) using Zircaloy-clad UO2 at burnup levels currently permitted by regulations. This general conclusion is based on the following considerations:

The Baker-Just correlation using the current range of parameter inputs is conservative and adequate to assess Appendix K ECCS performance. Virtually every data set published since the Baker-Just correlation was developed has clearly demonstrated the conservatism of the correlation for the temperature range important to clad oxidation calculations for LOCA.

The parabolic/Arrhenius behavior of the Cathcart-Pawel isothermal experiments confirmed that there was adequate availability of steam. An NRC analysis confirms the ORNL/ANL assessment that the Cathcart-Pawel isothermal experiments were not steam starved by at least two orders of magnitude. Therefore, the experimental data is valid.

NRC has continued to study complex thermal hydraulic effects on ECCS heat transfer processes during LOCA accident conditions consistent with Commission direction. As part of that initiative, the NRC funded more than 50 Zircaloy-clad nuclear fueled bundle reflood experiments at the NRU reactor. These experiments evaluated fuel rod and heat transfer behavior but did not include metallurgical examination to evaluate oxidation behavior. The NRC is continuing to conduct and evaluate experimental and analytical programs on fuel cladding behavior.

The petitioner did not take into account Westinghouse’s metallurgical analyses performed on the cladding for all four FLECHT Zircaloy-clad experiments reported in WCAP–7665. The petitioner also ignored the Westinghouse application of the Baker-Just correlation to these experiments, which had the “complex thermal hydraulic phenomena” deemed important by the petitioner. This application of the correlation to the metallurgical data clearly demonstrates the conservatism of the Baker-Just correlation for 21 typical temperature transients. The NRC also applied the Baker-Just correlation to the FLECHT Zircaloy experiments with nearly identical results, confirming the WCAP–7665 results.

For the development of oxidation correlations, limited by oxygen diffusion into the metal, well-characterized isothermal tests are more important than the complex thermal hydraulics suggested by the petitioner.
The petitioner’s suggested use of complex thermal-hydraulic conditions would be counter-productive in reaction kinetics tests because temperature control is required to develop a consistent set of data for correlation development. Isothermal tests allow this needed temperature control. It is more appropriate to apply the developed correlations to more prototypic transients (including complex thermal hydraulic conditions) to verify that the proposed phenomena embodied in the correlations are indeed limiting. This is what was done by Westinghouse in WCAP–7665, by Cathcart and Pawel in NUREG–17 and by the NRC in its technical safety analysis of PRM–50–76.

The NRC applied the Cathcart-Pawel oxygen uptake and ZrO2 thickness equations to the four FLECHT Zircaloy experiments, confirming the best-estimate behavior of the Cathcart-Pawel equations for large-break LOCA reflood transients.

Cathcart and Pawel applied their oxide thickness equation, using the BILD5 program, to 15 of their transient temperature experiments as described in ORNL/NUREG–17. The results showed that the correlation, based on numerous isothermal experiments, was conservative or best-estimate when applied to this transient data set.

Petitioner’s Public Comments

The petitioner submitted two public comment letters in which he again asserted that the Baker Just and Cathcart-Pawel equations are grossly misapplied by the NRC. The first comment letter basically repeated the arguments in the petition. No new technical information was supplied. The second comment letter introduced the issue of severe fouling, which was the subject of PRM–50–78 and addressed by the staff’s evaluation of that petition for rulemaking. Other issues addressed in the second letter are related to the issues already discussed in this document, and therefore, no further response is necessary.

Reasons for Denial

For the reasons cited in this document, the Commission is denying the petition for rulemaking (PRM–50–76) submitted by Mr. Robert Leyse. The NRC believes that the requested rulemaking would not make a significant contribution to maintaining safety because current regulations and regulatory guidance already adequately address the evaluation of performance of the ECCS. No data or evidence was provided by the petitioner or found in NRC records to suggest that the research, calculation methods, or data used to support ECCS performance evaluations were sufficiently flawed so as to create significant safety problems. NRC’s technical safety analysis demonstrates that current procedures for evaluating performance of ECCS are based on sound science and that no amendments to the NRC’s regulations and guidance documents are necessary. Additionally, the petitioner has not shown, nor has the NRC found, the existence of any safety issues regarding calculation methods or data used to support ECCS performance evaluations that would compromise the secure use of licensed radioactive material. The proposed revisions would not improve efficiency, effectiveness, and realism because licensees and the NRC would be required to generate additional information (as part of the evaluation of ECCS performance) that has no safety value and does not significantly improve realism.

Dated at Rockville, Maryland, this 26th day of August, 2005.

For the Nuclear Regulatory Commission.

Annette L. Vietti-Cook,
Secretary of the Commission.

[FR Doc. 05–17589 Filed 9–2–05; 8:45 am]

BILLING CODE 7590–01–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39


RIN 2120–AA64

Airworthiness Directives; Boeing Model 737–100, –200, –200C, and –300 Series Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Boeing Model 737–100, –200, –200C, and –300 series airplanes. This AD requires repetitive detailed inspections to detect discrepancies of the retaining pin lugs on the support fitting of the main landing gear (MLG) beam, and rework of the support fitting or replacement of the fitting if necessary.

Comments

We provided the public the opportunity to participate in the development of this AD. We have considered the comments that have been submitted on the proposed AD.

Agreement With the Proposed AD

One commenter, the manufacturer, agrees with the proposed AD.

Conditional Agreement With the Proposed AD

One commenter, an operator, agrees with the proposed AD provided that there are adequate parts available if the discrepant condition is found. The FAA agrees that adequate availability of parts is necessary. We