POLICY ISSUE
NOTATION VOTE

January 8, 2009 SECY-09-0005

FOR: The Commissioners

FROM: R. W. Borchardt
Executive Director for Operations

SUBJECT: OPTIONS FOR ACCELERATING THE COMPLETION OF THE VARIOUS FIRE PROTECTION TASKS AND APPLICABLE BUDGET IMPLICATIONS

PURPOSE:

To request a Commission decision on options, which the Nuclear Regulatory Commission (NRC) staff has considered to expedite the closure of various fire protection tasks, and the budgetary implications of those options on the fiscal year (FY) 2009 and FY2010 budgets.

SUMMARY:

This paper includes a summary of actions implemented to date to address unbudgeted activities and implications. It also includes options to expedite the review of National Fire Protection Association (NFPA) 805 license amendment requests (LAR), accelerate licensees adopting NFPA 805, and accelerate circuit issue closure as well as staff recommendations and applicable resource implications.

The options for accelerating the review of NFPA 805 LARs include (1) providing no additional resources than currently in the budget request for fiscal year (FY) 2010 and requesting similar resources for FY2011, (2) securing two full-time equivalents (FTE) and 1.3M dollars of additional resources in FY2011, or (3) securing five FTEs and 2.0M dollars of additional resources in FY2011. Choosing Option 1 would utilize current expert resources and avoid training additional staff for short periods only to idle them later. With Option 2, all anticipated

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LAR reviews would be completed within 2 years. With the significantly enhanced resources described in Option 3, the staff does not expect any LAR reviews to exceed 1.5 years. However, expert resources to support this option may be difficult to obtain due to their limited availability within or outside the NRC. The staff recommends the Option 2.

The options to accelerate licensees adopting NFPA 805 include either (1) maintaining the current enforcement policy applicable to NFPA 805 or (2) changing the enforcement policy to reduce the discretion period for licensees who are continuing to wait to adopt NFPA 805. The options for accelerating circuit issue closure also include either (1) maintaining current enforcement policy or (2) changing the enforcement policy to reduce the enforcement discretion timeframe to submit licensing actions from 36 to 24 months. In both of these cases, the staff recommends changing the existing enforcement discretion period.

BACKGROUND:

In staff requirements memorandum (SRM)-M080717, "Briefing on Fire Protection Issues," July 17, 2008, the Commission directed the staff to provide a Fire Protection Closure Plan including milestones and deliverables. The Commission also directed the staff to include options for accelerating the completion of the various fire protection issues, some of which were unbudgeted, and the applicable budget implications on the FY2009 and FY2010 budgets. On November 5, 2008, the NRC staff provided the Commission that plan as SECY-08-0171, "Plan for Stabilizing Fire Protection Regulatory Infrastructure." The plan included staff actions necessary to establish the regulatory stability of fire protection infrastructure, establish structure for enforcement, develop implementing guidance (e.g., issuance of regulatory guides and standard review plans), and validate the adequacy of that implementing guidance. It did not include routine staff actions such as evaluating operating experience, performing inspections, and completing licensing action reviews.

This paper describes actions already taken by the staff to accelerate resolution of some of the tasks listed in SECY-08-0171. It also describes some of the options for other tasks that could be accelerated.

DISCUSSION:

Summary of Actions Implemented to Date to Address Unbudgeted Activities and Implications

In recognition of the Commission direction to expedite closure of fire protection, the staff is implementing or plans to implement a number of activities by reprioritizing the assignments within the Office of Nuclear Reactor Regulation (NRR) and securing additional resources from other offices through mechanisms such as rotational assignments. This strategy will enable the staff to implement closure of the following three actions directed by the Commission, explicitly in its SRMs, or the response to Congress regarding the recommendations from the Government Accountability Office (GAO-08-747). The following actions will be completed during the fiscal years FY2009 and FY2010:

- develop a plan to assess regulatory effectiveness of the ongoing improvements to the fire protection program using recent plant data,

- develop training to appropriate staff on the historical lessons learned from the fire protection issue resolution activities, and

- develop a centralized database of fire protection exemptions.

The staff also elevated the priority of the review of the pilot LAR for NFPA 805 and has reprioritized tasks within NRR to invest in activities that would improve the effectiveness and efficiency of the reviews of 30 LARs in FY2010 and FY2011. Specifically, staff has performed the following actions:

- reprioritized tasks and re-distributed resources within NRR,

- dedicated a senior technical advisor in probabilistic risk assessment (PRA) to lead infrastructure development activities on NFPA 805;

- implemented a temporary re-organization within NRR/Division of Risk Assessment (DRA) to create the position of deputy director in fire protection, whose sole responsibility is to manage all fire protection activities; and

- implemented the state-of-the-art project management tool, Enterprise Project Management (EPM), to increase NFPA 805 project management efficiency.

As a result of these reprioritizations, some activities (such as risk-informed licensing actions in in-service inspections (ISI), development of several infrastructure improvement activities, and 10 CFR 50.69 implementation activities) will be delayed. NRR will monitor the status of the above activities to ensure that these implications continue to have no significant adverse impact on critical strategic goals of the NRC.

Options to Expedite the Review of NFPA 805 LARs, Accelerate Licensees Adopting NFPA 805, and Accelerate Circuit Issue Closure

- Accelerating Options to Expedite the Review of NFPA 805 LARs

  In FY2008, NRR received the two pilot LARs for NFPA 805 which cover four reactor units (Shearon Harris, Oconee Units 1, 2, and 3). The staff plans to complete these two licensing actions as well as to develop the regulatory infrastructure (e.g., issuance of Standard Review Plan, Safety Evaluation Report template, Regulatory Guide update, and inspection procedures) in accordance with SECY-08-0171. The pilot reviews will be completed using resources currently budgeted for FY2009.

  The staff currently anticipates receiving 23 LARs for 34 additional reactor units in FY2010. This would be followed by 7 LARs for 10 units in FY2011 and beyond. Based on a review of the pilot LARs, the staff estimates that the review of an LAR representing a single unit site would require about 1.25 FTE. The staff also estimates that the review of an LAR representing a multi-unit site would require about 1.5 FTE[1]. The expert resources necessary to perform the LAR reviews consist of fire protection safe shutdown (FPSSD)

[1] These FTE estimates assume that the licensee uses widely available approved methods and tools. A license amendment that uses other methods may require more staff resources and time to complete.

analysts, fire protection PRA (FPPRA) analysts, fire modeling analysts, fire protection related circuit analysts, and general fire protection analysts.

- *Option 1: No additional resources than currently in budget request for FY2010 and requesting similar resources for FY2011*

  This option utilizes current expert resources and avoids training additional staff for short periods with the potential to idle them later.

  Under this option the staff would setup an approach to prioritize the review of LARs. The approach would use concepts such as safety, complexity of review, timing of the triennial inspections, and schedule of the modifications planned by the licensee to prioritize reviews. The purpose of the approach is to apply resources where they can be most effective and efficient with a priority on safety benefits.

  The duration of the review period of some LARs which the staff receives in FY2010 would exceed 2 years. However, none of them would have review periods exceeding 3 years. Subsequent LARs that arrive in FY2011 would be completed in less than 2.5 years, and the third group arriving in FY2012 would be completed in less than 2 years.

- *Option 2: Secure two FTEs and 1.3M dollars of additional resources in FY2011*

  Utilizing the two additional FTEs and $1.3M during FY2011, all anticipated LAR reviews would be completed within 2 years. Specifically, the staff expects the first group of amendments, arriving in FY2010, to be completed in approximately 2 years. The second group that arrives in FY2011 would be completed in about 1.5 years, and the third group arriving beyond FY2011 would be completed in about 1 year. As in Option 1, the staff would setup an approach to prioritize the review of NFPA 805 LARs. The approach would use concepts (such as safety, complexity of review, the timing of the triennial inspections, and schedule of the modifications planned by the licensee) to prioritize reviews.

- *Option 3: Secure five FTEs and 2.0M dollars of additional resources in FY2011*

  Using these significantly enhanced resources, the staff does not expect any LAR reviews to exceed 1.5 years. Specifically, the staff expects the first group of amendments, arriving in March FY2010, to be completed in approximately 1.5 years. The group that arrives in FY 2011 would be completed in about 1 year, and the third group arriving in FY2012 would be completed in less than 1 year. However, expert resources to support this option may be difficult to obtain due to limited availability of expert resources within or outside of NRC. This option would not allow a continuity of work for those resources and may require training of the additional staff for short periods only to idle them later.

The staff recommends Option 2 for the following reasons:

- It enables staff to secure and train expert resources to review the LARs (e.g., fire PRA and fire protection safe shutdown analysts) in an orderly manner.

- It enables staff to complete all reviews within 2 years.
- It relies on an approach that enables staff to apply resources where they can be most effective and efficient with a priority on safety benefits.
- It enables the staff to maintain consistency in the reviews.

The options above do not include support for hearings on any of the subject LARs.

- Options to Accelerate Licensees Adopting NFPA 805

  - *Option 1: Maintain current enforcement policy applicable to NFPA 805*

    The current enforcement policy applicable to NFPA 805 allows licensees 3 years of enforcement discretion from the date that the licensees commit to adopt NFPA 805. For example, under the current policy, if a licensee begins its transition to NFPA 805 in January 2012, that licensee will have discretion until January 2015 to submit their license amendment.

  - *Option 2: Change current enforcement policy to reduce the enforcement discretion period for licensees who are continuing to wait to adopt NFPA 805*

    This option proposes a change to this policy to reduce the enforcement discretion period for licensees who are continuing to wait to adopt NFPA 805. This option, if approved by the Commission, would reduce the duration of enforcement discretion after a predetermined date from the current 3-year program for plants that decide to adopt NFPA 805. For example, the staff may propose for Commission approval reducing the enforcement discretion from 3 years to 2 years for plants who begin transitioning to NFPA 805 after December 31, 2011. Such a change to the enforcement discretion policy would assure that those plants transitioning to NFPA 805 would complete transition activities and submit their LARs by December 31, 2013.

    This option has no implications on FY2009 and FY2010 budgets because staff would be able to develop a proposal for a policy change using the allocated budgets. There is the implication on staff resources assuming the enforcement discretion duration is reduced. This will be addressed in the Planning, Budget, and Performance Management (PBPM) process for the appropriate years, depending on the date chosen to reduce discretion.

The staff recommends Option 2 because for the following reasons:

- First, licensees that choose to adopt NFPA 805 after the date would have to complete their transition application sooner due to the reduced enforcement period.
- Secondly, this may encourage licensees who are “on the fence” to adopt sooner since, if they wait, they could have less time to perform their transition.

- Options for Accelerating Circuit Issue Closure

  - *Option 1: Maintain current enforcement policy discretion timeframe*

    A 36-month enforcement discretion timeframe has been documented in SRM-SECY-08-0093, "Resolution of Issues Related to Fire-Induced Circuit Failures," dated September 3, 2008.

  - *Option 2: Change current enforcement policy to reduce the enforcement discretion timeframe to submit licensing actions from 36 to 24 months*

    Since a 36-month enforcement discretion timeframe has been documented in SRM-SECY-08-0093, additional Commission direction would be needed to change the current discretion duration. The staff recommends a reduction in the timeframe to submit licensing actions from 36 to 24 months. The staff expects to complete review of these licensing actions within 12 months in accordance with the current agency metrics.

    In the event the Commission revises the discretion policy in accordance with this approach, licensees who plan to disposition the circuit issues using exemptions and amendments would have to submit them to the NRC nominally by March 2011. At this time, there are 55 reactor units that have not committed to adopt NFPA 805. Assuming that 50% of the licensees would submit licensing actions for staff review in March 2011 and that each of these licensing actions requires 0.2 FTEs, staff will require about 1.5 FTEs to review these LARs in FY2011 and another 3.5 FTEs in FY2012. In the event this option is approved for FY2011 and FY2012, the resources identified would be sought through the PBPM process. The proposed option has no implications on the FY2009 and FY2010 budgets, and it does not include research efforts for fire protection.

  The staff recommends Option 2 for the following reasons:

  - Licensees who rely on exemptions and licensing actions will be prompted to close out the issues sooner.

  - The 2-year period provides a reasonable period for licensees to prepare licensing actions and submit them to the NRC.

RESOURCES:

- The tables below provide the anticipated resources for the three options described in the "Accelerating Options to Expedite the Review of NFPA 805 LARs" section of this paper.

  - Option 1 for NFPA 805 LAR Reviews (*no additional resources than currently in budget request for FY2010 and requesting similar resources for FY2011)*:

	Required Resources
FY2009	5 FTEs and $1.0M
FY2010	5 FTEs and $2.0M
FY2011	5 FTEs and $2.0M

- Option 2 for NFPA 805 LAR Reviews (*secure two FTEs and 1.3M dollars of additional resources in FY2011*):

	Required Resources
FY2009	5 FTEs and $1.0M
FY2010	5 FTEs and $2.0M
FY2011	7 FTEs and $3.3M

- Option 3 for NFPA 805 LAR Reviews (*secure five FTEs and 2.0M dollars of additional resources in FY2011*):

	Required Resources
FY2009	5 FTEs and $1.0M
FY2010	5 FTEs and $2.0M
FY2011	10 FTEs and $4.0M

The resources for FY2009 are budgeted. The resources for FY2010 have been requested through the FY2010 PBPM process. The resources for FY2011 will be requested through the FY2011 PBPM process.

- With regard to the "Options to Accelerate Licensees Adopting NFPA 805" section of this paper, there are no implications on FY2009 and FY2010 budgets because staff would be able to develop a proposal for a policy change using the allocated budgets. There is the implication on staff resources assuming the enforcement discretion duration is reduced. This will be addressed in the PBPM process for the appropriate years, depending on the date chosen to reduce discretion.

- With regard to the "Options for Accelerating Circuit Issue Closure" section of this paper, staff will require about 1.5 FTEs to review these LARs in FY2011 and another 3.5 FTEs in FY2012. If this option is approved for FY2011 and FY2012, the resources identified would be sought through the PBPM process. The proposed option has no implications on the FY2009 and FY2010 budgets, and it does not include research efforts for fire protection.

COORDINATION:

The Office of the General Counsel has reviewed this paper and has no legal objection. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

/RA/

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for Operations

- Option 2 for NFPA 805 LAR Reviews (*secure two FTEs and 1.3M dollars of additional resources in FY2011*):

	Required Resources
FY2009	5 FTEs and $1.0M
FY2010	5 FTEs and $2.0M
FY2011	7 FTEs and $3.3M

- Option 3 for NFPA 805 LAR Reviews (*secure five FTEs and 2.0M dollars of additional resources in FY2011*):

	Required Resources
FY2009	5 FTEs and $1.0M
FY2010	5 FTEs and $2.0M
FY2011	10 FTEs and $4.0M

The resources for FY2009 are budgeted. The resources for FY2010 have been requested through the FY2010 PBPM process. The resources for FY2011 will be requested through the FY2011 PBPM process.

- With regard to the "Options to Accelerate Licensees Adopting NFPA 805" section of this paper, there are no implications on FY2009 and FY2010 budgets because staff would be able to develop a proposal for a policy change using the allocated budgets. There is the implication on staff resources assuming the enforcement discretion duration is reduced. This will be addressed in the PBPM process for the appropriate years, depending on the date chosen to reduce discretion.

- With regard to the "Options for Accelerating Circuit Issue Closure" section of this paper, staff will require about 1.5 FTEs to review these LARs in FY2011 and another 3.5 FTEs in FY2012. If this option is approved for FY2011 and FY2012, the resources identified would be sought through the PBPM process. The proposed option has no implications on the FY2009 and FY2010 budgets, and it does not include research efforts for fire protection.

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