

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

May 11, 2009

SECRETARY

### COMMISSION VOTING RECORD

### DECISION ITEM: SECY-09-0005

TITLE:

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

The Commission (with Chairman Klein and Commissioner Svinicki approving in part and disapproving in part and Commissioners Jaczko and Lyons approving) acted on subject paper as recorded in the Staff Requirements Memorandum (SRM) of May 11, 2009.

This Record contains a summary of voting on this matter together with the individual vote sheets, views and comments of the Commission.

Annette L. Vietti-Cook Secretary of the Commission

Attachments:

1. Voting Summary

2. Commissioner Vote Sheets

cc: Chairman Klein Commissioner Jaczko Commissioner Lyons Commissioner Svinicki OGC EDO PDR

## VOTING SUMMARY - SECY-09-0005

## RECORDED VOTES

	APRVD	DISAPRVD	NOT ABSTAIN PARTICIP		DATE
CHRM. KLEIN	Х	X		Х	4/24/09
COMR. JACZKO	Х			X	2/27/09
COMR. LYONS	X			Х	3/3/09
COMR. SVINICKI	Х	Х		X	4/10/09

## **COMMENT RESOLUTION**

In their vote sheets, Chairman Klein and Commissioner Svinicki approved in part and disapproved in part and Commissioners Jaczko and Lyons approved the staff's recommendation and provided some additional comments. Subsequently, the comments of the Commission were incorporated into the guidance to staff as reflected in the SRM issued on May 11, 2009.

## **RESPONSE SHEET**

- TO: Annette Vietti-Cook, Secretary
- **CHAIRMAN KLEIN** FROM:

SECY-09-0005 – OPTIONS FOR ACCELERATING THE SUBJECT: **COMPLETION OF THE VARIOUS FIRE PROTECTION** TASKS AND APPLICABLE BUDGET IMPLICATIONS

Approved X In Part Disapproved X In Part Abstain \_\_\_\_\_

Not Participating

**COMMENTS:** 

Below \_\_\_\_ Attached X None \_\_\_\_

Ken

SIGNATURE

4/24/09

Entered on "STARS" Yes <u>
No</u>

#### Chairman Klein's Comments on SECY-09-0005

I would like to commend the staff for providing this insightful paper to assist the Commission in making an informed decision regarding options for accelerating the completion of the various fire protection tasks and for having already taken actions within the organizational infrastructure to enhance the agency's ability to review the large number of license amendment requests expected in FY 2010.

After evaluating staff's proposals, I approve option 2 to expedite the review of NFPA 805 license amendment requests, but I do not support altering either the current enforcement policy applicable to NFPA 805 or the current enforcement discretion timeframe associated with circuit issue closure. Before I discuss the rationale for my decisions, I would like to briefly reflect on some of NRC's history associated with fire protection regulations and provide a wider perspective on this issue.

In the 1960s and early 1970s, local fire protection codes, which were generally the same as required of other industrial facilities, applied to nuclear plants. In 1971, three years before the NRC was created, the Atomic Energy Commission, NRC's predecessor, issued the first regulations for fire protection at commercial nuclear power plants. The regulations, 10 CFR 50, Appendix A General Design Criterion (GDC) 3, provide basic fire protection system design requirements and broad performance objectives, but lack specific implementation guidance and assessment criteria.

Neither the NRC nor the nuclear industry fully appreciated the possibility that a fire could threaten a reactor's safety until the 1975 fire at unit 1 of TVA's Browns Ferry facility. The fire burned for 7 hours, damaged hundreds of electrical cables and impaired the operation of critical safety related equipment. NRC's investigation of the Browns Ferry fire revealed significant deficiencies in both the design of fire protection features and in the procedures for responding to a fire. The NRC issued specific fire protection guidance to utilities shortly after the Browns Ferry fire and over the next several years developed regulations with detailed requirements related to fire prevention, fire detection, fire suppression systems, fire brigade training, as well as other areas of fire protection. The NRC codified these requirements in 1981 in 10 CFR 50.48 and 10 CFR 50, Appendix R.

These regulations, which are still in effect today, are not perfect; have been criticized over the years as being "prescriptive" and "deterministic", which they are; and have been challenged in court. One example of why these regulations have been disparaged over the years is the requirement that certain systems and components be separated by at least 20 feet. Since these regulations were put in place after many of the currently operating reactors were built, the 20 foot separation criterion could not be met in all cases. Alternatively, when 10 CFR 50.48 was issued (10 CFR 50.12 would be used today), licensees could request an exemption from the separation criterion if they could demonstrate that the alternative fire protection features proposed met the safety standard established in the rule. This is a very important point that is sometimes overlooked or ignored. In a Court of Appeals decision to a challenge to Appendix R, (Connecticut Light and Power, et al. v. NRC, 673 F2d. 525 (D. C. Cir.)) the court found that "With the exemption procedure, power plants will be able to show that alternative fire protection systems protect the public safety at the same high level as the system chosen by the Commission." As I have said before, the Commission takes fire protection issues very seriously, like all regulations, and bases its actions on the safety

significance of identified problems and the licensees' actions to ensure the safe operation of all nuclear power plants. I think it is safe to say that ensuring public health and safety has always been the intent of these regulations but their cumbersome, "one-size-fits-all" nature has made their implementation a virtual nightmare.

It is this regulatory nightmare that was born of the best intentions but that suffered from the lack of thorough validation and verification that persuades me that we should take our time, continue to inform the NFPA 805 implementation process with experience, and do this right the first time. I do not want another regulatory maze. The NRC has continued to learn from the fire protection challenges encountered over the years and strives now with the implementation of NFPA 805 to enhance fire protection regulations by making them more risk informed as well as easier to understand, implement and enforce. This in turn would allow licensees to more effectively focus their resources on protecting safety significant systems, structures and components. I also recognize that the best way for some licensees to resolve many of the longstanding challenges with fire protection, such as numerous exemptions, is to transition to NFPA 805. With that in mind, I approve staff's recommended option 2 to expedite the review of NFPA 805 license amendment requests. I believe augmenting the staff's resources as described will expedite the review of the expected license amendment requests to implement NFPA 805 and will simultaneously accelerate the maturity and the stabilization of the review, implementation, and inspection processes. I believe that, in turn, this will act as a catalyst for those utilities that have not yet elected to transition to NFPA 805. I am confident that the merits of adopting NFPA 805, which can only be demonstrated through performance, will ultimately, influence those utilities to make a decision.

As I discussed above, it is the relative immaturity and related instability of the NFPA 805 implementation process that convinces me to vote to maintain the current applicable enforcement policy. It is completely understandable why licensees would want to inform their decision with the results and lessons learned from the pilot plant studies and to take full advantage of a mature and stable infrastructure.

I take a similar position concerning the current enforcement discretion policy timeframe pertaining to the circuit issue closure. I would prefer that licensees take the time allowed in the SRM on SECY-08-0093 to plan and execute a high quality resolution as opposed to rushing to perhaps a less than optimal outcome.

Dale Klein

Date

## **RESPONSE SHEET**

TO:	Annette Vietti-Cook, Secretary		
FROM:	COMMISSIONER JACZKO		

SUBJECT: SECY-09-0005 – OPTIONS FOR ACCELERATING THE COMPLETION OF THE VARIOUS FIRE PROTECTION TASKS AND APPLICABLE BUDGET IMPLICATIONS

Approved X	_ Disapproved Abstain	
Not Participating		
COMMENTS:	Below AttachedX_ None	

SIGNATURE

Entered on "STARS" Yes X No

### Commissioner Jaczko's Vote on SECY-09-0005 Options for Accelerating the Completion of the Various Fire Protection Tasks and Applicable Budget Implications

I approve of the staff's recommendations to expedite the license amendment reviews of 10 CFR 50.48(c) – National Fire Protection Association Standard (NFPA) 805, to accelerate the closure of the important safety issue concerning involving fire-induced circuit failures, as well as staff recommendations and applicable resource implications.

The agency is currently working to resolve many longstanding challenges with fire protection. I believe that the clearest path forward for most licensees is to transition to NFPA 805. In fact, 48 licensees have either submitted applications to amend their licenses, begun the transition, or submitted letters of intent. I believe the only way some licensees can resolve the fire-induced circuit failure issue will be to transition to NFPA 805.

While I would like to see the end of enforcement discretion today and NFPA 805 becoming mandatory for all existing nuclear power plants, the current situation does not permit that to happen. By majority vote, the Commission authorized extensions to enforcement discretion for transition to NFPA 805 and for resolution of issues related to fire-induced circuit failures. Therefore, I believe the staff has provided a good proposal for making progress with the fire protection issues.

Gregory B. Jaczko

Date

## **RESPONSE SHEET**

то:	Annette Vietti-Cook, Secretary				
FROM:	COMMISSIONER LYONS				
SUBJECT:	SECY-09-0005 – OPTIONS FOR ACCELERATING THE COMPLETION OF THE VARIOUS FIRE PROTECTION TASKS AND APPLICABLE BUDGET IMPLICATIONS				
Approved <u>X</u>	Disapproved Abstain				
Not Participating					
COMMENTS:	Below Attached X None				

SIGNATURE

<u>3/ 3</u> DATE /09

Entered on "STARS" Yes X No

#### Commissioner Lyons' Comments on SECY 09-0005

### Options for Accelerating the Completion of the Various Fire Protection Tasks and Applicable Budget Implications

I approve the staff's recommendations for accelerating the closure of the ongoing fire protection tasks as outlined in option two of this paper.

The issues surrounding fire protection at US nuclear plants have not been an impressive story for either the NRC or industry; however, I am pleased that advancements over the past four years have made significant strides towards improving and ending this story. The two pilot plants, Shearon Harris and Oconee, transitioning to NFPA 805 are making significant progress and have already demonstrated that this should be a viable path towards a lasting solution. With nearly half of the plants indicating they intend to adopt NFPA 805, I consider this a significant sign of progress.

As I noted in previous Commission votes, there are several levels of defense-in-depth for fire protection that are in place and unaffected by this issue. These include fire prevention measures and various combinations of detection, automatic suppression, suppression and extinguishment by trained personnel, barriers, and the associated administrative controls. As noted in a recent GAO audit of fire protection, no fire has threatened the safe shutdown of a plant and all have been of limited safety significance since the 1975 Browns Ferry fire. Furthermore, during my numerous plant visits, I make it a point to observe and have been consistently impressed with licensees' cleanliness standards, controls on combustible materials, and fire protection features. I have also been consistently impressed with the knowledge of the resident inspectors and the attention they pay to these issues.

My previous statements notwithstanding, I am sincerely interested in expediting resolution of these fire protection tasks. As described by the staff, other options exist to attempt to even further accelerate completion. In selecting option 2, I am balancing a personal desire to see the final resolution of these tasks with the realization that the solutions may take time and that simply increasing the NRC effort or eliminating enforcement discretion for licensees will not independently solve these tasks. Therefore, as I vote to expedite the resolution of these tasks, I am comfortable with taking adequate time to finally and permanently address them.

Following the July 17, 2008, briefing on fire protection issues, the Commission directed the staff to provide a fire protection closure plan, with milestones. The Commission also challenged the staff to provide options to accelerate the closure of the various protection tasks. As a result of this challenge, the staff provided what I consider a realistic and worthy plan that balances resources with my desire to close this longstanding chapter in the history of the U.S. nuclear industry. In approving this action, I am aware that I am challenging both staff and industry to take the actions necessary to improve the fire protection story.

### **RESPONSE SHEET**

TO: Annette Vietti-Cook, Secretary

FROM: COMMISSIONER SVINICKI

SUBJECT: SECY-09-0005 – OPTIONS FOR ACCELERATING THE COMPLETION OF THE VARIOUS FIRE PROTECTION TASKS AND APPLICABLE BUDGET IMPLICATIONS

Approved X In Part Disapproved X In Part Abstain

Not Participating \_\_\_\_\_

COMMENTS: Below Attached X None

SIGNATURE

	04/10/09	
	DATE	
-		
Entered on "STARS"	Yes 📈 No	

#### Commissioner Svinicki's Comments on SECY-09-0005 Options for Accelerating the Completion of the Various Fire Protection Tasks and Applicable Budget Implications

I approve in part and disapprove in part the staff's package of recommendations related to closure of various fire protection tasks. I support strongly a number of actions already planned during fiscal years 2009 and 2010 (described in the paper), which are intended to accelerate transition and closure. Additionally, I commend the staff on a number of the items already underway, such as dedication of a senior technical advisor in probabilistic risk assessment (PRA) to lead all infrastructure development activities related to National Fire Protection Association (NFPA) 805, creation of a deputy director position in the Office of Nuclear Reactor Regulation whose sole responsibility is to manage all fire protection activities, and implementation of project management tools to increase NFPA 805 project management efficiency. These measures are prudent management actions given the anticipated submittal of 23 license amendment requests (LARs) for 34 reactor units in FY 2010, in addition to the pilots now underway, followed by 7 LARs for 10 units in FY 2011.

As the staff notes in this paper, the expert resources necessary to perform the LAR reviews consist of fire protection safe shutdown analysts, fire protection PRA analysts, fire modeling analysts, fire protection-related circuit analysts, and general fire protection analysts. These are niche areas of expertise, and the competition for such analysts will be fierce – a point noted for the Commission by both staff and industry participants at the Commission's briefing last year on fire protection. To expedite the review of the large wave of NFPA 805 LARs in FY 2011, I support the staff's recommended resource addition (Option 2) of two additional full time equivalent positions (FTEs) and \$1,300,000 in FY 2011.

With respect to the staff's recommended options for 1) accelerating licensees' adoption of NFPA 805 and 2) accelerating circuit issue closure, I find myself unable to support the staff recommendations (Option 2, in both cases) and instead approve maintaining the current enforcement policy and the current discretion timeframe (i.e., no change to current policies). I appreciate that the staff wants to be responsive to the Commission's prior direction to provide options for accelerating the closure of various fire protection issues. Many of the actions within the staff's authority to implement, such as those I cited, above, are already positioning the agency for efficient action on the large number of LARs to come. Approval of the additional resources requested by the staff, as I have supported doing here, will further advance these efforts.

Conversely, a hasty decision now to shorten the enforcement discretion periods prior to completing the Harris and Oconee pilots and processing the results, strikes me as premature and possibly ill-advised, and certainly contrary to the very reasons why we conduct pilots. When the staff has completed the ongoing pilots and the pilot plants have successfully completed the transition to NFPA 805, the staff should document the results in a paper to the Commission. Such a paper should include any lessons-learned to be incorporated into the larger tranche of LAR reviews and only then should the staff revisit the discretion intervals, and provide recommendations, rooted in the stronger technical basis such experiences will provide.

Kristine L. Svinic

04/0/09