

## UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 4, 2015

SECRETARY

#### COMMISSION VOTING RECORD

DECISION ITEM: SECY-15-0077

TITLE:

OPTIONS FOR EMERGENCY PREPAREDNESS FOR

SMALL MODULAR REACTORS AND OTHER NEW

**TECHNOLOGIES** 

The Commission (with all Commissioners agreeing) approved the subject paper as recorded in the Staff Requirements Memorandum (SRM) of August 4, 2015.

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

#### **Enclosures:**

1. Voting Summary

2. Commissioner Vote Sheets

CC:

Chairman Burns

Commissioner Svinicki Commissioner Ostendorff Commissioner Baran

OGC EDO PDR

## VOTING SUMMARY - SECY-15-0077

### RECORDED VOTES

	APRVD DISAPRVD ABSTAIN PARTIC	OT IP COMMENTS	DATE
CHRM. BURNS	X	X	7/24/15
COMR. SVINICKI	X	X	7/20/15
COMR. OSTENDORFF	X	X	7/10/15
COMR. BARAN	Χ	X	7/23/15

TO:	Annette Vietti-Cook, Secretary
FROM:	Chairman Burns
SUBJECT:	SECY-15-0077: OPTIONS FOR EMERGENCY PREPAREDNESS FOR SMALL MODULAR REACTORS AND OTHER NEW TECHNOLOGIES
Approved X	Disapproved Abstain Not Participating
COMMENTS:	Below AttachedX None
	SIGNATURE 24 July 2015 DATE
Entered in "STA	ARS" Yes x No

#### Chairman Burns comments on SECY-15-0077 Options for Emergency Preparedness for Small Modular Reactors and Other New Technologies

I approve the staff's recommendation to pursue Option 1 under which the staff would develop an emergency preparedness (EP) framework containing regulations and guidance for small modular reactors (SMRs) and other technologies separate from the existing EP regulations for the current operating fleet of large light-water reactors. I agree with my colleagues that this approach will provide greater regulatory stability and more opportunity for external stakeholder involvement in the development of EP requirements for SMRs and non-light-water reactor technologies.

In developing the EP framework for SMRs and other technologies, the staff should keep the Commission's previous direction in mind. In the Staff Requirements Memorandum for SECY-14-0038, "Performance-Based Framework for Nuclear Power Plant Emergency Preparedness Oversight," the Commission stated:

The staff should be vigilant in continuing to assess the NRC's emergency preparedness program and should not rule out the possibility of moving to a performance-based framework in the future. The Commission notes the potential benefit of a performance-based emergency preparedness regimen for small modular reactors, and the staff should return to the Commission if it finds that conditions warrant rulemaking.

This rulemaking provides an opportunity for the staff to further explore the pros and cons of a performance-based EP framework.

Stephen G. Burns

July 2015

TO:	Annette Vietti-Cook, Secretary	
FROM:	COMMISSIONER SVINICKI	
SUBJECT:	SECY-15-0077: OPTIONS FOR EMERGENCY PREPAREDNESS FOR SMALL MODULAR REACTORS AND OTHER NEW TECHNOLOGIES	
Approved XX	_ Disapproved Abstain Not Participating	
COMMENTS:	Below XX Attached None	
forecasted duration of on the underlying topi small modular reactor	ecommendation to initiate rulemaking as described in the paper. Given the f the rulemaking activity, and the need for extensive stakeholder outreach ic, it will likely not be possible to establish a new rule by the time of initial r reviews. For these cases, the staff should be prepared to adapt an acy planning zones for SMRs under existing exemption processes, in aking efforts.	
	SIGNATURE	
	07/ <b>20</b> /15 DATE	
Entered in "ST	ARS" Yes No	

TO:	Annette Vietti-Cook, Secretary		
FROM:	COMMISSIONER OSTENDORFF		
SUBJECT:	SECY-15-0077: OPTIONS FOR EMERGENCY PREPAREDNESS FOR SMALL MODULAR REACTORS AND OTHER NEW TECHNOLOGIES		
Approved X	Disapproved Abstain Not Participating		
COMMENTS:	Below X Attached None		
I approve the staff's proposal to initiate a rulemaking to revise regulations and guidance for emergency preparedness (EP) for small modular reactors (SMRs) and other new technologies, such as non-light water reactors (non-LWRs) and medical isotope production facilities. This rulemaking will provide greater clarity and regulatory stability for future applicants and greater transparency for all stakeholders as the agency considers the appropriate EP requirements for these facilities. The staff should coordinate these efforts, as appropriate, with the Regulatory Improvements for Power Reactors Transitioning to Decommissioning rulemaking, which also addresses EP, and staff actions to address Tier 3 post-Fukushima items. I recognize that this rulemaking will take time to develop and that it is not practical to complete this effort before the expected submission date of the first SMR application. However, the staff should strive to complete this rulemaking in order to support issuance of any new permit, license, or certification, rather than rely on the exemption process. The staff should provide a plan and schedule for this rulemaking within six months. I ask that the staff keep the Commission informed as the technical basis is being developed.			
	SIGNATURE		
	7 /10/15 DATE		
Entered in "STA	ARS" Yes No		

TO:	Annette Vietti-Cook, Secretary	
FROM:	Commissioner Baran	
SUBJECT:	SECY-15-0077: OPTIONS FOR EMERGENCY PREPAREDNESS FOR SMALL MODULAR REACTORS AND OTHER NEW TECHNOLOGIES	
Approved X	Disapproved Abstain Not Participating	
COMMENTS:	Below Attached _X_ None	
	SIGNATURE  7/23/15  DATE	
Entered in "STA	RS" Yes <u>X</u> No	

# Commissioner Baran's Comments on SECY-15-0077, "Options for Emergency Preparedness for Small Modular Reactors and Other New Technologies"

The staff paper seeks Commission approval of the staff's recommendation to initiate a rulemaking to revise regulations and guidance related to emergency preparedness for small modular reactors (SMRs) and other new technologies, such as non-light-water reactors and medical isotope production facilities. The staff is anticipating a number of applications in the coming years, with an early site permit application for an SMR facility expected as early as the first quarter of next year. These applications likely will seek emergency planning zones (EPZs) smaller than the traditional 10-mile EPZs for large light-water reactors based on the smaller source terms associated with their smaller reactor cores and new reactor designs that include passive safety features. NRC may receive applications that would limit the EPZ to the site boundary. The staff proposes a rulemaking to establish scalable EPZs for SMRs and other new technologies by requiring applicants to demonstrate that EPA's Protective Action Guides dose limits are not exceeded at the outer bound of a proposed site-specific EPZ. Under this approach, the size of a SMR's EPZ would depend on the potential consequences of a release from a severe accident.

I approve the staff's recommendation to initiate a rulemaking on emergency preparedness for SMRs and other new non-light-water reactor technologies. A rulemaking will provide regulatory certainty to potential applicants and offer the public an opportunity to comment on novel approaches to emergency preparedness. Without a rulemaking, potential applicants likely would seek exemptions from NRC's existing EPZ requirements, which were established for large light-water reactors. Relying on the exemption process would result in NRC making important and potentially controversial safety decisions without hearing the views of interested stakeholders. The exemption process also would not provide regulatory clarity and transparency to future applicants and other stakeholders. Although some applications may be submitted and reviewed before completion of the rulemaking, the staff analysis and public comments for the rulemaking could inform the staff's review of exemption requests for those initial applications.

Some aspects of the technical work on the ongoing decommissioning rulemaking probably will inform the technical work on the SMR emergency preparedness rulemaking. However, the two rules should be developed separately so as not to delay the decommissioning rulemaking, which should be completed by 2019.