

NUMARC 93-01

Rev 4E Endorsement into RG 1.160

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# Scope of Changes

- New language in Section 8.2.1.3 of NUMARC 93-01 that addresses the treatment of non-safety related SSCs where their use is directed by an Emergency Operating Procedure (EOP) only to implement functions in FLEX Support Guidelines (FSGs).

# Non-safety related SSCs

- 8.2.1.2 – that are relied upon to mitigate accidents or transients, or
- 8.2.1.3 – are used in plant emergency operating procedures (EOPs), or
- 8.2.1.4 – whose failure could prevent safety-related SSCs from fulfilling their safety-related function, or
- 8.2.1.5 – whose failure could cause a reactor scram or actuation of a safety-related system

# Criteria not Changing

- 8.2.1.2 – that are relied upon to mitigate accidents or transients, or
- 8.2.1.4 – whose failure could prevent safety-related SSCs from fulfilling their safety-related function, or
- 8.2.1.5 – whose failure could cause a reactor scram or actuation of a safety-related system

# Criteria Changing

- *8.2.1.3 – are used in plant emergency operating procedures (EOPs), or*

# Endorsed Language (rev. 4a)

Are the nonsafety-related SSCs used in plant Emergency Operating Procedures (EOPs)?

- Nonsafety-related SSCs that are necessary to be in the Maintenance Rule scope by this paragraph are those explicitly used in the EOPs that provide a mitigating function.
  - SSCs used in plant EOPs are required for mitigation of the event/symptom that necessitated entry into the EOP.
  - Severe Accident Management Guidelines (SAMGs) are not considered to be EOPs. Equipment described only in SAMGs would not be in scope of the Maintenance Rule unless otherwise required by paragraph 50.65(b).
  - Equipment used in support of 10 CFR 50.54(hh)(2) (Loss of Large Areas) would not be in scope of the Maintenance Rule unless otherwise required by paragraph 50.65(b).
  - Only those SSCs under licensee control need be included in the Maintenance Rule scope.
- When the EOPs direct the user to another procedure, the associated SSCs required to perform the EOP mitigating function are included in the scope of the Maintenance Rule.
- SSCs whose use are implied and are necessary to perform the EOP steps in the necessary response times, such as emergency lighting or communication SSCs are included in the scope of the Maintenance Rule.
- Since the Maintenance Rule is a performance-based regulation, licensees have the flexibility to add or remove SSCs from the scope of 10 CFR 50.65(b) if an adequate technical basis exists for including or excluding the SSC in question.

# Submitted Language (rev. 4e)

Are the nonsafety-related SSCs used in plant Emergency Operating Procedures (EOPs)?

- Nonsafety-related SSCs that are necessary to be in the Maintenance Rule scope by this paragraph are those explicitly used in the EOPs that provide a function required for mitigation of the event/symptom that necessitated entry into the EOP.
- Severe Accident Management Guidelines (SAMGs) are not considered to be EOPs. Equipment described only in SAMGs would not be in scope of the Maintenance Rule unless otherwise required by paragraph 50.65(b).
- Equipment used in support of 10 CFR 50.54(hh)(2) (Loss of Large Areas) would not be in scope of the Maintenance Rule unless otherwise required by paragraph 50.65(b).
- **FLEX Support Guidelines (FSGs) are not considered to be EOPs. Equipment described only in FSGs would not be in scope of the Maintenance Rule unless otherwise required by paragraph 50.65(b).**
- Only those SSCs under licensee control need to be included in the Maintenance Rule Scope.
- When the EOPs direct the user to another procedure, the associated SSCs required to perform the EOP mitigating function are included in the scope of the Maintenance Rule.
  - **When steps are added to an EOP only to direct to FSGs for implementing non-safety related SSCs, those SSCs should not be considered used in the EOP, as long as the changes associated with these steps made to the EOP do not impede the successful implementation of other SSCs used in the EOP. An appropriate technical basis should be documented that demonstrates that these changes do not impede the successful implementation of the other SSCs. These uses of non-safety-related SSCs should be evaluated against all other 10 CFR 50.65(b) scoping criteria.**
- SSCs whose use is implied and is necessary to perform the EOP steps in the necessary response times, such as emergency lighting or communication SSCs are included in the scope of the Maintenance Rule.
- Since the Maintenance Rule is a performance-based regulation, licensees have the flexibility to add or remove SSCs from the scope of 10 CFR 50.65(b) if an adequate technical basis exists for including or excluding the SSC in question.

# Differences

- FLEX Support Guidelines (FSGs) are not considered to be EOPs. Equipment described only in FSGs would not be in scope of the Maintenance Rule unless otherwise required by paragraph 50.65(b).
- When the EOPs direct the user to another procedure, the associated SSCs required to perform the EOP mitigating function are included in the scope of the Maintenance Rule.\*
  - When steps are added to an EOP only to direct to FSGs for implementing non-safety related SSCs, those SSCs should not be considered used in the EOP, as long as the changes associated with these steps made to the EOP do not impede the successful implementation of other SSCs used in the EOP. An appropriate technical basis should be documented that demonstrates that these changes do not impede the successful implementation of the other SSCs. These uses of non-safety-related SSCs should be evaluated against all other 10 CFR 50.65(b) scoping criteria.

*\*this language exists in the endorsed language, new part is the paragraph below it*



# 1<sup>st</sup> Bullet

- FLEX Support Guidelines (FSGs) are not considered to be EOPs. Equipment described only in FSGs would not be in scope of the Maintenance Rule unless otherwise required by paragraph 50.65(b).
- This Bullet applies to the FLEX and FSGs directed by the Fukushima Order or the Proposed Mitigating Strategy Rule.

## 2<sup>nd</sup> Bullet

- When the EOPs direct the user to another procedure, the associated SSCs required to perform the EOP mitigating function are included in the scope of the Maintenance Rule.\*
  - When steps are added to an EOP only to direct to FSGs for implementing non-safety related SSCs, those SSCs should not be considered used in the EOP, as long as the changes associated with these steps made to the EOP do not impede the successful implementation of other SSCs used in the EOP. An appropriate technical basis should be documented that demonstrates that these changes do not impede the successful implementation of the other SSCs. These uses of non-safety-related SSCs should be evaluated against all other 10 CFR 50.65(b) scoping criteria.

## 2<sup>nd</sup> Bullet Continue

- This Bullet applies to both the design basis and beyond design basis accidents.
- Intent of this bullet is to allow licensee's to use FLEX equipment as additional defense in depth directed by FSGs.
- There are three exceptions and clarifications as discussed in next slide.

# Proposed Exceptions to 4e Language

The following requirements shall be met when steps are added to an EOP directed by FSGs for additional EOP mitigation function and not necessarily considered used or performing an EOP mitigating function:

1. Identify the additional equipment from the equipment providing EOP mitigation function in the Maintenance rule scoping evaluation or EOP basis document.
2. Maintenance rule scoped in equipment shall not be removed from the Maintenance Rule scope based on the presence of this additional equipment in the EOP.
3. The technical evaluation documented shall also ensure the utilization of the non-safety related equipment is not relied upon for any EOP mitigating function. The technical evaluation should consider, among other aspects, the appropriate regulatory process for changes to the EOPs, potential new failure modes impacting EOP SSCs, and aspects that could potentially impact the reliability of operator manual actions such as adequate staffing and potential delays incurred in implementing or abandoning the credited malfunctioning SSCs in favor of FLEX.

# Next Steps

**Pending NEI decision to propose any new changes to either the NUMARC language or provide comments on the draft RG language, following is the timeline for RG issuance.**

- **Jan 31<sup>st</sup>:** DIRS will provide final input to RG and Regulatory Analysis
- **Feb 15<sup>th</sup>-March 8:** Internal review and concurrence process
- **March 10<sup>th</sup>-April 7<sup>th</sup>:** OGC review
- **April 14<sup>th</sup>- July 7<sup>th</sup>:** Public Federal Register Notice for public comments for 60 days and comment resolution
- **July:** ACRS and OGC review
- Issue RG by December 2018

