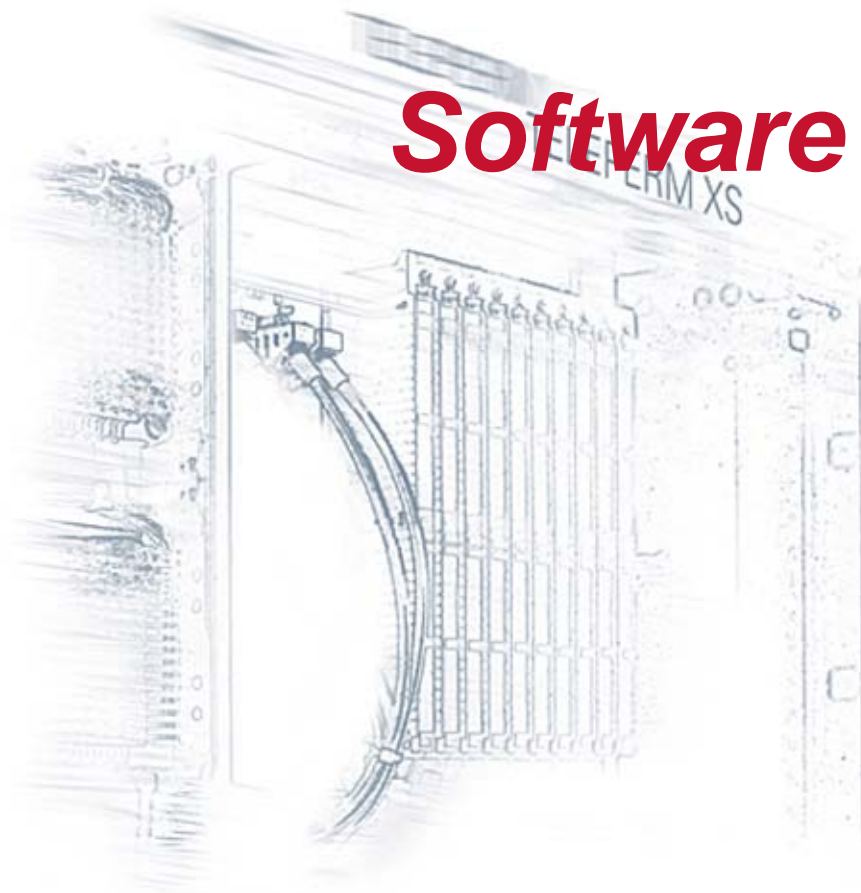# TELEPERM XS
Software Program Manual

Meeting with NRC
June 16, 2009

Sean Kelley
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Recent Correspondence

> **February 18, 2009 AREVA NP Letter to NRC (NRC:09:014)**

- *Draft Revision 1 of the Software Program Manual Topical Report*

- *Incorporates Changes Associated with RAI Responses*

- *Added Insights and Lessons Learned from Oconee LAR Review*

- *Incorporated Changes to Lifecycle Terminology Based on AREVA NP Global Standardization Activities*

- *Removed References to SIVAT and Replaced with General Language Allowing Future Use of NRC-Approved Simulation Test Tool*

Recent Correspondence

> ### *April 7, 2009 AREVA NP Letter to NRC (NRC:09:035)*

>
> - *Identified an Updated Draft Revision 1 of the Software Program Manual Topical Report for Submittal*
>
> - *Incorporates Changes Associated with Resolution of Comments Provided in NRC March 9, 2009 Letter*
>
> - *Included New Guidance Patterned After 10 CFR 50.54(a)(3) and 10 CFR 50.59 to Address Future TELEPERM XS Platform Changes for Use in U.S. Projects*

> ### *June 11, 2009 AREVA NP Letter to NRC (NRC:09:063)*

>
> - *Request for Review and Approval of ANP-10303P, SIVAT: TELEPERM XS Simulation Validation Test Tool Topical Report*

Summary of Software Program Manual Changes

> ## *General*

- ### *Added Sections and Reformatted Information to Align with BTP 7-14*

> ## *Section 3, Software Management Plan*

- ### *Added Key Interface Information*

- ### *Expanded Organization and Responsibilities Information*

- ### *Incorporated RAI Responses*

- ### *Addressed NRC March 2009 Concerns*

  - *Added Information on Open Item Process*

  - *Added Information on Use of Industry Standards*

Summary of Software Program Manual Changes

> *Section 4, Software Development Plan*

- *New Section*

- *Relocated Lifecycle Development and Documentation Information*

- *Incorporated RAI Responses*

- *Addressed NRC March 2009 Concerns*
  - *Added Function Block Information*
  - *Added SPACE Tool Information*

- *Included New Guidance Patterned After 10 CFR 50.54(a)(3) and 10 CFR 50.59 to Address Future TELEPERM XS Platform Changes for Use in U.S. Projects*

Summary of Software Program Manual Changes

> ## *Section 5, Software Quality Assurance Plan*

  - *Incorporated RAI Responses*

  - *Expanded Information on Software Reviews Based on IEEE Std 1028*

  - *Addressed NRC March 2009 Concerns*

    - *Expanded Management Responsibility Information*

> ## *Section 6, Software Integration Plan*

  - *New Section*

  - *Incorporated RAI Responses*

> ## *Section 7, Software Installation Plan*

  - *New Section*

  - *Incorporated RAI Responses*

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Summary of Software Program Manual Changes

> **Section 8, Software Maintenance and Operation Plan**

  - *Incorporated RAI Responses*

> **Section 9, Software Training Plan**

  - *Minor Edits*

> **Section 10, Software Safety Plan**

  - *Incorporated RAI Responses*

  - *Addressed NRC March 2009*
    - *Expanded Management Responsibility Information*
    - *Expanded Discussion of Software Hazard Analysis*

Summary of Software Program Manual Changes

> **>** *Section 11, Software Verification and Validation Plan*

- *Incorporated RAI Responses*

- *Expanded Discussion of Verification and Validation Activities and Methods Based on IEEE Std 1012-1998*

- *Removed References to SIVAT and Replaced with General Language Allowing Future Use of NRC-Approved Simulation Test Tool*

- *Relocated Test Information to New Section 13*

- *Addressed NRC March 2009*
  - *Expanded Management Responsibility and Independence Information*

Summary of Software Program Manual Changes

> **Section 12, Software Configuration Management Plan**

- **Incorporated RAI Responses**

- **Addressed NRC March 2009**
  - **Expanded Change Control Board Information**

> **Section 13, Software Test Plan**

- **New Section**

- **Incorporated RAI Responses**

- **Expanded Discussion of Test Activities and Methods**

- **Removed References to SIVAT and Replaced with General Language Allowing Future Use of NRC-Approved Simulation Test Tool**

- **Addressed NRC March 2009**
  - **Expanded Discussion of Test Alignment to IEEE Std 1012-1998**

Summary of Software Program Manual Changes

> **> *Appendix B, Historical Information on SPACE Tool Qualification***

>> - ***New Section***
>>
>> - ***Added Historical Information on SPACE Tool Qualification***
>>
>> - ***Incorporated RAI Responses***