

## ATTACHMENT 0609.03

### SENIOR REACTOR ANALYST SUPPORT EXPECTATIONS

The NRC Senior Reactor Analysts (SRAs) are trained to help achieve specific expectations and tasks in support of the NRC Reactor Oversight Process (ROP). These tasks are important in helping agency decision-makers gain risk-insights of licensee performance deficiencies and effectively communicate the significance of those deficiencies to the public. To successfully achieve these tasks, all SRA's (region-based and headquarter-based) are expected to:

- Support implementation of NRC's risk-informed regulatory activities to successfully accomplish the agency's mission. The SRAs are expected to participate and/or provide leadership in task forces or small working groups on risk-informed activities. The SRA efforts would be focused on risk-informed activities associated with improvements to the ROP.
- Provide effective communication about risk with internal and external stakeholders. This is accomplished by interactions with other agency probabilistic risk assessment (PRA) groups, licensees, reactor vendors, other Federal agencies, National Laboratories, international organizations, and other stakeholders. The SRAs should be able to represent the agency at government, academic, and industry conferences, seminars, and meetings.
- Maintain open communication channels with licensee PRA staff and with other NRC offices performing PRA or significance determination process (SDP) related functions.
- Evaluate the potential risk significance of plant events (e.g., IMC0309, "Reactive Inspection Decision Basis for Reactors," and M.D. 8.3, "NRC Incident Investigation Program," event assessments and perform analyses using the SAPHIRE computer code), inspection findings, and Notice of Enforcement Discretion (NOED) requests using known risk insights, the SDP, and quantitative assessment techniques. Integrate these risk insights with other regulatory insights, and provide timely recommendations to NRC management for appropriate regulatory responses based on these insights.
- Maintain awareness of the risk assessment capabilities, licensee-generated risk insights and NRC-generated risk insights for those licensees specifically assigned. Maintain general awareness of overall industry risk insights. Integrate these risk insights with other regulatory insights (e.g., defense-in-depth, licensing basis, performance history), and provide recommendations to NRC management for inspection effort focus.
- Support the qualification training for SRA candidates. This should involve reviewing the performance of the SRA candidate in Individual Study Activities (ISAs), On-the-Job (OJT) Activities, and Rotational Assignment tasks. The qualified SRA also serves as a trainer and mentor in PRA for the SRA candidate,

providing guidance regarding risk-informed methodologies, information sources, and engineering approaches to resolving safety issues.

- Serve as a subject matter expert in providing refresher training for the inspection staff and management in areas of risk-informed inspection, SDP appendices, and other risk-informed methodologies used for risk-informed decision-making.
- Participate and attend, as often as possible, the monthly SRA call between HQ and the regional offices and the Spring and Fall SRA counterpart meetings. Continuing discussion and training on the Risk Assessment Standardization Project (RASP) Handbook is expected to be an element of these activities.
- Provide comments and improvements to the RASP handbook based on field use and support the RASP User Group, when possible.
- Maintain their inspector and SRA certifications by attending all required refresher training courses within the required frequency (three-years). This includes the PWR/BWR Technology Review (R-904) and Simulator Refresher (R-704) courses, and the Advanced Risk-Assessment Topics (P-501). Inspector certification training should, if possible, be alternated between the PWR and BWR reactor technologies.

In addition to above support expectations, the Region-based SRAs have these responsibilities:

- Maintain regional management awareness of significant PRA or SDP issues and changes.
- Support risk-informed inspection planning activities, and provide leadership and assistance in various risk-informed inspection activities. Support inspection planning activities by providing assistance in information gathering, and providing risk-informed guidance on selection of inspection samples. Communicate important risk insights and provide specific SDP and other risk assessment assistance to regional inspectors.
- Support inspection activities by providing advice on regulatory review of risk issues, peer review of risk assessments, and performing detailed assessment of significance of inspection findings.

The Headquarters-based SRAs are also responsible for these support expectations:

- Maintain NRC management awareness of significant PRA or SDP issues and changes through periodic communication briefings to peers and HQ Risk Management Team. This includes attendance and participation in HQ Risk Management Team meetings and the bi-weekly ROP teleconference calls.
- Provide specific SDP and risk assessment assistance to Region-based SRAs and inspectors by performing peer reviews of SDP and risk analyses of highly complex safety issues associated with all aspects of the design and operation of

nuclear power plants. The technical support may include performing the complete SDP and risk analyses, and providing advice on NRC technical positions and requirements on complex generic safety issues (e.g., Reactor Cooling Pump seal loss-of-coolant accident (LOCA) modeling).

| In order to effectively assist in the accomplishment of these expectations, SRAs **should** continue professional development in the PRA field through training and education opportunities, and maintain exposure to evolving best PRA practices and techniques through attendance and participation in PRA conferences and SRA counterpart meetings.

END

ATTACHMENT 1  
Revision History - MC 0609.03

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	06/08/2006	Revision history reviewed for the last four years	NO	N/A	N/A
N/A	04/21/2000 CN 00-007	This manual chapter supports the New Reactor Oversight Program for significant determination of findings. The significance determination process detailed in the manual chapter is designed to characterize the significance of inspection findings for the NRC licensee performance assessment process using risk insights, as appropriate.	NO	N/A	N/A
N/A	08/16/2001 CN 01-015	0609.04 has been renamed 0609.03.	NO	N/A	N/A
NA	07/26/06 CN 06-018	Revision updates the management expectations for Senior Reactor Analyst located in the regional offices and headquarters.	NO	N/A	ML061590493

NA	ML101400526 06/02/11 CN 11-009	Revision updates references and adds expectation for SRAs to maintain their SRA and inspector certifications by attending required training courses. The SRA is expected to participate in periodic communications and meeting and conduct inspection staff refresher training. Provide comments and improvements to the RASP handbook based on field use and support the RASP User Group, when possible.	NO	N/A	ML103490443
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