

Framework for Accident Sequence Precursor (ASP) Program Next Steps

Background:

In follow-on to the Project AIM common prioritization activities, the internal Risk-Informed Steering Committee (RISC) requested the staff to perform an assessment of the ASP Program and to recommend options on work to be shed, re-prioritized, or performed with fewer resources. The Review Team briefed the internal RISC on March 28, 2017, with the recommendation to: Eliminate the ASP Program and identify how other existing programs can meet the ASP Program intent.

During the March 28th meeting, substantial discussions occurred with varying perspectives on the Program, its history, and its usage. At the conclusion of the meeting, the RISC Chairman assigned the Deputy Director, NRR and Acting Deputy Director, RES to evaluate the recommendations further and report back to the RISC on their recommendations and next steps.

Conclusion from Deputy Level Review:

Based upon the insights gathered and additional review of the draft report, the Deputy Directors concluded the ASP Program adds value in identifying the significance of complex events/conditions and in assessing overall industry health and the effectiveness of NRC regulatory processes. As a general matter, the ASP analyses also serve as a tool to communicate industry event information to the public and licensees. However, historically, ASP insights have not been used by other Agency processes to drive decision-making, programmatic changes, or additional communications to the industry. Additional effort is needed to define how the outputs from ASP analyses should be used by other Agency processes, to identify resource efficiencies through process or threshold changes, and to ensure the timeliness for ASP analyses align to the associated customer processes. The Deputies did not believe that an additional Working Group was needed to accomplish these three follow-on actions; these additional assessments would best be performed by the owners of the respective programs.

These conclusions were communicated to the Directors of NRR and RES who agreed on the path forward.

Approach/Background:

Responsible Branch Chiefs from RES/DRA (Nakoski) and NRR/DIRS (TBD) are to evaluate the current framework and provide options on how to integrate ASP results and insights into the appropriate Agency processes. This is not to be a re-assessment effort and should leverage the practical knowledge of the BCs and work already performed by the Review Group.

The options should seek to improve the effective use of the insights gained from the ASP Program while also gaining efficiencies in the use of NRC staff necessary to generate the appropriate ASP analyses for the use in Agency processes.

As background, for FY2016, 352 LERs were initially screened by INL resulting in 62 potential precursors. Ten of these LERs were determined to be precursors using the SDP results (7) or an independent ASP analysis (3). For the 49 remaining potential precursors (3 were not ready

for evaluation), all were screened out using either additional SDP insights, a simplified/bounding analysis, or a detailed ASP analysis.

Current resources for the program are 3 FTE which includes effort to distill the events data, perform the various analyses, assess industry trends, and generate the ASP annual report. Prior to FY15 and the Project AIM rebaselining efforts, the program was staffed at 6 FTE. The primary change to achieve this reduction was streamlining/eliminating the documentation of the analyses for the screened out events. No contract dollars are specifically allocated for the ASP Program, as the program leverages the work of INL to maintain the LER database for a variety of programs/process.

Areas of Specific Review/Outcomes:

Assess current methods of issue screening and graded approach to ASP assessment to identify potential efficiencies. Specific areas to be evaluated:

- Review LER screening criteria and data with the goal of reducing the number of LERs that are initially screened in, requiring additional staff review. For example, in 2016, approximately 50 LERs that were initially screen in as warranting a detailed ASP analysis, ultimately screened out.
- Assess process points for efficiencies such as (1) use SDP assessment to provide needed data for ASP in a more deliberate fashion; (2) the level of reviews required for independent ASP analyses; (3) minimization of process touch points; and (4) leveraging NRR/OpE or SDP review processes to complement LER screening criteria.

Identify appropriate input points for ASP results into ROP and licensing self-assessment activities, Operating Experience, Generic Communications, and the AARM.

Recommended process changes should continue to result in the assessment of the most safety significant issues (e.g., those currently receiving the most in-depth analysis).

Estimate the resource savings associated with the options identified.

After addressing the requested program change options, identify the options for where the resources for the ASP Program could reside. Develop pros and cons for the options, given the current and future organizational interfaces.

Identify an appropriate timeline for implementation and conduct of a follow-up effectiveness review.

A final proposal is to be provided to the NRR/RES Deputy Office Directors by September 30, 2017.