

Assess Transmission Future Needs and Develop Transmission Plans SAR

**Consideration of Industry Comments on SAR Version 1
(SAR Originally Posted for Comment 4/02/02 – 5/03/02)**

Background:

Version 1 of the “**Assess Transmission Future Needs and Develop Transmission Plans**” SAR was an abbreviated SAR, which included an “Industry Need” statement and a brief description of the proposed standard, but did not include a detailed description. The purpose of this first posting was to collect feedback from the industry on the following questions:

- Is there a reliability-related need for this SAR?

If there is such a need, how should the scope of the SAR be changed?

- The scope of the SAR is fine as is
- The scope of the SAR should be reduced to eliminate.....
- The scope of the SAR should be expanded to include.....

In January 2004, the Standards Authorization Committee (SAC) appointed a Drafting Team (DT) to address industry answers and comments to the questions posed. The DT was also charged with refining the SAR and drafting a detailed description of the proposed standard in preparation for the 2nd posting of the SAR.

This document contains the DT responses to the first set of comments on the original SAR. Because almost 2 years have elapsed since the comments were collected, some have become dated and no longer apply to the present situation. Thus, the DT has not addressed each and every comment, but rather only those that are still timely and represent a general consensus from industry.

Please note that the original comments from industry respondents are shown as underlined text, while the SAR DT responses are shown in **yellow highlight**.

Question: “Is there a Reliability-Related Need for this SAR?”

Development of this SAR is not needed or is premature.

Industry comments were overwhelmingly in favor of a standard on transmission assessment and planning, so the SAR DT feels we should proceed with the preparation of a final SAR to be posted for industry comment.

Question: “Scope of this SAR Should be Reduced to Eliminate”

Standard should not go beyond assessment & planning of the bulk transmission system.

We agree. The DT feels that this SAR as presently written does not go beyond assessment and planning of the bulk transmission system.

Standard should not apply to intrastate systems.

These standards are being drafted to apply to ALL North American bulk electric systems.

Market solutions are outside NERC’s scope with respect to development of reliability policies.

Agreed. The present SAR does not require transmission plans to facilitate market operation -- instead, the emphasis is on ensuring reliability.

Definition of “what” core reliability standards are needed is encouraged. However, “how” they are achieved and implemented should not be included at this time, until there is clarity on SMD & RTO formation, and NERC/NAESB interface is defined.

We agree. Industry responses to postings of other SARs and standards indicate that it is widely felt that NERC standards should concentrate on “what” the requirements are, not “how” to achieve them.

SAR should only address creation of Planning Standards. Plan Development is a compliance issue.

The Standard will not tell people “how” to achieve the solutions, but only require that they have a Plan. This is in accordance with the Functional Model, which requires that each Planning Authority have a documented Plan to address inadequacies identified in a transmission needs assessment.

SAR should only define the reliability requirements, not specific solutions.

Agreed.

Eliminate the function relating to “assessing” transmission performance. Only “plan” future transmission expansion.

Assessment of the transmission system is needed to identify anticipated deficiencies that proper planning will correct. Thus, the SAR DT feels that both “assessment” and “planning” are essential components of this SAR.

Standard should only apply to the long-term planning function. Should be a parallel standard for operational planning.

We agree. The standard will only address long term planning, which is defined in the Functional Model as 1 year and beyond.

Standard must not become a mandate for all to use the same load flow model.

Agreed.

Question: “*Scope of this SAR Should be Expanded to Include*”

Scope should be expanded to include generation as well.

The SAR DT understands this requirement to “include” generation to mean developing transmission plans that include (as inputs to the transmission adequacy assessment) resources, adequacy plans and load forecasts of LSE’s . According to the Functional Model, the Planning Authority must develop an integrated plan from both Transmission Planners and Resource Planners. We agree generation should be included; however, we do not believe that there should be a single standard that integrates resource adequacy planning and transmission adequacy planning. This standard should address only transmission adequacy planning. Separate RA standards may be developed, applicable to different entities; e.g., transmission standards for TOs, resource standards for LSEs .

NERC should guard against establishing a one-dimensional standard that fails to take into account all dimensions that guide the planning process.

Agreed.

SAR should include a requirement to plan the system so that it can be operated within operating limits.

The SAR DT believes that complying with a properly-designed planning standard will result in a system that can be operated within operating limits.

Scope should include planning associated with IPPs

See our response to the comment above that the “scope should be expanded to include generation as well”.

NERC should ensure that the standards defined include a definition of how the planning model is created.

The SAR DT has attempted to address this issue in the proposed SAR.

Standard should be specific and measurable and define what “normal”, “extreme”, and “abnormal” system conditions are.

Agreed. The DT has deleted these terms from the SAR and instead has included a requirement that the standard use the contingency events identified in Table 1 of existing Planning Standard I.A.

Minimum set of criteria for assessing acceptability of plans is needed.

The SAR DT believes the proposed SAR establishes minimum system performance standards, but does not direct how to meet those standards. For a Plan to be acceptable, anticipated system performance under the Plan must meet the minimum criteria established by the standard.

May be a need for multiple expansion plans because of timing of generator projects that are dictated by commercial rather than system adequacy considerations.

The SAR DT does not envision that the standard will address commercial or market issues. However, the standard will require documentation and disclosure of generation assumptions used to develop the Transmission Plan.

Must define what minimum need is. Some regulatory backstop is needed if expansion plans are deemed insufficient to meet needs.

The DT feels that the SAR as written will result in a standard that defines the minimum need.

SAR should identify who has obligation to implement transmission plans.

The Functional Model identifies which functions have the responsibility to implement transmission plans. The SAR DT (in the Comment Form posted with Version 2 of the SAR) has asked for industry guidance on the monitoring of implementation plans.

Must use a reasonable planning horizon (less than or equal to 5 years).

The DT believes that the SAR as written will result in a standard that requires the use of a reasonable planning horizon.

Provision for interim use of Remedial Action Plans (RAP) & Special Protection Schemes (SPS) is needed.

The SAR DT feels that the standard will neither require nor preclude the use of RAP or SPS for either interim or permanent use to meet the reliability criteria contained in the standard.

Regional differences should be recognized.

Agreed. The SAR DT has asked for industry input to identify such differences. See the Comment Form posted with the SAR – V2.

Requirement to provide assessment at all demand levels should be added.

The SAR DT has developed language to consider the variability of load in the development of the standard.

Responsibility for assessing and defining adequate operating reserves and reactive support should be added.

The SAR DT believes operating reserves is an operational issue that should be addressed by operating standards. However, voltage support and reactive power will be addressed in this standard.

Planning criteria should be expanded to include maintainability of system.

The SAR DT has asked for industry input on this issue. Refer to the Comment Form posted with the SAR – V2.

When studies indicate that the system may not meet performance requirements, plans should be developed to address the situation and studies should demonstrate that implemented plans meet requirements.

We agree.

Core standard for reliability should be specific & measurable.

Agreed.

“Miscellaneous Comments”

Technical specifications should ensure that they do not prohibit worthwhile commercial negotiations or commercial activity.

Agreed.

Must have coordination with operating procedures and protocols of RTOs.

The standard will be applicable to all functional responsibilities included in the Functional Model.

Must be close coordination with NAESB and RTOs to meet both reliability objectives and commercial needs.

The standard will define reliability criteria without precluding or dictating viable commercial solutions.

Measuring for compliance is extremely difficult. It is also difficult to determine if events will result in “cascading outages”.

We believe the standard will clarify and explicitly state the requirements for compliance. Agreed that a clearer definition of “cascading outages” is needed, and the definition is being developed.

SAR will not accomplish its intent without credible models from which to do analysis.

Agreed.

SAR seems large – divide it up?

The SAR does cover a large scope, but the DT feels that dividing the SAR and standard is premature at this point.

Scope of SAR is poorly written. It does not convey transmission planning responsibilities.

Scope is being revised to add more details and become clearer.

Separate SAR should be established for implementation of SPS. Develop plans to address operational issues for interconnected grids where SPS is needed to mitigate against system deficiencies.

There is a separate SAR that addresses Protection Systems. To the extent that SPS affects transmission assessment and planning, some aspects of SPS may be addressed in this SAR.

SAR does not set standard, but tries to assign responsibility for setting standard.
As envisioned, this SAR will address BOTH the standard and the responsibility.

END OF INDUSTRY COMMENTS/DT RESPONSES FOR SAR – V1