

18.8 Procedure Development

Procedures are essential to plant safety because they support and guide personnel interactions with plant systems and personnel responses to plant-related events. Procedures and the human system interfaces (HSI) are designed in parallel using similar processes and incorporating the same accident analyses; the evaluation processes used are also interrelated. Human factors principles are applied to aspects of the interface to verify complete integration and consistency. Refer to Section 5.4.9 of the AREVA NP Human Factors Topical Report (Reference 1) for a generic outline of HFE program input to the procedure development process for the U.S. EPR.

A COL applicant that references the U.S. EPR design certification will describe how HFE principles and criteria are incorporated into the development program for site procedures.

18.8.1 Objectives and Scope

From the perspective of the HFE program, the objectives of procedure development activities are to develop procedures that are technically accurate, comprehensive, explicit, easy to use, and validated (i.e., the user can comply with the requirements of each step).

HFE guidelines are applied to all procedures associated with plant operations, [testing](#), and maintenance:

- Generic Technical Guidelines (GTG) for emergency operating procedures.
- Plant and system operations (including startup, power, and shutdown operations).
- Maintenance.
- Abnormal and emergency operations.
- Alarm response.
- [Equipment testing](#).

18.8.2 Methodology

Procedure development activities consider the following aspects:

- Plant design basis.
- System-based technical requirements and specifications.
- Results of task analyses (TA) (performed specifically for procedure development).