

PREDECISIONAL
BEING PROVIDED TO SUPPORT THE 2/7/2017 ACRS REGULATORY
POLICIES AND PRACTICES SUBCOMMITTEE MEETING
AND NOT TO SOLICIT EXTERNAL STAKEHOLDER FEEDBACK

APPENDIX H: SEVERE ACCIDENT CONSEQUENCE ANALYSIS

Draft Outline

1. Introduction
 - a. Background
 - b. Purpose of document
2. Description of tools and capabilities
 - a. PRA information
 - b. MELCOR
 - c. MACCS
3. Severe reactor accident offsite consequence analysis
 - a. Scope based on regulatory problem statement
 - i. Scenario development
 - ii. Affected population of plants and affected parameters
 - b. PRA information and frequency weighting
 - c. Accident progression analysis
 - i. Sources of information
 - ii. MELCOR modeling approach
 - d. Off-site consequence analysis
 - i. Sources of information
 - ii. MACCS modeling approach
4. Supplemental analyses
 - a. Sensitivity analyses
 - b. Uncertainty analyses
 - c. Plant-to-plant variability analyses
5. Presentation of results - inputs to regulatory analysis
 - a. Early fatality risk
 - b. Latent cancer fatality risk
 - c. Population dose risk
 - d. Offsite economic cost risk
 - e. Key assumptions and uncertainties
6. References