



STATUS OF NRC STAFF REVIEW

OF FENOC'S BULLETIN 2001-01 RESPONSE FOR
DAVIS-BESSE

-
- Brief for the Commissioners' TAs
 - November 30, 2001
-

NRC-001

E-0019a



AGENDA FOR DISCUSSION

- Purpose
 - ▶ To discuss the results of the staff's ongoing assessment of FENOC's responses to Bulletin 2001-01 for Davis-Besse
 - ▶ To discuss the change in the staff's decision regarding issuance of an Order

 - Success
 - ▶ Commissioners' TAs understand the basis for the staff's decisions regarding responses to Bulletin 2001-01 for Davis-Besse

 - Introduction and discussion of changes - Larry Burkhart (5 minutes)

 - Discussion of status of staff's review - Jack Strosnider and Rich Barrett (15 minutes)
-



CHANGE IN LICENSEE'S PLANS/COMMITMENTS

- The Licensee proposed changing its commitments to include
 - ▶ Commencing its refueling outage on February 16, 2002, vice March 31, 2002,
 - ▶ Perform a qualified visual inspection of 100% of the VHP nozzles and undertaking NDE of those nozzles that have indications of cracking,
 - ▶ Characterizing any cracks that are identified in VHP nozzles,
 - ▶ Operating at a lower RCS hot leg temperature to reduce the head temperature effects on crack initiation and growth,
 - ▶ Maximizing the availability of the plant's redundant critical safety systems until shutdown, and
 - ▶ Providing increased human factors reliability through additional training, personnel, etc.



RISK ASSESSMENTS*

	Base Scenario	Alternate Scenario**
IE Freq. (/ry)	4.0E-02	2.0E-02
CCDP (/ry)	2.7E-03	2.0E-03
Delta CDF (/ry)	1E-04	4E-05
LERF (/ry)	1E-06	4E-07
Delta CDF (12/31/01)(/ry)	1E-05	3E-06
Delta CDF (3/31/02)(/ry)	4E-05	
Delta CDF (2/16/02)(/ry)		

Inspection Credit

*20% reduction
75 days*

*4 x 10⁻⁵
(4 in 100,000)*

*8 x 10⁻⁶
8 in 1,000,000*

*Risk numbers are approximate due to the various uncertainties associated with this issue.

**Includes some credit for past inspections, compensatory actions to reduce CCDP, and shortened duration of operation



RISK-INFORMED DECISIONMAKING GUIDELINES

- RG 1.174
 - ▶ Intended for licensing basis changes (permanent changes)
 - Δ CDF less than $1E-06/ry$: very small changes are allowed with tracking of cumulative impacts on CDF
 - Δ CDF between $1E-06/ry$ and $1E-05/ry$: small changes are allowed with tracking of cumulative impacts on CDF
 - Δ CDF $> 1E-05/ry$ are not normally allowed
- RG 1.182
 - ▶ Intended for managing risk associated with maintenance activities (short-duration)
 - ICDP $< 1E-06$ and ILERP $1E-07$: normal work controls apply
 - ICDP between $1E-06$ and $1E-05$ or ILERP between $1E-07$ and $1E-06$
 - Assess non-quantifiable factors
 - Establish risk management actions
 - ICDP $> 1E-05$ or ILERP $> 1E-06$
 - Configuration should not normally be entered voluntarily



RG 1.174 SAFETY PRINCIPLES

- Current Regulations are met
 - ▶ It is likely that, if inspections were performed today, the current regulations would not be met (TS requirements and GDC)
- Defense-in-depth philosophy is maintained
 - ▶ It is likely that one of 3 barriers is degraded
 - ▶ However, Davis-Besse has a large, dry containment ^{rated 10⁻²} (licensee states that conditional containment failure probability is 1.5E-03)
- Sufficient safety margins are maintained
 - ▶ It is likely that safety margins are reduced
- Only a small increase in CDF results
 - ▶ Δ CDF (assuming operation until 2/16/02 and crediting comp. actions) is approximately 8E-06/ry
 - ▶ Baseline CDF is 6.6E-05/ry (IPE)
- The basis of risk measurement is monitored using performance measurement strategies
 - ▶ Will not occur until inspection is performed