Docket File

JUL 26 1973

Docket No. 50-410

Voss A. Moore, Assistant Director for Boiling Water Reactors, L
THRU: Robert A. Clark, Chief, Gas Cooled Reactors Branch, L

Original signed by
Robert A. Clark

SUMMARY OF ACRS MEETING, NINE MILE POINT-2

Representatives of Niagara Mohawk Power Corporation, Stone & Webster Engineering Corporation, and General Electric Company met with the ACRS and the Regulatory staff on July 12, 1973 concerning Niagara Mohawk Power Corporation's application for a construction permit for the Nine Mile Point Nuclear Station, Unit 2. The meeting was open to the public except for a closed session in which the subject of industrial security was discussed. A transcript of the meeting was prepared by Ace-Federal Reporters, Incorporation; copies of which are available in the public document rooms and in the AEC's Bethesda Library. On July 17, 1973, the ACRS reported by letter to Chairman Ray on the Nine Mile Point-2 facility. A copy of this letter is appended to this report. The various items discussed at the meeting are summarized below in the order in which they were first considered at the meeting.

1. Flood Protection

(a) The staff indicated that there is a difference of predicting the maximum surge between the applicant and the staff of 3 feet (251 and 254 ft LSD, respectively). The applicant is continuing his study using a 2-D model developed by his Architect-Engineer. It was indicated that the results from this study will be reviewed by the staff prior to construction of the dike and drainage system.

(b) The applicant has described an interceptor ditch behind the dike with the capacity of 200,000 ft^3. The staff does not agree with the interceptor ditch capacity and will require substantiation to show that the design capacity is sufficient to avert any flooding that could adversely affect any safety-related structures or systems prior to the construction of the dike and drainage system.

2. Criteria Utilized to Ascertain the ECCS

The applicant presented results of analyses performed for different type of pipe breaks utilizing a stretch power of 3,489 MWt which is 5 percent above the designed power. All analyses showed that the

OFFICE ▷						
SURNAME ▷						
DATE ▷						

Form AEC-318 (Rev. 9-53) AECM 0240 GPO 643—16—81465-1 445-678

Original signed by
Robert A. Clark

the maximum clad temperature were below the 1971 Interim Acceptance Criteria of 2300°F. Although the interim criteria were met, the ACRS committee queried the applicant relative to his ECCS improvements as stipulated by the ACRS letter of January 7, 1972 and also the effects of fuel densification. To the former question on ECCS improvements the applicant indicated that the 1971 Interim Criteria was met. Also, the applicant was cognizant of the new proposed fuel design for Grand Gulf, and would not preclude the use of that fuel in Nine Mile Point-2 depending on the outcome of the licensing review. Relative to fuel densification, the applicant indicated that he has submitted the generic reports on this topic and is awaiting the results of the staff's review.

3. ADS Interlock
A discussion proceeded in this area relative to the interlock system in the ADS system. The system that has been incorporated into the Nine Mile Point-2 is as follows: to actuate the ADS system manually 2 buttons must be pushed which in turn initiate a 2 minute timer which delays the valves from opening. If no operator action is taken and if there is low pressure pump running (ADS system interlock), the ADS is activated. To circumvent the ADS interlock and the timer, each individual valve can be actuated by pushing the respective individual push button.

4. Main Steam Line Isolation Valve Leakage
The applicant described a seal water system which will augment the function of the main steam line isolation valves to achieve a positive water seal. At the staff's request the applicant is committed to perform detail thermal stress and deformation analysis. The results will be presented at the OL stage. In the event these studies are not conclusive, the applicant will be required to conduct appropriate tests to supplement these analyses.

5. Combustible Gas Control
The applicant indicated that the system consists of two 100% capacity recombiners to limit the oxygen concentration in the containment to below the lower flammability limit following a LOCA. As a backup system a non-safety purge system is used as indicated in Regulatory Guide 1.07. The system is in the preliminary stages of design; and therefore, the type of recombiner, thermal or catalytic, has not been selected.

6. RHR Motor-Operated Suction Valve Interlocks
The ACRS committee was interested to explore whether the valve interlock in the low pressure RHR system in the primary system in this plant was the same as for other General Electric plants which have recently received construction permits. The applicant indicated in the affirmative; however, a difference did exist for the interlock system of this plant in that the designed intent was to meet the diversity principle required by IEEE Std. 279-1971.

OFFICE ▷					
SURNAME ▷					
DATE ▷					

7. Seal System Between Dry and Wet Wall

The final topic to be discussed at the meeting was relative to the seal system that exists between the drywell floor and wall for the over-under type of pressure suppression system. It was indicated that the seal consists of two seals in series, that the seal cannot be leak tested in service, and that this seal design is the same as the Shoreham plant.

Original signed by:
Anthony Bournia

Anthony Bournia, Project Manager
Gas Cooled Reactors Branch
Directorate of Licensing

Enclosure:
ACRS Letter dated 7/17/73

Distribution:
Docket File
AEC PDR
Local PDR
L Reading
RP Reading
GCR Reading
E. G. Case
A. Biambusso
R. S. Boyd
V. A. Moore
RP/BCs
J. Hendrie
TR/ADs
TR/BCs
R. F. Fraley, ACRS
W. Haass
A. Bournia
J. A. Norris
Massar/Bordenick
RO (3)
R. K. Frahm
F. Rosa
J. E. Richardson
R. E. Lipinski
L. B. Riani
D. D. Rieff
F. Guevara
J. E. Kohler
E. F. Hawkins
F. J. Congel

OFFICE ▷	L:GCR	L:GCR				
SURNAME ▷	ABournia:nb	RAE				
DATE ▷	7/24/73	7/24/73				

Form AEC-318 (Rev. 9-53) AECM 0240 GPO c43—16—81465-1 445-678