

OCT 01 1985

In Reply Refer To:
Docket: 50-298

Nebraska Public Power District
ATTN: J. M. Pilant, Manager, Technical
Staff-Nuclear Power Group
P. O. Box 499
Columbus, Nebraska 68601

Gentlemen:

This letter is to acknowledge receipt and review of the scenario for the annual emergency preparedness exercise scheduled for October 1985. The emergency preparedness staff has reviewed the scenario. As a result of this review, the following items were identified as requiring additional information or clarification:

1. If data sheets are handed out routinely, the controllers' instructions should assure that the players do not use the sheets for trending.
2. The Radiological Monitor Data Sheet, Panel 9-10 reads:
Mn. Stm. Rad. Monitor Ch. A2, B1
Ch. A2, B2

These channel numbers should be checked for correctness.

3. It is suggested that the procedure 6.2.4.1, Attachment A, page 6 of 15, Daily Jet Pump Operability Check actually be run and observed. This would eliminate some of the simulation.
4. At 1000 the last bullet on controller information provides two possible power levels (100% or 75% power), however, it appears that the appropriate data is not available for the various conditions.
5. Message at 1030 states "Main Steam Isolation Valves not full of open trip." The wording does not provide clear meaning.
6. Between 1030 and 1045 there is a flow balance problems. HPCI and RCIC are operating at 1030. By 1035 the reactor level is 45 ft. and these two systems continue to operate.
7. At 1100 HPCI isolates, however, the scenario still provides pressure and flow data.

RIV:EP
JBBaird:lt
9/20/85

R&SPB
REHall
9/20/85

D:DRS
R/Bangart
9/21/85

RPS/A
JPJaudon
9/21/85

RPB
EHJohnson
9/25/85

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9. Inplant survey maps with radiological data should be in the scenario.
10. The lines on Figure 10-1 do not line up, making it impossible to read the data.
11. Meteorological and forecast data should be provided in the scenario.
12. Additional maps or tables should be provided with more complete off-centerline dose rates and iodine concentrations so that values may be estimated at any location within the plume area.
13. Although accountability is an objective, there appears to be no discussion of this in controller information or expected actions.

In addition, the enclosed memorandum from FEMA - Region VII to the Nebraska State Civil Defense Agency indicates several inadequacies in the exercise scenario support of offsite objectives. You should coordinate with the Nebraska and Missouri state agencies to resolve the inadequacies so that the offsite objectives can be demonstrated during this exercise.

If you have any questions, please contact Mr. J. B. Baird at (817) 860-8185.

Sincerely,

Original Signed By
E. H. Johnson

E. H. Johnson, Chief
Reactor Projects Branch

Enclosure:
FEMA memo dtd. 9/11/85

cc w/enclosure:
Paul V. Thomason, Division Manager
of Nuclear Operations
Cooper Nuclear Station
P. O. Box 98
Brownville, Nebraska 68321

Rich Leonard, FEMA, Region VII

Kansas Radiation Control Program Director

Nebraska Radiation Control Program Director

✓ bcc to DMB (A045) after exercise

bcc distrib. by RIV after exercise:

RPB	R. P. Denise, DRSP
Resident Inspector	R. D. Martin, RA
Section Chief (RPB/A)	R. L. Bangart, DRSS
R&SPB	J. B. Baird, EP&SPS
C. A. Hackney, EP&SPS	RIV File



Federal Emergency Management Agency

Region VII 911 Walnut Street Kansas City, Missouri 64106

SEP 13 1985

SEP 11 1985

MEMORANDUM FOR: Fran Laden, Deputy Director
Nebraska State Civil Defense Agency

FROM: Patrick J. Breheny, Regional Director, FEMA-Region VII

SUBJECT: 1985 Cooper Exercise Scenario

We have reviewed the Cooper utility scenario based upon the off-site objectives to be demonstrated for Nebraska and Missouri. We find that the scenario is inadequate in several respects.

1. The proposed scenario has the plume leaving the plant site and traveling across the river into Missouri. With the exception of the plant property, no Nebraska land areas will be affected. Nebraska lists several radiological objectives, #'s 4, 5, 6, 9, 11, 12 on pages 1-4 and 1-5, which the proposed scenario does not test.
2. The time line proposed toward the end of the exercise does not allow sufficient time for Missouri to demonstrate either ingestion pathway capability or recovery and reentry activities prior to the time that the reactor has been brought under control and the emergency has been deescalated. The one hour proposed is not sufficient for an adequate demonstration. At least an hour and one half to two hours would be required. Ingestion pathway sampling could begin prior to the deescalation, however, data would have to be provided for intermediate times during plume passage and not only for after plume passage, as is the current case. In addition, a time jump of a minimum of 72 hours with corresponding meteorological and radiological data will be required to demonstrate ingestion pathway objectives.
3. The transmitted material did not contain sufficient information to verify the doses presented. In particular, the meteorological stability class data needed to review this parameter is not included (other information is also not included as stated on the second page). In a phone call to Mr. Clem Morgan of the utility, our contractor, Joe Keller of the Idaho Engineering Laboratory, was told that the stability class used was "D" and that the release point was a 100 meter stack. Using this data and that included in the package, we were able to verify the whole-body dose rates and the radioiodine concentrations shown to within reasonable limits. The thyroid dose rates tabulated could not be verified. It

appears that the proposed thyroid dose are about a factor of 5-8 higher than would be supported by the radioiodine concentrations tabulated. This error is particularly critical since the integrated whole body doses at 1 mile are about 700 mrem (less than the PAG). The off-site doses are therefore controlled by the thyroid dose commitment. The tabulated thyroid dose at 1 mile is about 23 Rem. When the error is taken into account, the PAG for the thyroid will not be exceeded. The reactor status should be sufficient to require a PAR, however, the data should support, after the fact, the action taken.

From the above we conclude that the scenario is not adequate for the radiological objectives in Nebraska or for the Nebraska recovery and reentry objective. It is also not adequate for the Missouri ingestion pathway and recovery and reentry objectives. Without increasing the radioiodine to correct for the calculation error, it is not adequate to drive many of the other Missouri objectives.

The changes necessary to correct the radioiodine rate are relatively minor although they will involve some recalculation of off-site data. Changes necessary to meet the other concerns are major revisions.

Should you have any questions concerning this matter, feel free to contact Rich Leonard or Marlee Carroll of my staff at (816) 374-2161.

cc: Richard Ross, MO SEMA
Clem Morgan, NPPD
✓ Charles Hackney, USNRC IV