

#### UNITED STATES **NUCLEAR REGULATORY COMMISSION** WASHINGTON, D. C. 20555

December 5, 1980

MEMORANDUM FOR: Karl R. Goller, Director

Division of Siting, Health & Safeguards Standards, SD

FROM:

John B. Martin, Director

Division of Waste Management, NMSS

SUBJECT:

NMSS INPUT FOR COMPLETION OF 10 CFR PART 60

As committed in our meeting last week, enclosed are the portions of 10 CFR Part 60 that NMSS agreed to redraft.

It is my understanding that you need nothing more from us to complete the package which will be submitted to the Commission. Please advise if at any time additional actions are required of NMSS.

> John B. Martin, Director Division of Waste Management

Enclosure: As stated

40.17

## TIMELINE FOR HLW RULEMAKING

| PROCEDURES  TECHNICAL CRITERIA | GENERAL STATEMENT OF POLICY | PROPOSED RULE ISSUED            | EFFECTIVE<br>RULE |                   |
|--------------------------------|-----------------------------|---------------------------------|-------------------|-------------------|
|                                | NOVEMBER 1978               | DECEMBER 1979                   | SEPTEMBER 1980    |                   |
|                                | STAFF WORKING PAPERS        | ANR FOR TECH-<br>NICAL CRITERIA | PROPOSED  RULE    | EFFECTIVE<br>RULE |
|                                |                             | APRIL 1980                      | SEPTEMBER 1980    | остовек 1981      |
| EIS                            | TECHNICAL SUPPO             | RT                              | DRAFT EIS         | FINAL EIS         |
|                                | •                           | <b></b>                         | SEPTEMBER 1980    | остовек 1981      |

### PURPOSE OF ANR

- . Provide best thinking available to assist DOE to meet President's schedule.
- . FORMALIZE AND FURTHER BROADEN PUBLIC PARTICIPATION.
- . PROVIDE A COMPLETE STATEMENT OF THE RESULTS OF STAFF ACTIVITY TO DATE.

# CHRONOLOGY OF STAFF INTERACTION WITH GROUPS OR EXPERTS

| EPA BRIEFING        | JUNE 1979 | PRESENTATION TO MATERIAL   |          |
|---------------------|-----------|----------------------------|----------|
| AIF BRIEFING        | SEPT 1979 | RESEARCH SOCIETY           | Nov 1979 |
| PRESENTATION TO DOE | 0ст 1979  | NAS Briefing               | Nov 1979 |
| UTILITY WASTE MGMT  | 23. 23. 3 | BUREAU OF MINES REVIEW     | DEC 1979 |
| GROUP COMMENTS      | 0ст 1979  | NRDC Briefing              | Jan 1980 |
| Keystone Review     | 0ст 1979  | Univ of Arizona Review     | Jan 1980 |
| USGS BRIEFING       | Nov 1979  | GOLDER ASSOCIATES COMMENTS | Jan 1930 |
| DOE COMMENTS        | Nov 1979  | EPA Briefing               | Mar 1980 |

#### UNIQUE ASPECTS OF A HLW REPOSITORY

- . TIME SPAN THREE DISTINCT PHASES; DIFFERENT HAZARDS WITH EACH.
- . PHYSICAL EXTENT SURFACE FACILITIES, EXCAVATED AREA, PRIMARY GEOLOGIC BARRIER.
- . WASTE/ROCK INTERACTION WASTE CAN HAVE A DETRIMENTAL EFFECT ON HOST ROCK.
- NEED TO TREAT UNCERTAINTIES EXTRAPOLATING INTO DISTANT FUTURE FROM DISTANT PAST, GEOLOGIC PROCESSES ARE MULTICOMPONENT SYSTEMS, DIFFICULT TO ARRIVE AT SPECIFIC ANSWERS TO SPECIFIC QUESTIONS, NO EXPERIENCE.
- . HUMAN INTRUSION HAS NO NATURAL ANALOGUE, NO WAY TO BOUND POSSIBLE HUMAN ACTIVITIES.

### IMPORTANT CONSIDERATIONS IN DEVELOPING TECHNICAL CRITERIA

- . USE OF MULTI-BARRIERS AS A SYSTEM
- . USE OF MINIMUM PERFORMANCE STANDARDS
- . SITING CRITERIA
- . RETRIEVABILITY