006

January 29, 1969

D. Muller, Chief
Reactor Project Branch 1, DRL

AGENDA AND SCHEDULE FOR MIDLAND SUBCOMMITTEE MEETING, FEBRUARY 4, 1969

Dr. Monson, the Midland Subcommittee Chairman, has identified the following specific subjects of interest and has recommended that the applicant be ready to discuss them during the February 4 meeting:

1. Meteorology
2. Dose Calculations
3. Containment Leakage Rates
4. Iodine Removing Systems for the Containment
5. Evacuation Procedures

Please recognize that discussion may arise on other subjects even though they have not been specifically identified here.

A tentative schedule for the meeting is as follows:

| | |
|---|---|
| 10:30 - 11:30AM | Meet with Regulatory Staff |
| 11:30AM- 12:30PM | Lunch |
| 12:30 - 2:30PM | Meet with Applicant |
| 2:30 - 2:40PM | Break |
| 2:40 - 3:10PM | Caucus |
| 3:10 - Finish | Meet with Applicant |

The meeting will be in Room 1046 at H Street. The standby room for the applicant is 1062.

Original Signed by
J. E. Hard

J. E. Hard
Senior Staff Assistant



FOIA-85-602
B/2

001

10/31 - 11/2/68

EXCERPT FROM SUMMARY OF 103RD ACRS MEETING

OCTOBER 31 - NOVEMBER 2, 1968

MEETINGS WITH THE DIRECTOR OF REGULATION AND THE REGULATORY STAFF

10. Dow Midland Plant

Mr. Price reported that DRL had received Part B of the Dow Chemical application to construct a PWR (B&W) for electrical power and 4 million pounds of process steam for manufacturing pharmaceutical chemicals. Dow has encountered a problem with the Food and Drug Administration and the DeLaney clause of the Pure Food and Drug Act which prohibits any man made radioactivity in drug products.

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2/3/69

**Project**: Midland Plant

**Status** : Population related site evaluation

**General Description**:

Twin B&W reactors of conventional design, owned and operated by Consumers Power Company, are to be employed for generation of electrical power and process steam. The process steam is to be directed to the Dow Chemical Company plant located immediately to the north of the reactors. A portion of the Dow plant is within the reactors' exclusion area. The city of Midland is located just north of the Dow plant and within 1 1/2 miles of the reactors. The entire city is within the Low Population Zone defined by the Applicant (radius = 3 mi). Combined business and residential population numbers are larger than for the Indian Point site at all radii out to about 7 miles.

**Results of Site Visit**:

Since only two Subcommittee members were able to visit the site, a follow-up Subcommittee meeting was planned. The concerns noted by the Regulatory Staff (see below) were discussed with both the Staff and Applicant. Evacuation plans for the Dow plant and for Midland received considerable attention as did the matters of possible contamination of the process steam and control of plant activities in the reactor exclusion area.

**Items from DRL Report**:

This report has no conclusions; the Subcommittee has been told that the conclusions would be presented orally by Mr. Price at the February ACRS meeting. The Staff points to difficulties they are having in the areas of evacuation, application of 10 CFR 100, population density, meteorology, and post-accident doses. The Staff also observes the lack of iodine removing safeguards in the containment and notes that the containment design leakage rate is higher than at other plants.

**Schedule and Agenda**:

| | | | |
|---|---|---|---|
| 8:30 | - | 10:15AM | Executive Session |
| 10:15 | - | 10:30AM | Break |
| 10:30 | - | 11:30AM | Meet with Staff |
| 11:30AM | - | 12:30PM | Lunch |
| 12:30 | - | 2:30PM | Meet with Applicant |
| 2:30 | - | 2:40PM | Break |
| 2:40 | - | 3:10PM | Caucus |
| 3:10 | - | Finish | Meet with Applicant |

The applicant is to be particularly ready to discuss the following:

1. Meteorology
2. Dose calculations
3. Containment leakage rates
4. Iodine removing systems for the containment
5. Evacuation procedures

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| DATE ▶ | 2/3/69 |



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008

JEH:emb
2/5/69

**Project**: Midland Plant

**Status** : Population related site evaluation

**General Description**:

Twin B&W reactors of conventional design, owned and operated by Consumers Power Company, are to be employed for generation of electrical power and process steam. The process steam is to be directed to the Dow Chemical Company plant located immediately to the north of the reactors. A portion of the Dow plant is within the reactors' exclusion area. The city of Midland is located just north of the Dow plant and within 1 1/2 miles of the reactors. The Population Center Distance as defined by 10 CFR 100 is ~600 feet and nearly the entire city is within the Low Population Zone (radius = 3 mi). Combined business and residential population numbers are larger than for the Indian Point site at all radii out to about 7 miles.

**Items from DRL Report**:

This report has no conclusions; the Subcommittee has been told that the conclusions would be presented orally by Mr. Price at the February ACRS meeting. The Staff points to difficulties they are having in the areas of evacuation, application of 10 CFR 100, population density, meteorology, and post-accident doses. The Staff also observes the lack of iodine removing safeguards in the containment and notes that the containment design leakage rate is higher than at other plants.

**Results of 1/22/69 Site Visit and 2/4/69 Subcommittee Meeting**

The Subcommittee identified the three particularly different aspects of this application: population distribution and related questions, cooling pond for heat dissipation, and the use of steam from the reactor steam generators in the Dow processes.

When the population distribution is analyzed, using the Ergen-Monson method, the site looks acceptable in comparison with the reference site. Evacuation plans exist for the Dow plant and are being discussed for Midland; the Subcommittee felt that more discussion is required on this question and the applicant was read a list of evacuation related questions prepared by Dr. Thompson.

Post-accident off-site doses have been calculated using meteorological assumptions that have been questioned by the Staff and by Dr. Gifford. The applicant reports acceptable doses even though the containment leak rate is high (0.2%/day) and even without iodine-removing engineered safety features. The applicant stated that there was room for compromise in his design. Dr. Monson observed that the Exclusion Area radius and Low Population Zone distance both can be reduced considerably if additional safeguards are employed.

FILE: Midland project file

**For the 106th ACRS**

The applicant will be ready with a one-hour presentation describing the site and the use of the reactors.

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FOIA-85-602
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EXCERPT FROM SUMMARY OF 106TH ACRS MEETING

FEBRUARY 6-8, 1969

SPECIFIC PROJECTS

Midland Plant - The Committee completed its preliminary site review of the application by the Consumers Power Company for authorization to construct the Midland Plant. The Committee concluded and reported orally to the applicant that: "The Committee has reviewed the proposed Midland site primarily from the standpoint of population and population density. The following remarks therefore reflect Committee conclusions based primarily on that one aspect of site evaluation.

"The Committee considers the site proposed to be unacceptable for use with reactor plants designed and analyzed as presently described in the PSAR. However, it believes that the site may be acceptable for use with reactor plants of the proposed power rating if: (1) The facility is equipped with adequate engineered safety features and protective systems; (2) the facility is analyzed sufficiently conservatively - particularly in respect to: determination of exclusion area and low population zone; assurance of low potential doses at short distances from the reactor in the unlikely event of a serious accident; evaluation of the number and location of people who could be safely and quickly evacuated in such an event; and, use of assumptions, for example those related to meterology, in dose calculations; (3) the facility is designed, constructed, and utilized sufficiently conservatively; and (4) the facility is provided with thoroughly structured, effective emergency plans, including evacuation plans."

Significant factors in the Committee's considerations were the high population within four miles of the site, the minimal engineered safeguards proposed in the application, and the use of less than conservative assumptions in the dose calculations.

The Committee discussed the items listed below and the results of those discussions are indicated:

a. The cost of energy in the Midland area - the costs of coal are high and the demand is not large enough to enjoy the price benefits of unit-train transportation.

b. Dow Chemical needs process steam as well as electrical power - the nuclear plant needs to be located close to the Dow plant to minimize steam line costs and heat ~~steam~~ losses. There is some indication that Dow may phase-out the Midland works if a new source of less costly energy is not found.

c. Exclusion area and low population zone - the exclusion area extends 1100 meters from the proposed plant and includes a portion of the Dow plant, including 353 Dow employees; the low population zone extends to three miles and includes all of the Dow plant and part of the city of Midland. The site received a -34 index rating when compared to the hypothetical reference site (considering the maximum population in the Dow complex).

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d. Evacuation - Consumers Power has made arrangements with Dow to evacuate all Dow employees on order from the nuclear power plant. The 353 Dow employees within this exclusion area can be evacuated within ten minutes of notification, 90% of the remainder of the Dow employees would be evacuated within twenty minutes, and complete evacuation could be accomplished 45 minutes after notification. The city of Midland has an evacuation plan and has conducted partial evacuations of some segments of the city.

e. Engineered safety features - the applicant does not propose to install an iodine clean-up system in the containment structure. The containment cooling sprays are provided with a borated additive. This containment structure was designed with a leak rate greater than most others of this type.

f. Protection of the nuclear plant and operators from accidents originating within the Dow complex - the release of chlorine gas appears to be an accident that could be hazardous to the nuclear plant. The applicant did not believe that a chlorine accident could cause shut-down and evacuation of the nuclear plant. The ventilation system could be provided with chlorine filters and emergency air pacs and protective clothing could be provided for the operators.

g. Other aspects - the Committee mentioned but did not explore in any depth: the suitability of B&W reactors for marginal sites, protection required against reactor vessel splits, cavity flooding systems, and the use of process steam in products to be consumed by people.

Changes made from correction to Summary dated 3/17/69.

012

FILE: MIDLAND PLANT

Excerpt from Summary Letter dated February 14, 1969, revised February 17, 1969 (106th ACRS Meeting, Feb. 6-8, 1969)

Specific Projects

The Committee considered population-related factors of the application by the Consumers Power Company to construct the Midland Plant. The Committee had the benefit of discussions with representatives of the Consumers Power Company, its contractors and consultants, and the AEC Regulatory Staff. The Committee provided preliminary comments to the applicant and the Staff regarding this site and site-related matters.

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## BORON CONCENTRATION MONITORING

H. B. Robinson Unit No. 2, 4/16/70
Point Beach Units 1 and 2

"As methods for continuous monitoring of boron concentration and a more definitive determination of gross failure of a fuel element are developed, consideration should be given to their implementation in this plant".

8

# FUEL - SPENT (Damage)

Indian Point 3, 1/15/69

"In the event that an irradiated fuel assembly is dropped or otherwise damaged during transit from the reactor vessel to the spent fuel pit, the cladding on the fuel rods may be ruptured with a consequent release of radioactivity. In view of the relatively high population density close to the Indian Point site, the applicant should review the assumptions made in analysis of a refueling accident to see whether additional conservatism is warranted in assessing its effects and the provisions to cope with the accident. The matter should be resolved with the Regulatory Staff".

Hutchinson Island Plant Unit No. 1, 3/12/70

Further study is required with regard to potential releases of radio-acitivity in the unlikely event of gross damage to an irradiated subassembly during fuel handling and the possible need for a charcoal filtration system in the fuel handling building. This matter should be resolved in a manner satisfactory to the Regulatory Staff.

Point Beach Units 1&2, 4/16/70

"The applicant has determined that turbine failure could release missiles that might damage fuel elements in the fuel pool. He has stated that, for each turbine, a second, completely independent speed control system designed to meet nuclear protection system criteria of redundancy, separation, and reliability, will be installed to reduce the probability of an overspeed condition. In a related matter, in the evaluation of re-fueling accidents, studies pertaining to reduction of fission product releases have not been completed. The Committee recommends that irradiated fuel not be handled outside the containment building until these matters are resolved in a manner satisfactory to the Regulatory Staff".

Millstone Unit 2, 5/15/70

Further study is required with regard to potential releases of radio-activity in the unlikely event of gross damage to an irradiated fuel assembly in the spent fuel pool. This matter should be resolved in a manner satisfactory to the AEC Regulatory Staff.

Oconee Nuclear Station Unit 1, 9/23/70

In order to protect against the postulated consequences of the acci-dental dropping of a fuel element, the applicant has stated that either he will install filters in the fuel pool building exhaust system, or the equivalent control and protection will be assured by another method. This matter should be resolved to the satisfaction of the Regulatory Staff within the first year of power operation.

## INSTRUMENTATION (POST-ACCIDENT)

Palisades Plant, January 27, 1970

The Committee recommends that attention be given to the long-term ability of vital components, such as electrical equipment and cables, to withstand the environment of the containment in the unlikely event of a loss-of-coolant accident. This matter is applicable to all large water-cooled power reactors.

Hutchinson Island Plant Unit 1, March 12, 1970
Beaver Valley Power Station, Unit 1, March 12, 1970

Information on a number of items, identified in previous reports of the Committee, is to be provided by the applicant to the Regulatory Staff during construction. These include:

b) Review of development of systems to control the buildup of hydrogen in the containment, including an appropriately conservative estimate of possible hydrogen sources, and of instrumentation to monitor the course of events in the unlikely event of a loss-of-coolant accident.

Point Beach Nuclear Plant Units 1 and 2, April 16, 1970
H. B. Robinson Unit 2, April 16, 1970

Studies by the applicant are underway on two problems identified in previous reports of the Committee, as follows:

(b) Review of development of systems to control the buildup of hydrogen in the containment, and of instrumentation to monitor the course of events in the unlikely event of a loss-of-coolant accident.

Dresden 3, July 17, 1970

Problems experienced during preliminary operation of Unit 2 have shown the need for some improvements in the plant and in operating procedures. These improvements will also be incorporated in Unit 3. One of the improvements consists of instrumentation to be installed in the primary containment for remote monitoring of temperature and pressure over the full range of postulated accidents. The Committee believes that instrumentation should also be provided for monitoring high radiation levels by means more rapid than sampling and laboratory analysis.

Surry Power Station Units 1 and 2, December 17, 1971

The applicant should assure himself that instrumentation for determining the course of postulated accidents is on hand at the station and that appropriate calibration methods and calculated bases for interpreting instrument responses are available.

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Oyster Creek 1, Dec. 12, 1968

"It is recommended that supplemental and potentially more sensitive methods of primary system leak detection be studied, evaluated, and implemented if they provide significant improvements in measurement of leak rate, in the time needed to measure leak rate, or in distinguishing the nature of the leak. The study and evaluation should be completed within a year."

Nine Mile Point, April 17, 1969

"The applicant plans to study supplemental and potentially more sensitive methods of primary system leak detection and to implement methods which provide significant improvements in measurement of leak rate, in the time needed to measure leak rate, or in distinguishing the nature of the leak. The applicant should report to the Regulatory Staff his progress in this area within a year after start of power operation."

Duane Arnold, December 18, 1969

"It is important that no leakage from the primary containment bypass the secondary containment and the associated filtering systems in the event of an accident. The applicant should study the effects of leakage through possible bypass paths, with particular emphasis on the main steam line isolation valves, and should propose measures to deal with any such bypass leakage. This matter should be resolved in a manner satisfactory to the Regulatory Staff during construction of the plant. The Committee wishes to be kept informed of progress in this area."

Monticello Unit 1, June 15, 1970

"The Committee has on several occasions stressed the importance of inservice inspection and leak detection. It recommends that the Regulatory Staff develop a schedule of inspections for safe ends. The operation of the leak detection and location systems should be reviewed and modified as appropriate to obtain the maximum speed and sensitivity for detection of leaks. In addition, the applicant should study other techniques of detecting leaks."

Millstone Station Unit 1, June 16, 1970

(Same as above)

Nine Mile Point, June 16, 1970

"The applicant is studying improved leak-detection methods. The Committee believes that detection and location of small leaks is an essential part of the surveillance program. The applicant should expeditiously install such leak-detection devices as seem likely to give improved sensitivity or speed of leak detection. The Committee recommends that at least one leak-detection system in addition to the proposed sump accumulation rate and dew point systems be installed within a few months and wishes to be kept informed of progress in this regard."

## NEUTRON NOISE ANALYSIS

### Point Beach Nuclear Plant Units 1 and 2, April 16, 1970

The applicant has presented a program for preoperational tests of the plant, including proof testing of the containments. The applicant is performing studies to determine the appropriate number of tendons and the interval for tendon inspection. The applicant is following the work of others for in-service vibration monitoring and loose parts detection so as to evaluate the applicability and appropriateness of implementing such means when developed. Neutronic and external accelerometer signature measurements of the reactors during initial operation should be considered in order to provide a basis for comparison with possible future monitoring results. These matters should be resolved in a manner satisfactory to the Regulatory Staff.

### Indian Point Nuclear Generating Unit No. 2, September 23, 1970

"The applicant stated that neutron noise measurements will be made periodically and analyzed to provide developmental information concerning the possible usefulness of this technique in ascertaining changes in core vibration or other displacements. On a similar basis, accelerometers will be installed on the pressure vessel and steam generators to ascertain the practicality of their use to detect the presence of loose parts."

### Oconee Nuclear Station Unit No. 1, September 23, 1970

"The Committee suggests that developmental techniques, such as neutron noise analysis and use of accelerometers, be considered as an aid in ascertaining displacements, changes in vibration characteristics, and the presence of loose parts in the primary systems. The Committee notes the desirability of the continuing use of some thermocouples in the core."

### Indian Point Nuclear Generating Unit No. 2, September 23, 1970

The applicant stated that neutron noise measurements will be made periodically and analyzed to provide developmental information concerning the possible usefulness of this technique in ascertaining changes in core vibration or other displacements. On a similar basis, accelerometers will be installed on the pressure vessel and steam generators to ascertain the practicality of their use to detect the presence of loose parts.

### Quad Cities Station, Units 1 and 2, March 9, 1971

The Committee recommends that a confirmatory vibration test program be undertaken as part of the start-up and power ascension test program. This matter should be resolved with the Regulatory Staff. It is also recommended that consideration be given to the use, on a developmental basis, of neutron noise easurements, accelerometers, or other devices to provide information conerning the occurrence of excessive vibrations, structural damage, or loose parts. The Committee wishes to support and encourage continuing efforts by the applicant to develop improved methods of inservice pressure vessel inspection.

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## POST-ACCIDENT OPERATION

Palisades Plant, January 27, 1970

"The Committee recommends that attention be given to the long-term ability of vital components, such as electrical equipment and cables, to withstand the environment of the containment in the unlikely event of a loss-of-coolant accident. This matter is applicable to all large water-cooled power reactors."

Hutchinson Island Plant Unit No. 1, March 12, 1970
Beaver Valley Power Station, Unit No. 1, March 12, 1970

"Information on a number of items, identified in previous reports of the Committee, is to be provided by the applicant to the Regulatory Staff during construction. These include:

b) Review of development of systems to control the buildup of hydrogen in the containment, including an appropriately conservative estimate of possible hydrogen sources, and of instrumentation to monitor the course of events in the unlikely event of a loss-of-coolant accident.

Point Beach Nuclear Plant Units 1 and 2, April 16, 1970
H. B. Robinson, Unit 2, April 16, 1970

Studies by the applicant are underway on two problems identified in previous reports of the Committee, as follows:

(b) Review of development of systems to control the buildup of hydrogen in the containment, and of instrumentation to monitor the course of events in the unlikely event of a loss-of-coolant accident.

Fort St. Vrain Nuclear Generating Station, May 12, 1971

"The applicant has identified electrical equipment which is required to operate during and following postulated accidents, and has determined the environmental conditions to which this equipment will be exposed. Test procedures have been developed, and tests are being made to provide assurance that this essential equipment will perform its functions. The results of these tests should be reviewed by the Regulatory Staff prior to operation of the plant."

13

QUALITY ASSURANCE

Pilgrim, April 12, 1968

"The Committee recommends that the Boston Edison Company assume an active role in quality assurance in all stages of fabrication and construction.*"

Kewaunee, May 15, 1968

"The Committee continues to emphasize the importance of quality assurance in fabrication of the primary system as well as inspection during service life, and recommends that the applicant implement those improvements in quality that are practical with current technology. The Committee also calls attention to those matters previously emphasized, which it deems to be important for all large water-cooled power reactors."

Zion, July 24, 1968

"The Committee continues to emphasize the need for quality in the manufacture, storage, and installation of the reactor and primary system components. The applicant described the quality assurance program that he and his contractors intend to carry out for this purpose. In this connection, the applicant described the testing program for engineered safety features, including a full flow test of the emergency core cooling system delivering water to the reactor vessel. The Committee recommends that the applicant give further consideration to testing the containment spray systems with full flow to the spray nozzles at least once at an appropriate time during construction."

Russellville, Sep. 12, 1968

"The Committee emphasizes the importance of the implementation and management of the quality assurance and quality control programs necessary to achieve the design, construction, and operation objectives."

Donald C. Cook, December 1968

"The Committee continues to emphasize the importance of the implementation and management of the quality assurance program."

Indian Point 3, Jan. 15, 1969

"The Committee also emphasizes the importance of independent action by the applicant to assure quality in the construction of the facility."

"*The Committee believes that the industry should continue to pursue an orderly program leading to further improvement in the quality of pressure vessels and other components of the primary system such as valves, pumps, and piping."

Monticello, Jan. 10, 1970 and Millstone 1, Jan. 15, 1970

"Continuing research and engineering studies are expected to lead to enhancemen of the safety of water-cooled reactors in other areas than those mentioned, for example, by the determination of the extent of the generation of hydrogen by radiolysis and by other sources in the unlikely event of a loss-of-coolant accident, development of instrumentation for in-service monitoring of the pressure vessel and other parts of the primary system for vibration and detection of loose parts in the system, by the development of further means of preventing common failure modes from negating scram action and of design features to make tolerable the consequences of failure to scram during anticipated transients, and evaluation of the consequences of water contaminati by structural materials and coatings in a loss-of-coolant accident. As solutic to the problems develop and are evaluated by the Regulatory Staff, appropriate action should be taken by the applicant on a reasonable time scale."

Palisades, January 27, 1970

"Continuing research and engineering studies are expected to lead to enhancement of the safety of water-cooled reactors in other areas than those mentioned: for example, by determination of the extent of the generation of hydrogen by radiolysis and from other sources, and development of means to control the concentration of hydrogen in the containment, in the unlikely event of a loss-of-coolant accident; by development of instrumentation for inservice monitoring of the pressure vessel and other parts of the primary system for vibration and detection of loose parts in the system; and by evaluation of the consequences of water contamination by structural materials and coatings in a loss-of=cooland accident. As solutions to these problems develop and are evaluated by the Regulatory Staff, appropriate action should be taken by the applicant on a reasonable time scale."

Beaver Valley, March 12, 1970

"Information on a number of items, identified in previous reports of the Committee, is to be provided by the applicant to the Regulatory Staff during construction. These include:

a) A study of means of preventing common failure modes from negating scram action and of design features to make tolerable the consequences of a failure to scram during anticipated transients.

b) Review of development of systems to control the buildup of hydrogen in the containment, including an appropriately conservative estimate of possible hydrogen sources, and of instrumentation to monitor the course of events in the unlikely event of a loss-of-coolant accident."

Hutchinson Island, March 12, 1970

(Same as above)

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Dresden 2, Sept. 10, 1969

"Continuing research is expected to enhance safety of water-cooled reactors in other areas than those mentioned, for example, by the determination of the extent of radiolytic decomposition of cooling water in the unlikely event of a loss-of-coolant accident, development of instrumentation for in-service monitoring of the pressure vessel and other parts of the primary system for vibration and detection of loose parts in the system, and evaluation of the consequences of water contamination by structural materials and coatings in a loss-of-coolant accident. As solutions to the problems develop and are evaluated by the Regulatory Staff, appropriate action should be taken by the applicant on a reasonable time scale."

Dresden 2, Sep. 10, 1969

"Many improvements in safety features and procedures have evolved since the Dresden Unit 2 provisional construction permit was granted, as a result of the work of reactor suppliers, the AEC, and others. Some of these improvements have been discussed in recent ACRS construction permit and operating license reports. The applicant has agreed to incorporate several of these improvements in Dresden Unit 2. These include an improved emergency cooling system, flooding protection for the emergency cooling pumps, provision of an interlock to prevent depressurization by the automatic pressure relief subsystem if low-pressure emergency core cooling pumping capability is lost, and installation of a strong motion seismograph."

Duane Arnold, Dec. 18, 1969 and Shoreham, Dec. 18, 1969 also Sequoyah, Feb. (except (c))

"Information on a number of items, identified in previous reports of the Committee, is to be provided by the applicant to the Regulatory Staff during construction. These include:

"(a) A study of means of preventing common failure modes from negating scram action and of design features to make tolerable the consequence of failure to scram during anticipated transients.

"(b) Review of development of systems to control buildup of hydrogen in the containment following a loss-of-coolant accident.

"(c) Analysis of methods to limit damage to the spent fuel pool and to reduce release of fission products in the event of a dropped fuel cask.

"Other problems related to boiling water reactors have been identified by the Regulatory Staff and the ACRS and cited in previous ACRS reports. The Committee feels that resolution of these items should apply equally to the Arnold plant."

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E... ...JM SUMMARY OF 196th'
MEETING 8/12-14/76

5. Midland Decision

Guidance from the Commission should be sought before the Committee expands upon the generic concerns noted in its construction permit report on the Midland Plant.

D. Midland Decision

The Chairman noted that the Federal District Court has found that the statement made by the Committee with regard to generic items in the Midland report lacked necessary specificity. It was anticipated that the Commission would request some action by the Committee to correct this deficiency. Action by the Committee would be deferred until such a request was received from the Commission.

A. Court Decisions on Midland and Vermont Yankee

L. V. Gossick noted that B. C. Rusche would inform the public via a press conference of the NRC positions resulting from the District Court of Appeal Decisions regarding the Midland and Vermont Yankee licensing actions. He noted that for the immediate future, NRC was not planning to issue any full power licenses, but did plan to permit Salem and Calvert Cliffs Plants to develop up to 1% full power in order to carry out a number of their preoperational tests. He stated that the NRC Legal Staff believed that these decisions will prevent the issuance of OLs, CPs and LWAs until the matters concerning waste management have been satisfactorily addressed.

FOIA-85-602

B/34

Midland

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Excerpt from:
Minutes of 202nd ACRS Meeting

Meeting Dates: February 10-12, 1977

VIII. <u>Executive Sessions</u> (Open to Public)

A. <u>Request for Further Clarifications of the ACRS Report on the Midland Plant</u>

The ACRS Executive Secretary noted receipt of a memorandum from F. J. Coufal, Chairman of the Atomic Safety and Licensing Board, dated January 28, 1977, requesting further clarification of the Committee's report on the Midland Plant, Units 1 and 2 (see Appendix XXVI). Mr. Coufal is of the opinion that the Committee's supplemental report on Midland Plant, Units 1 and 2, dated November 18, 1976, does ot meet the requirements set forth by District of Columbia Circuit Court Case, Aeschliman vs. NRC.

The Committee agreed to seek the advice of the General Counsel of NRC, and to consider a reply to this request at the 203rd ACRS Meeting to be held in March 1977.

FOIA-85-602

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midland

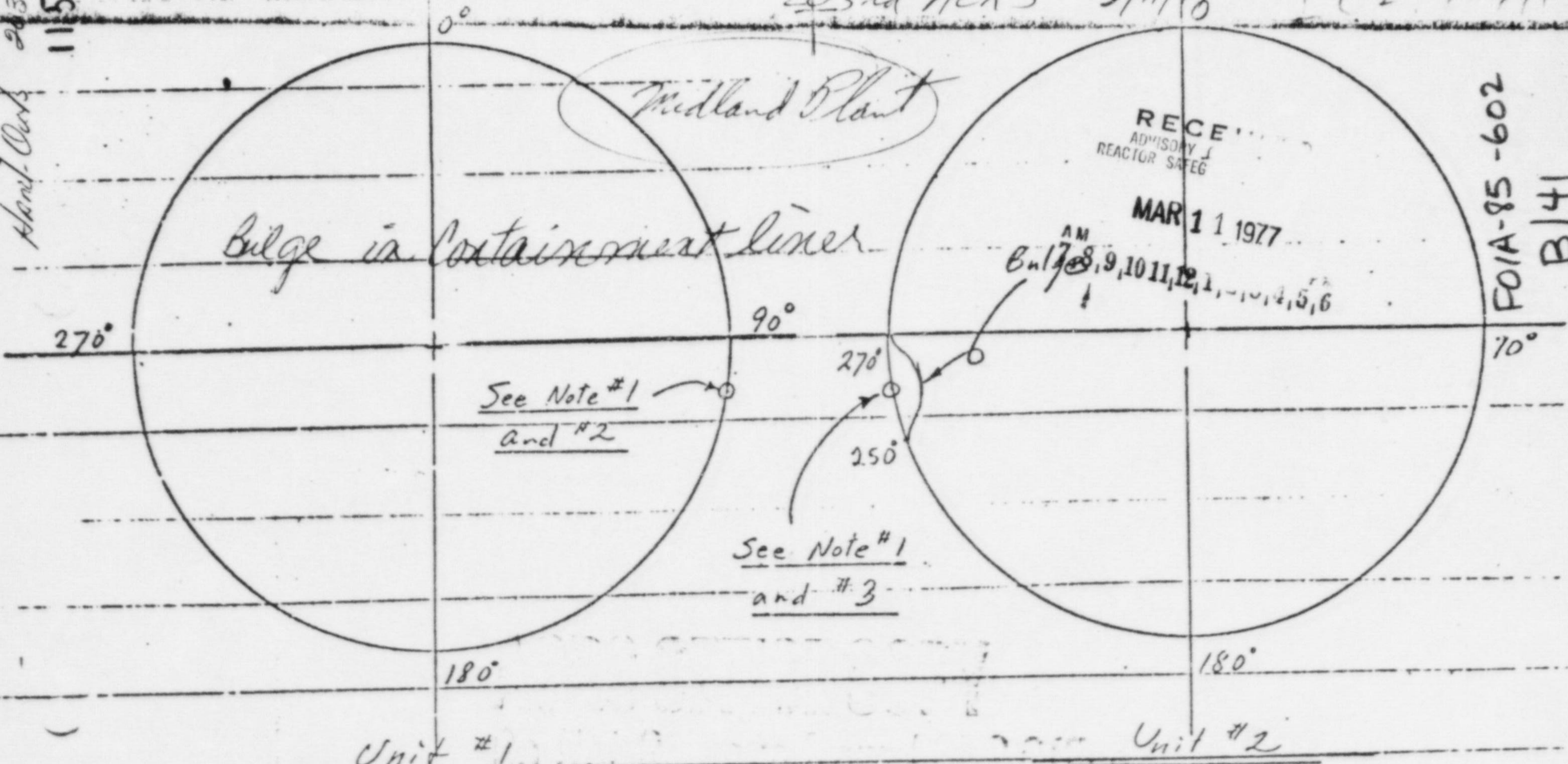
Carl Siefert - current events
203rd ACRS 3/11/77

FOIA-85-602
B/41

Hand Out

# Bilge in Containment liner

Midland Plant






Note #1

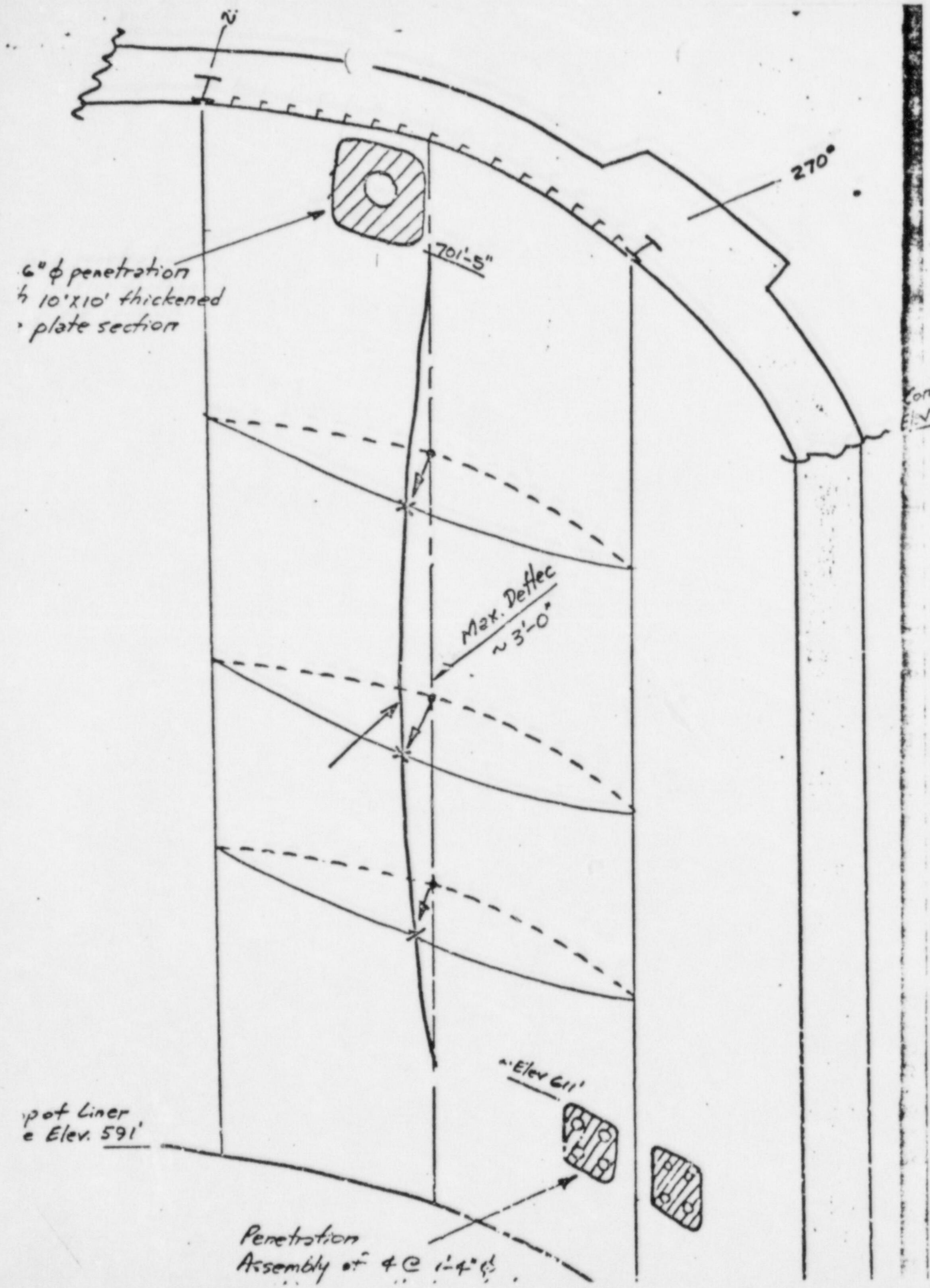
One 2" water line
One 2" air line
One 2" grease line
} within a few inches apart from each other

Note #2

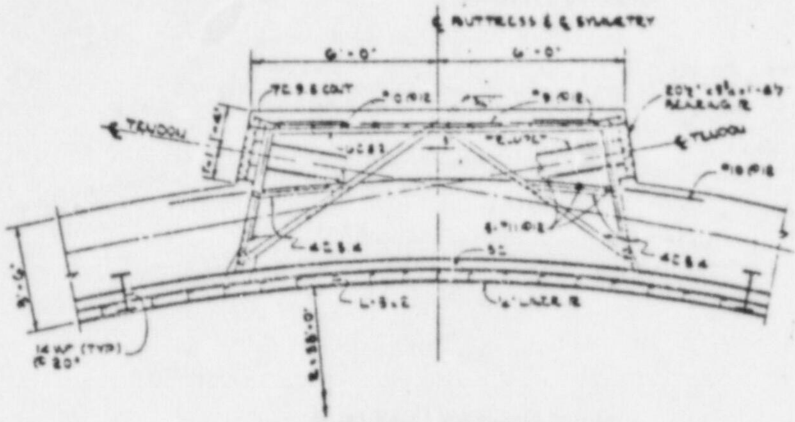
Approx. Location } Azimuth 101° @ El. 602'
" 99° @ El. 700'

Note #3

Approx. Location } Azimuth 259° @ El. 602'
" 261° @ El. 700'

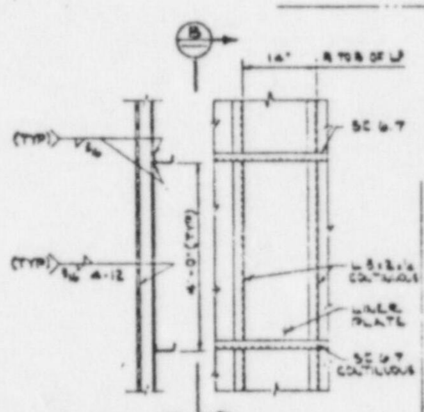


270°
.6" ϕ penetration
h 10'x10' thickened
plate section
701'-5"
Conc
Elv.
Max. Deflec
~ 3'-0"
Elev 611'
p of Liner
e Elev. 591'
Penetration
Assembly of 4 @ 1'-4" ¢s




BUTTRESS FRAMING PLAN

1/2" = 1'-0"




SECTION (B)

NTS

TYPICAL LINER PLATE STIFFENING DETAIL

| | |
|---|---|
| MIDLAND PLANT UNITS 1 & 2<br>CONSUMERS POWER COMPANY | |
| REACTOR BUILDING<br>TYPICAL DETAILS | A |
| 7220 | FIG. No 5-1 |

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Excerpt from
Minutes of 203rd ACRS Meeting

Meeting Date: March 10-12, 1[illegible]

V. Meeting With the NRC Staff on Recent Operating Experience, Licensing Actions, and Future Agenda

D. Midland 1: Containment Liner Problem

K. Seyfrit, NRC Staff, discussed a recently occurring problem at the Midland Plant, Unit 1, where a bulge developed in the containment liner. This plant is currently still in the construction stage. (For details of the bulge, see Appendix XXVIII.) He stated that the cause of the problem is believed to have been a leak in a water line used to cool the containment concrete during curing. Had the curing process been completed, this water line would have been grouted. He noted that this is a preliminary report, and that details will be reported at a later date.

K. Seyfrit stated that the Applicant has cut sections of the bulge away to clear debris. The method to be used to repair the liner has not yet been determined. The Applicant has not yet analyzed the pressure which caused the bulge to see whether or or not it was adequate to fail the liner welds.

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