



CHAIRMAN

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

May 29, 1981.

The Honorable Tom Beville, Chairman  
Subcommittee on Energy and Water  
Development  
Committee on Appropriations  
United States House of Representatives  
Washington, D.C. 20515

Dear Mr. Chairman:

This monthly status report is in response to the direction given in House Report 96-1093. Our seventh monthly status report is enclosed and covers the period from April 15, 1981 to May 15, 1981. This seventh report discusses the actions that were taken during the last month on operating reactors and licensing reviews of new facilities.

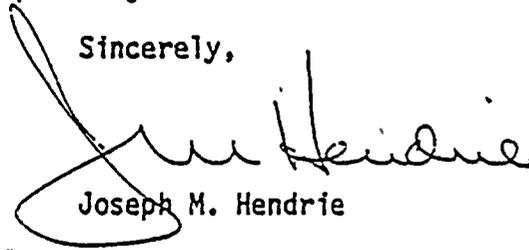
During this period three applicants reported revisions to their estimated construction completion dates. The estimated construction completion date for LaSalle 1 has been revised from June 1981 to September 1981. The estimated construction completion date for Susquehanna 1 has been revised from June 1981 to April 1982. The estimated construction completion date for Seabrook 1 has been revised from January 1983 to November 1983. Only Susquehanna 1 is a potentially delayed facility. Because of the applicant's revision of the estimated construction completion date, the delay estimated for this facility has been reduced from twelve to two months. This change has been incorporated into the DOE cost estimates.

In addition, the Washington Public Power Supply System reported that they are re-evaluating the estimated construction completion date for Washington Nuclear Project No. 2. The preliminary results of their evaluation, taking into account the impact of last year's extended labor dispute, indicates a scheduled fuel load date for WNP-2 of September 1983. This date was reported by the local news media on May 4, 1981. The applicant is presently re-evaluating the critical path milestones for the facility with an objective of achieving a fuel load date no later than December 1982. A meeting to discuss the review schedule for WNP-2 with the applicant is planned for late June 1981. After the meeting the review schedule will be modified as necessary.

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I would also like to note three recent actions that will be reported in more detail in the next monthly report. These are the Commission actions in approving a final rule change to Appendix B of Part 2 that will save two months for each operating license case in which a hearing is held, in publishing the Policy Statement on the Efficient Conduct of Licensing Proceedings, and in approving issuance of a full power operating license for Salem Unit 2.

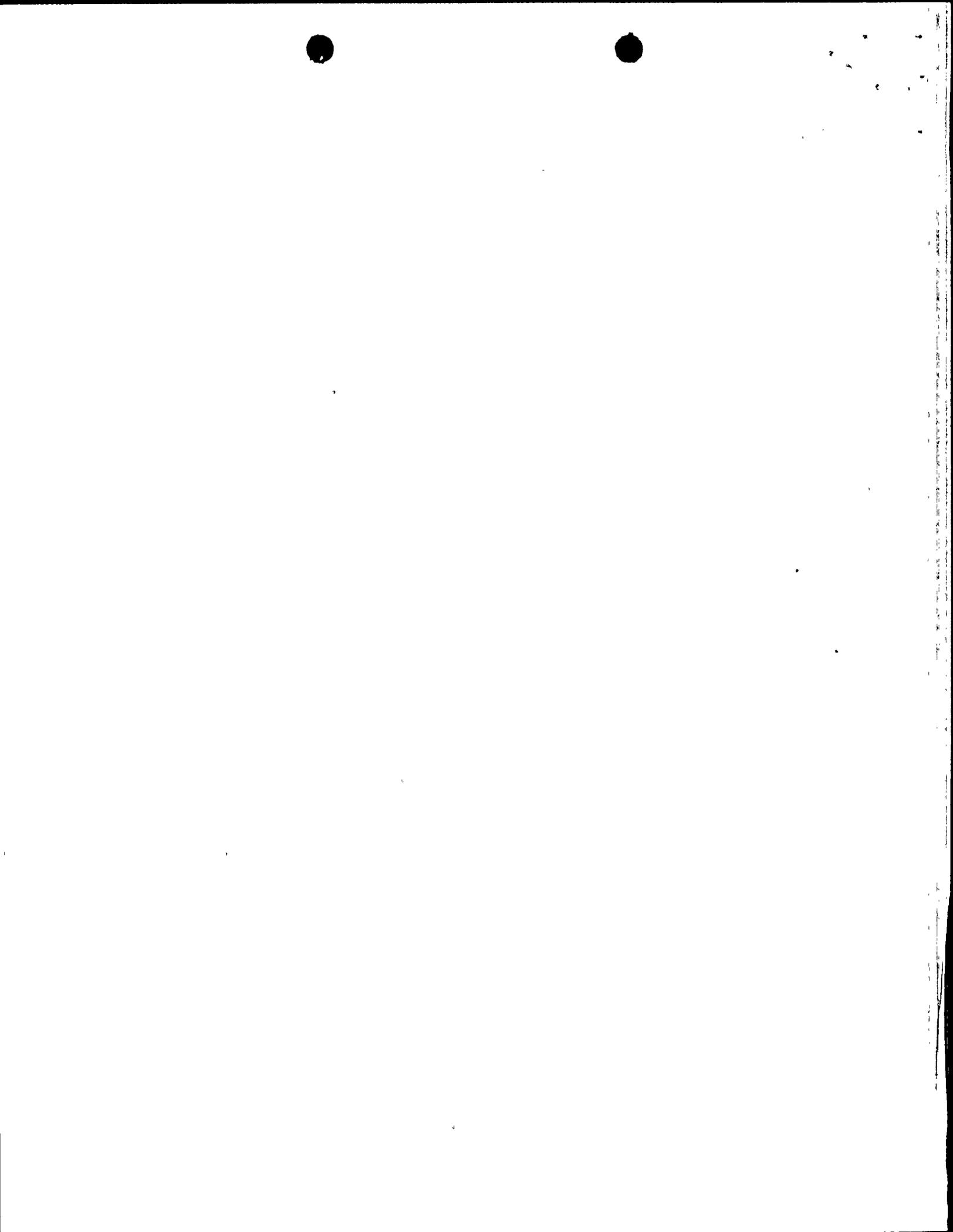
Sincerely,

A handwritten signature in cursive script, appearing to read "Joe Hendrie". The signature is written in black ink and is positioned above the printed name "Joseph M. Hendrie".

Joseph M. Hendrie

Enclosure:  
NRC Monthly Status Report  
to Congress

cc: The Honorable John T. Myers



NRC MONTHLY STATUS REPORT TO CONGRESS

This is the seventh monthly status report to Congress in response to the directions given in House Report 96-1093. This report provides a discussion of the major actions that were taken on operating reactors and on licensing reviews of new facilities during the period of time between April 15, 1981 and May 15, 1981.

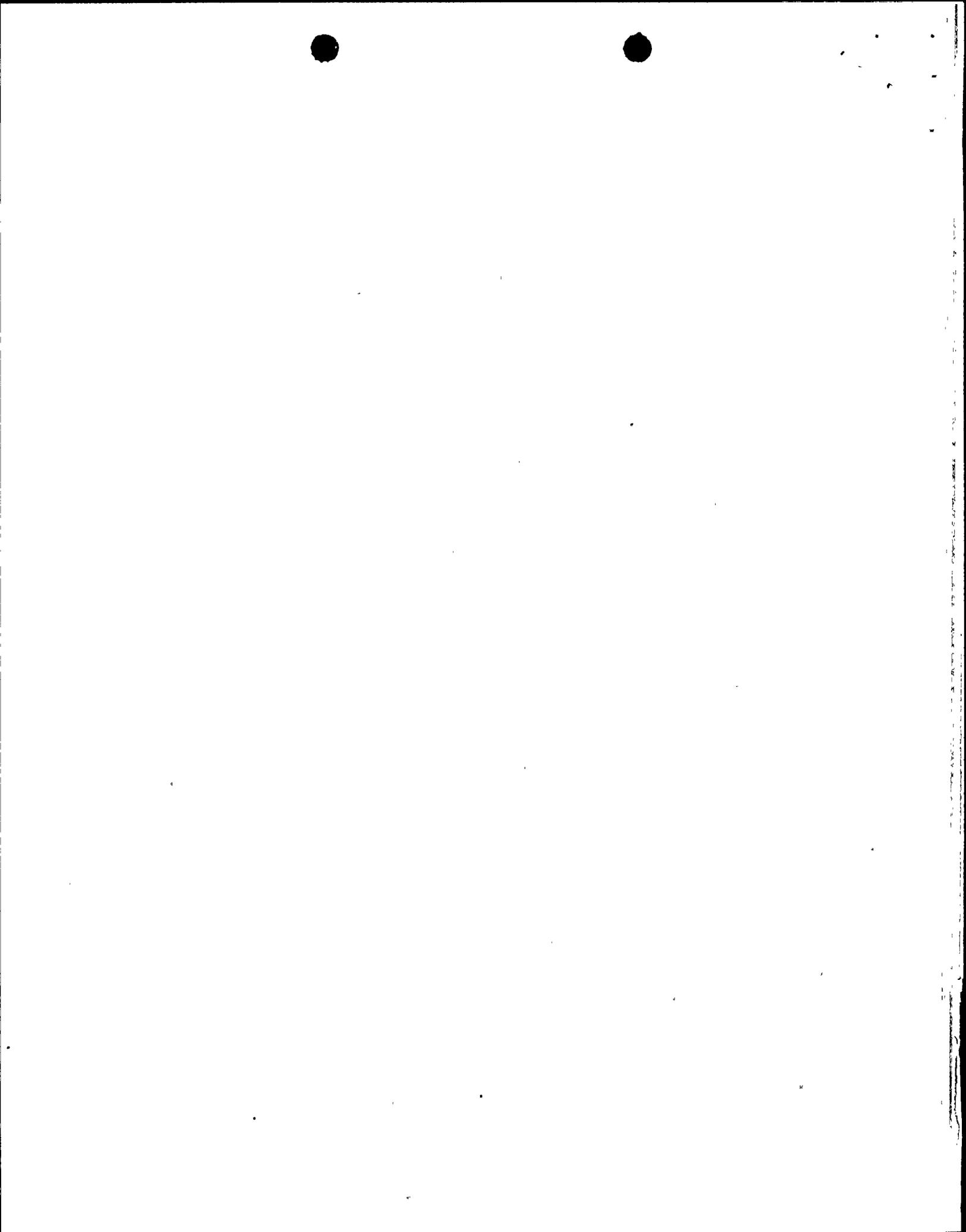
OPERATING REACTORS

Thermal Shock to Reactor Pressure Vessels

For the past several years the NRC and industry have been conducting research on the effects of thermal shock to reactor pressure vessels. Thermal shock could result from a sequence of events causing a rapid cool down of the reactor pressure vessel. After a thermal shock event, the structural integrity of the reactor pressure vessel could be jeopardized by the repressurization of the reactor pressure vessel.

Recently, research program results have been published which provide a better understanding of the potential severity of overcooling transients, and the expected behavior of reactor pressure vessel materials. These research programs include development of materials data and improved analytical methods for assessing reactor pressure vessel integrity. In addition, the staff evaluated overcooling events at pressurized water reactor plants and reviewed accident analyses to estimate the probability of a severe overcooling transient.

As a result of its evaluations to date, the staff has concluded that the probability of a severe overcooling transient is relatively low and that, based on present irradiation levels at operating reactors, reactor pressure



vessel failure from such an event is unlikely. Accordingly, the staff believes that no immediate licensing actions are required on operating reactors. However, the staff is continuing its investigation in this area. This continuing assessment, taken together with information being provided by industry Owners Groups, will permit the staff to define what long term actions the industry and the NRC must take to resolve this safety concern.

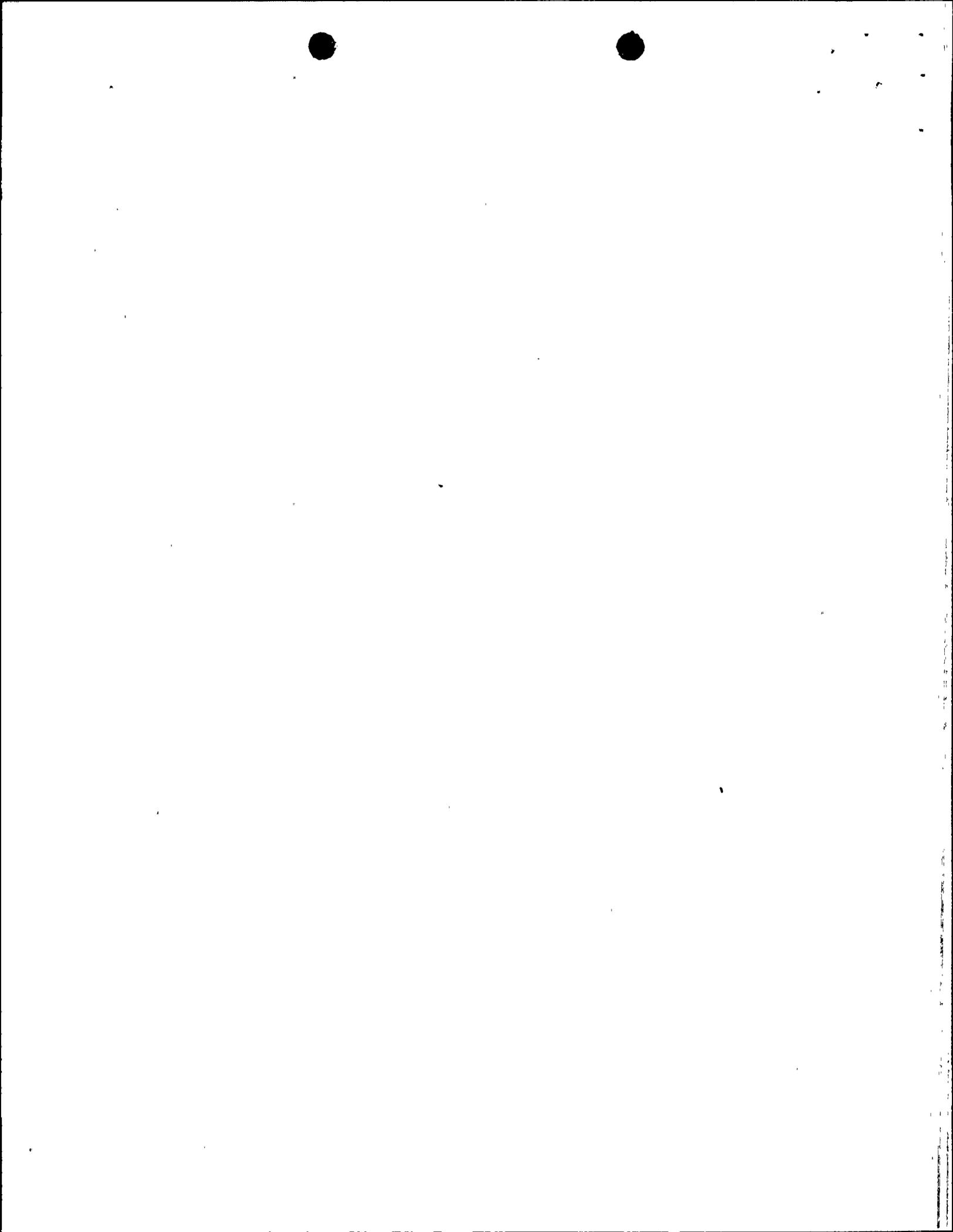
#### Pipe Breaks in the BWR Scram System

The NRC's Office of Analysis and Evaluation of Operational Data issued a report on April 3, 1981 entitled "Safety Concerns Associated with Pipe Breaks in the BWR Scram System". The report describes a potential sequence of events resulting in a degraded core condition. The sequence is based on a postulated break in the BWR scram discharge piping. A number of recommendations were made in the report to remedy the potential safety concerns.

A letter was sent to all BWR licensees on April 10, 1981 requiring a generic evaluation of the safety concerns within 45 days and a plant specific evaluation within 120 days. In addition, the staff held a meeting on April 28 to discuss these safety concerns with representatives of the BWR licensees and representatives of the General Electric Company -- the reactor vendor for the affected BWRs.

In response to the staff's April 10 request for a generic evaluation of the safety concerns, the General Electric Company provided on April 30 a generic analysis of the safety concerns associated with pipe breaks in the BWR scram system.

The staff is performing an accelerated review of the generic analysis. The staff's safety evaluation report on the generic analysis is scheduled to be completed by about May 29, 1981.



OPERATING LICENSE APPLICATIONS

Licensing Schedules

During the past month, the emphasis on licensing activities continued to be on OL applications. The present licensing schedules for plants projected by utilities to be completed in 1981 and 1982 are given in Table 1, and the licensing schedules for plants projected to be completed in 1983 are given in Table 2. The potential delays between construction completion and projected issuance of a full power license are presented based on the applicant's expected construction completion date. The applicants' estimated completion dates have historically proven optimistic, that is, earlier than actual construction completion dates, and therefore their use may overstate the delay. On the other hand, it is difficult to predict NRC's license issuance dates especially more than a year in advance. Thus the dates shown in Table 2 should not be considered definitive for either the licensee or the NRC.

Commissioners Ahearne and Bradford note the following table:

PROJECTED FUEL LOAD DATES

<u>Plant</u>	<u>NRC Estimate (2/81)</u>	<u>Licensee Estimate (Apr. Status Rpt.)</u>	<u>Licensee Estimate (May Status Rpt.)</u>
LaSalle	9/81	6/81 (Jan. 9, 1981)*	9/81 (May 6, 1981)*
Susquehanna	3/82	6/81 (Oct. 30, 1980)*	4/82 (May 4, 1981)*
WNP-2	7/83	7/82 (Feb. 1980)*	12/82-9/83 (May 13, 1981)*
Seabrook	7/84	1/83 (Jan. 6, 1980)*	11/83 (Apr. 15, 1981)*

The NRC has made changes to its regulations reducing the amount of time allocated for the Immediate Effectiveness Rule. All the schedules shown in Tables 1 and 2 are based on this time-saving measure.

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\*Date the licensee provided estimate

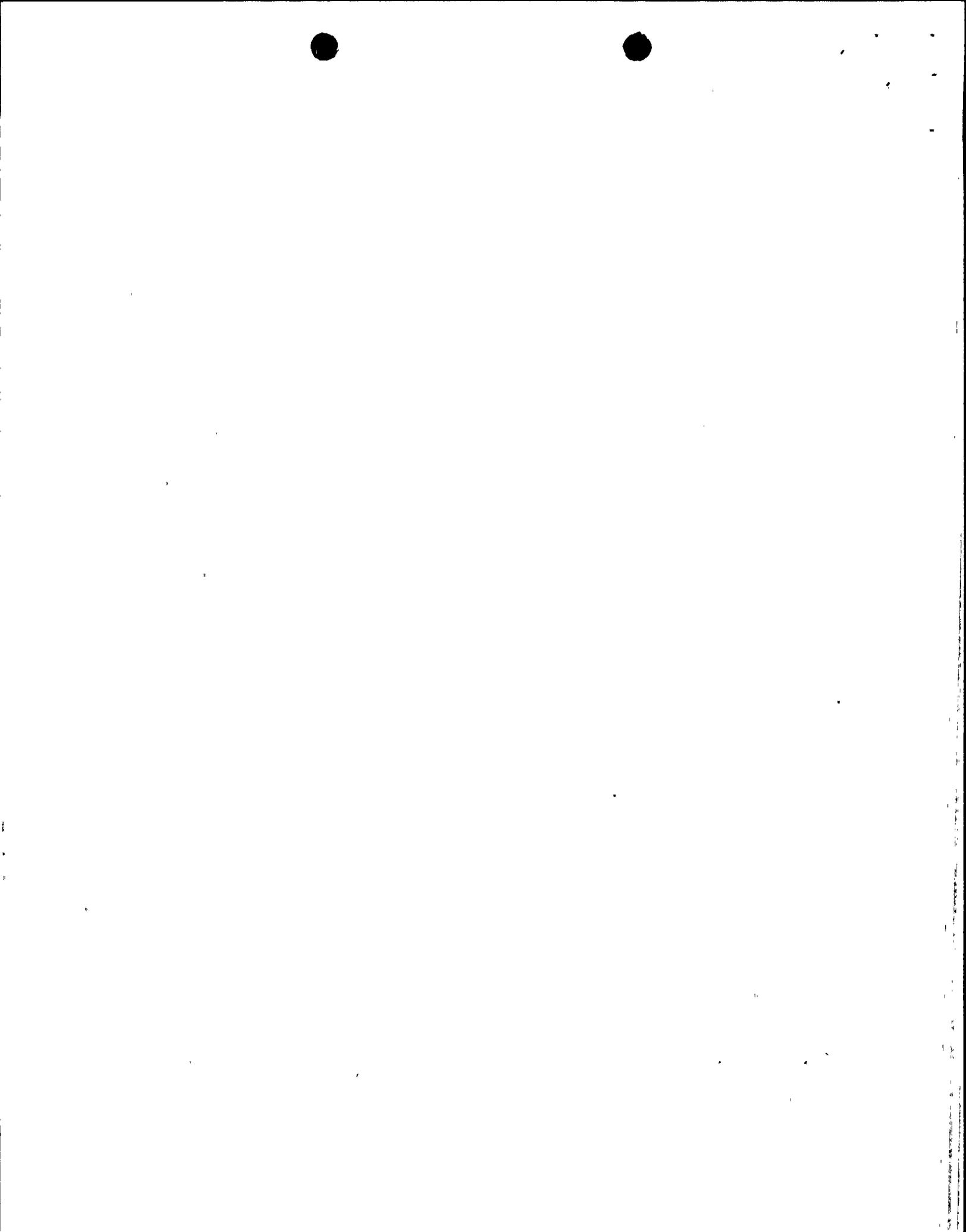
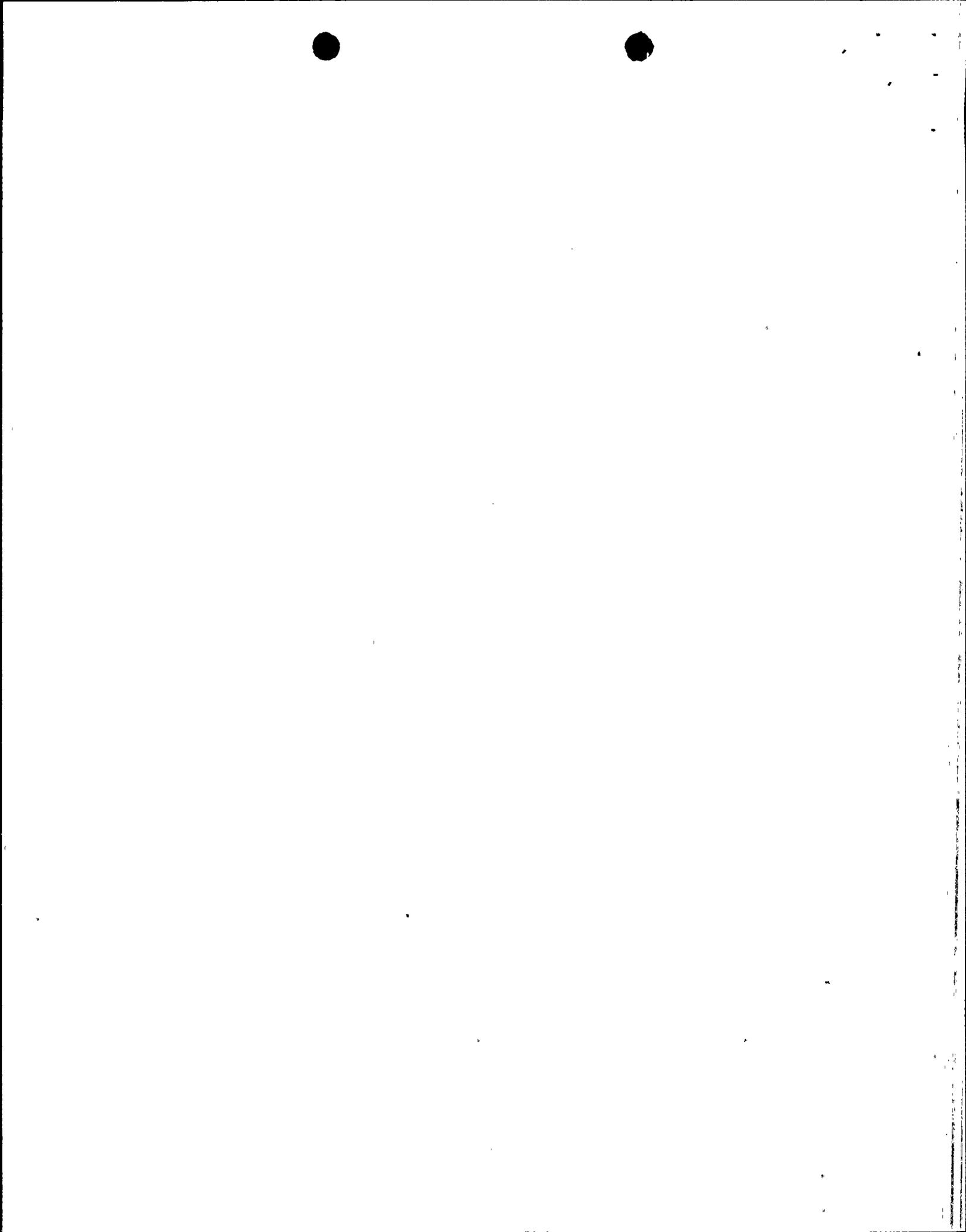


Table 1 schedules were developed on a case-by-case basis by the Office of Nuclear Reactor Regulation, the Office of the Executive Legal Director and the Atomic Safety and Licensing Board Panel. Table 2 schedules are based on the assumption of a standard eleven-month hearing process that takes into account the effect of both the change in the Immediate Effectiveness Rule and other rule changes related to the hearing and Commission review process under consideration by the Commission. Table 2 schedules were developed to complete the entire licensing process prior to the applicant's estimated construction completion date.

Recently three applicants reported revisions to their estimated construction completion dates. The estimated construction completion date for LaSalle 1 has been revised from June 1981 to September 1981. The estimated construction completion date for Susquehanna 1 has been revised from June 1981 to April 1982. The estimated construction completion date for Seabrook 1 has been revised from January 1983 to November 1983. Only Susquehanna 1 is a potentially delayed facility. Because of the applicant's revision of the estimated construction completion date, the delay estimated for this facility has been reduced from twelve to two months.

In addition, the Washington Public Power Supply System reported that they are re-evaluating the estimated construction completion date for Washington Nuclear Project No. 2. The preliminary results of their evaluation, taking into account the impact of last year's extended labor dispute, indicates a scheduled fuel load date for WNP-2 of September 1983. This date was reported by the local news media on May 4, 1981. The applicant is presently re-evaluating the critical path milestones for the facility with an objective of achieving a fuel load date no later than December 1982. A meeting to discuss the review



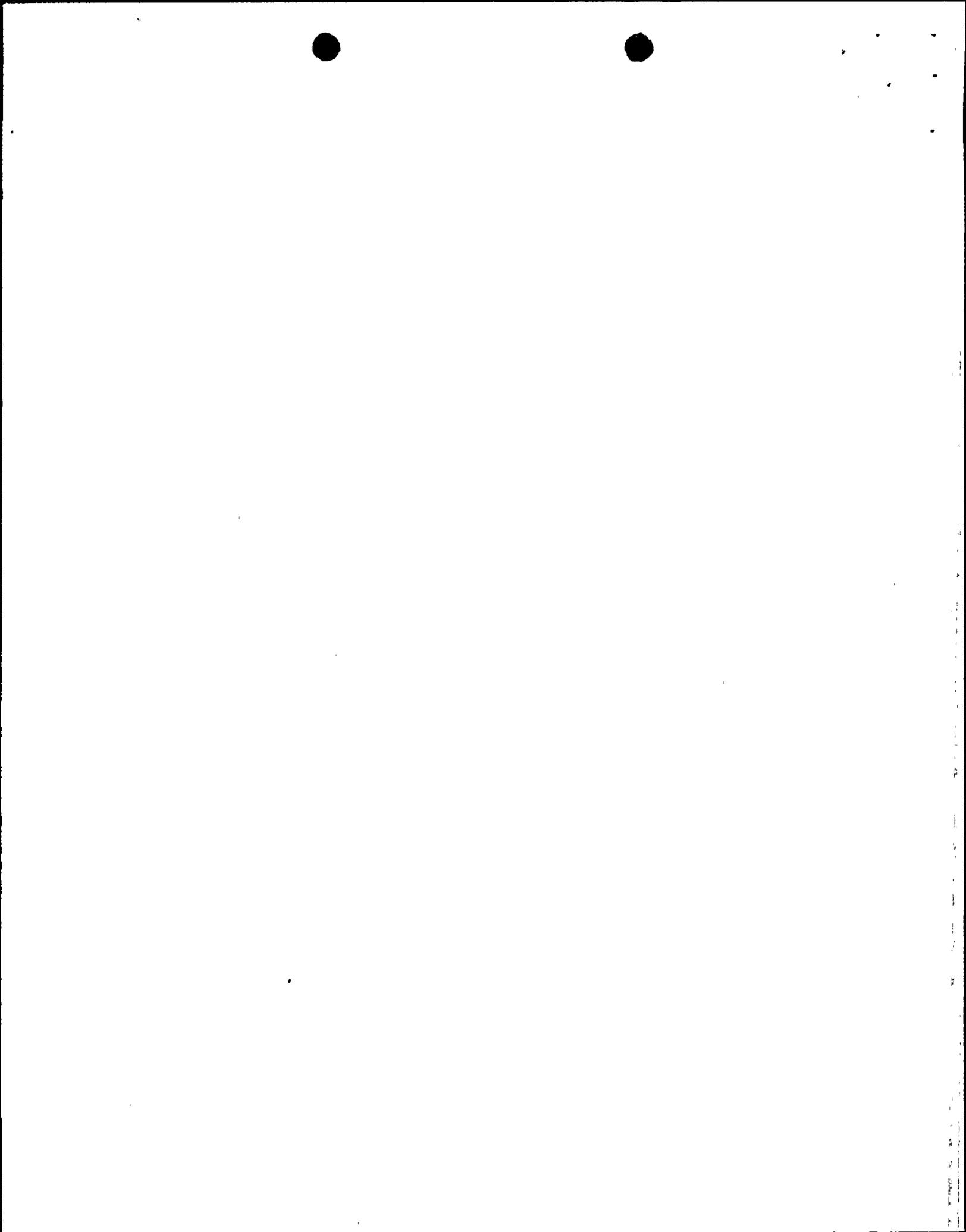
schedule for WNP-2 with the applicant is planned for late June 1981. After the meeting the review schedule will be modified as necessary.

Proposed Rule for TMI-2 Related Safety Requirements

The Commission is proposing to amend its regulations to incorporate additional TMI-2 safety-related requirements which must be met by OL applicants. The requirements, which were previously approved by the Commission and referenced in its December 1980 Policy Statement, resulted from intensive reviews of the lessons learned from the Three Mile Island accident and are in addition to those safety requirements already incorporated in the regulations. The proposed rule was issued for a 90-day public comment period on May 13, 1981 and is expected to reduce litigation related to these requirements in the licensing process.

These requirements for OL applicants were initially approved by the Commission in May 1980. Revisions to these requirements were approved in October 1980. These requirements are contained in "Clarification of TMI Action Plan Requirements" (NUREG-0737). Commission guidance to the NRC staff and licensing boards on use of these requirements in the review of OL applications and the subsequent public hearings was provided in a December 1980 Policy Statement.

In asking for public comment, the Commission expressed its particular interest in comments related to whether any of the requirements may be redundant with existing regulations; if some may not be needed at all; or if some are so specific and of such limited applicability that they should not be included in the regulations. In addition, the Commission is interested in public comments on the potential impact -- if the proposed amendment becomes an



effective rule -- on OL applications which presently are being considered by licensing boards -- particularly those where the record already might be closed.

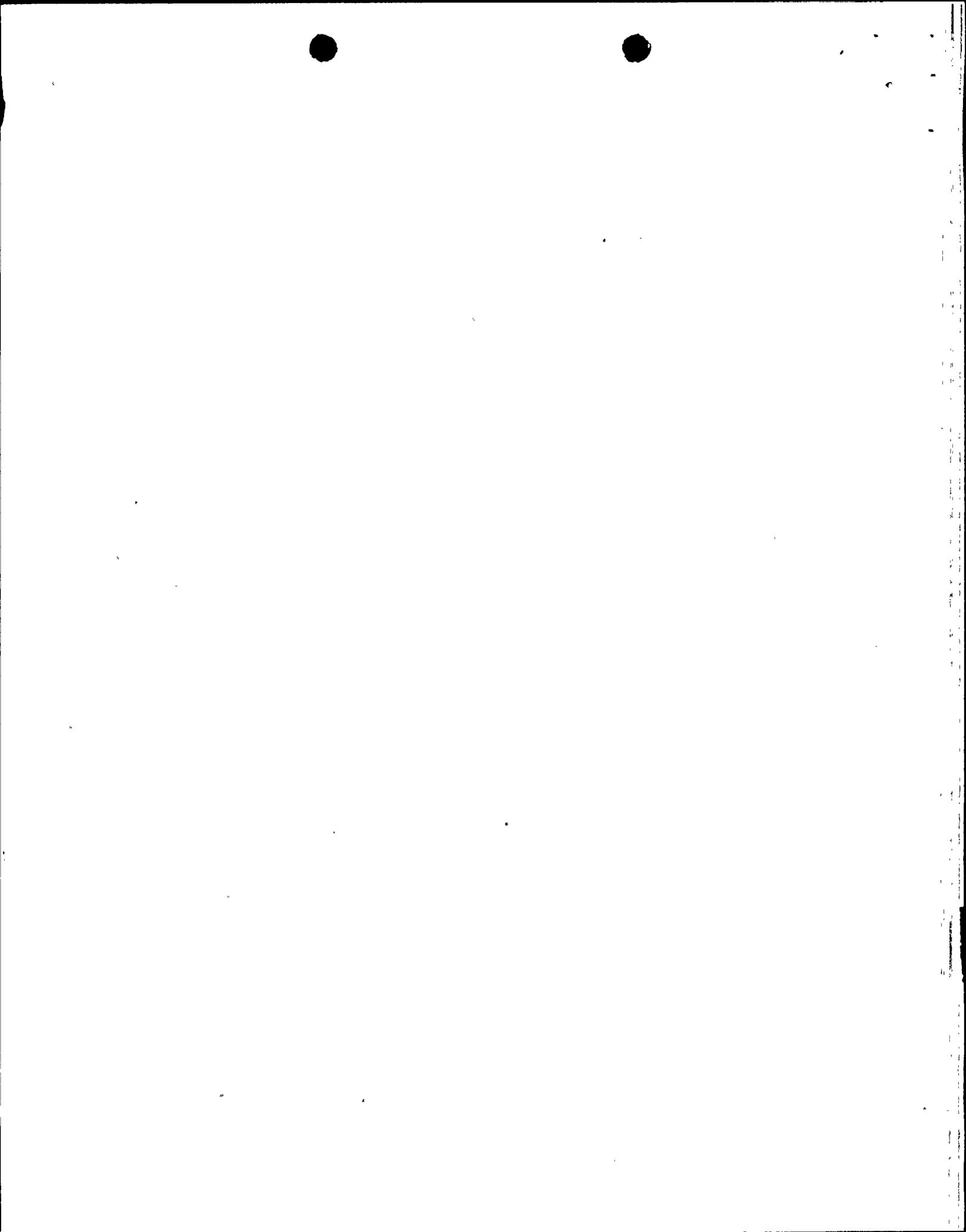
#### Cost Estimates

The NRC is obtaining cost estimates associated with the licensing delays from the Department of Energy on a monthly basis. These estimates are set forth in Attachment 1. Footnote 3 to Table T of the DOE report states that NRC projects a return to service for TMI Unit 1 in October 1981. This is inaccurate. An NRC licensing board decision, not a return to service, is expected in October 1981. The Commission has expressed no view with respect to the restart of Unit 1, but has indicated that it would attempt to make a decision on the effectiveness of a board decision authorizing restart within 35 days of the board's decision.

#### Commission Actions to Improve the Licensing Process

The Commission issued in the Federal Register on March 13, 1981 proposed amendments to its Rules of Practice that would permit more timely completion of hearings. The public comment period for the proposed amendments expired on April 7, 1981. To date, responses from over six hundred commentors have been received. The comments have been analysed by the staff and a final rule has been prepared for Commission consideration.

The Commission has changed its Rules of Practice to permit more immediate operation of nuclear power plants which have received favorable Atomic Safety and Licensing Board initial decisions on fuel loading and low power testing or full power operating licenses. The amendments provide that Commission decisions on whether favorable initial decisions should become effective will be made within 10 days for fuel loading and low power testing licenses and 30 days for full power licenses. The prior rules provided for such Commission decisions within 80 days.

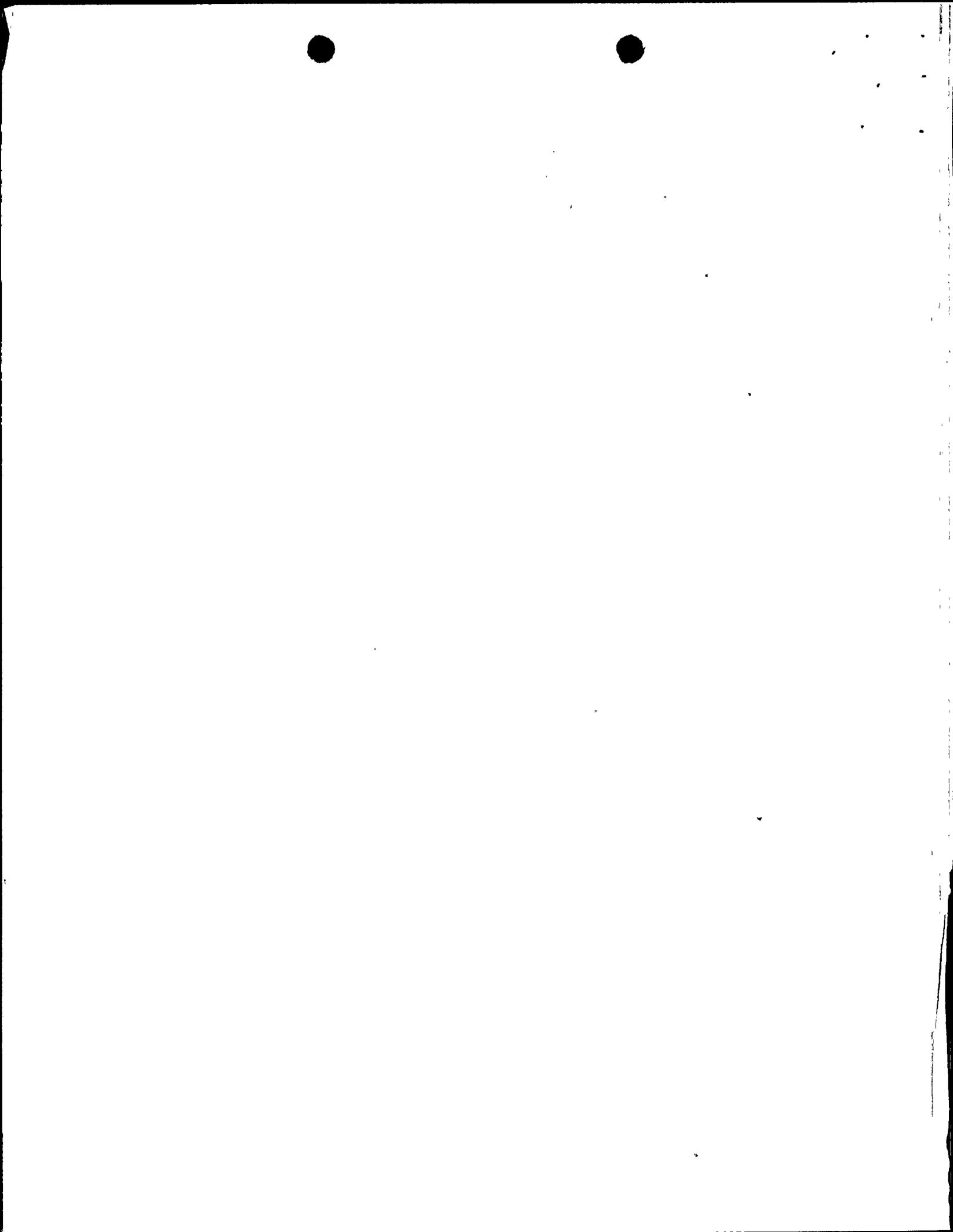


Also, the Commission has issued a Policy Statement on the Efficient Conduct of Licensing Proceedings. The Policy Statement was issued to emphasize the Commission's commitment to a hearing process which will produce sound licensing decisions in a fair and timely manner.

PLANT-BY-PLANT DISCUSSIONS OF DELAYED PLANTS

The following is a discussion of the status of each of the delayed facilities.

1. San Onofre Unit 2 - The FES was issued on May 6, 1981. The SSER was issued on May 8, 1981. The hearing is scheduled to start in June 1981. A decision on the full power license is projected for February 1982. Based on the current schedule an eight-month delay is projected for this facility.
2. Diablo Canyon 1 and 2 - An updated SER for low power operation was issued March 5, 1981. The hearing for low power operation began on May 19. A licensing decision on low power operation is scheduled for December-1981. The SER for full power operation was issued April 2, 1981. The full power hearing is scheduled to begin in September. A decision on a full power license is projected for January 1982. A twelve-month delay is projected for Unit 1 and a three-month delay is projected for Unit 2.
3. Shoreham Unit 1 - The SER for Shoreham 1 was issued on April 10, 1981 with a number of open items requiring further information from the applicant. Sixty-one such items were identified. Because of the large number and significance of the open items, the ACRS deferred its review of this case pending a more complete resolution of the open items. The applicant has committed to provide by the end of May 1981 a large portion of their responses to the open items, including the TMI requirements.

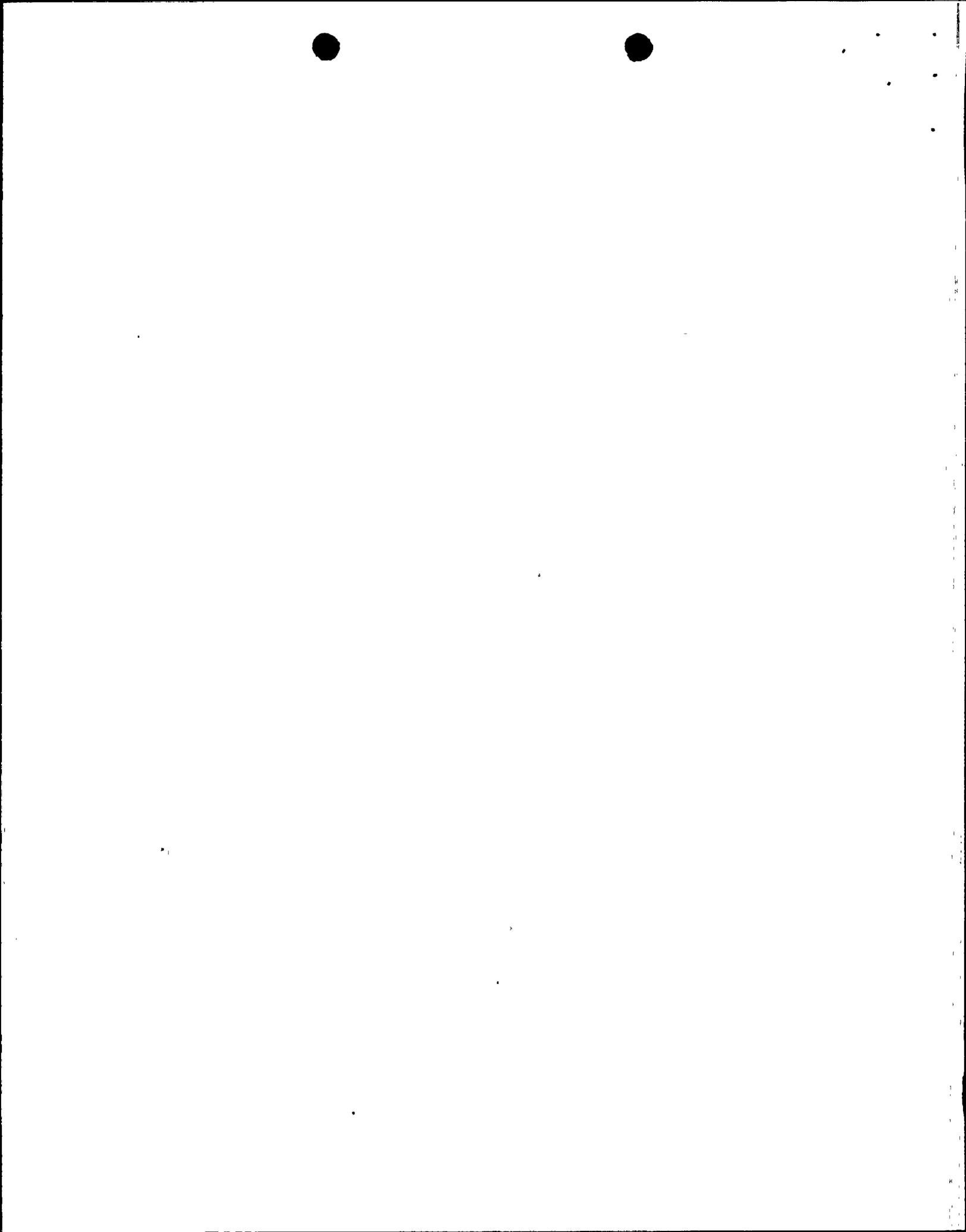


The estimated construction completion date is May 1982. A decision regarding a full power license is projected for August 1982. A three-month delay is projected for this facility.

4. Summer Unit 1 - The SSER was issued on April 28, 1981. The hearing is scheduled to start in June 1981. A decision for a full power license is projected for January 1982. A five-month delay is projected for this facility.
5. Susquehanna Unit 1 - The SER for Susquehanna 1 was issued on April 10, 1981 with 103 open items. Because of the large number and significance of the open items, the ACRS deferred its review of this case pending a more complete resolution of the open items. The applicant has committed to provide by June 1981 most of the required information.

The applicant reported a revision to their estimated construction completion date from June 1981 to April 1982. A decision on the full power license is projected for June 1982. Because of the applicant's revision of the estimated construction completion date, the delay projected for this facility has been reduced from twelve to two months.

6. Zimmer Unit 1 - The Zimmer SSER is scheduled for issuance on May 29, 1981. The Zimmer hearing is scheduled to recommence in October 1981. A decision on the full power license is projected for May 1982. A six-month delay is projected for this facility.
7. Waterford Unit 3 - The DES was issued on May 1, 1981. The SER for Waterford Unit 3 is scheduled to be issued on May 30, 1981. The estimated construction completion date is October 1982. A decision regarding a full power license is projected for November 1982. A delay of one month is projected for this facility.



8. Comanche Peak Unit 1 - The DES was issued on May 15, 1981. The SER for Comanche Peak is scheduled to be issued on June 11, 1981. The estimated construction completion date is December 1981. A decision regarding the full power license is projected for October 1982. A ten-month delay is projected for this facility.
9. McGuire Unit 1 - The SER for low power operation at McGuire Unit 1 was issued January 8, 1981. A fuel loading and zero power testing license was issued January 23, 1981. The hearing for a full power license started on February 24, and was completed on March 19, 1981. The ASLB issued an initial decision on May 26, 1981. A Commission decision on a full power license is projected for June 1981. A five-month delay is projected for this facility.

#### FULL POWER LICENSES

##### Full Power License for Salem Unit 2

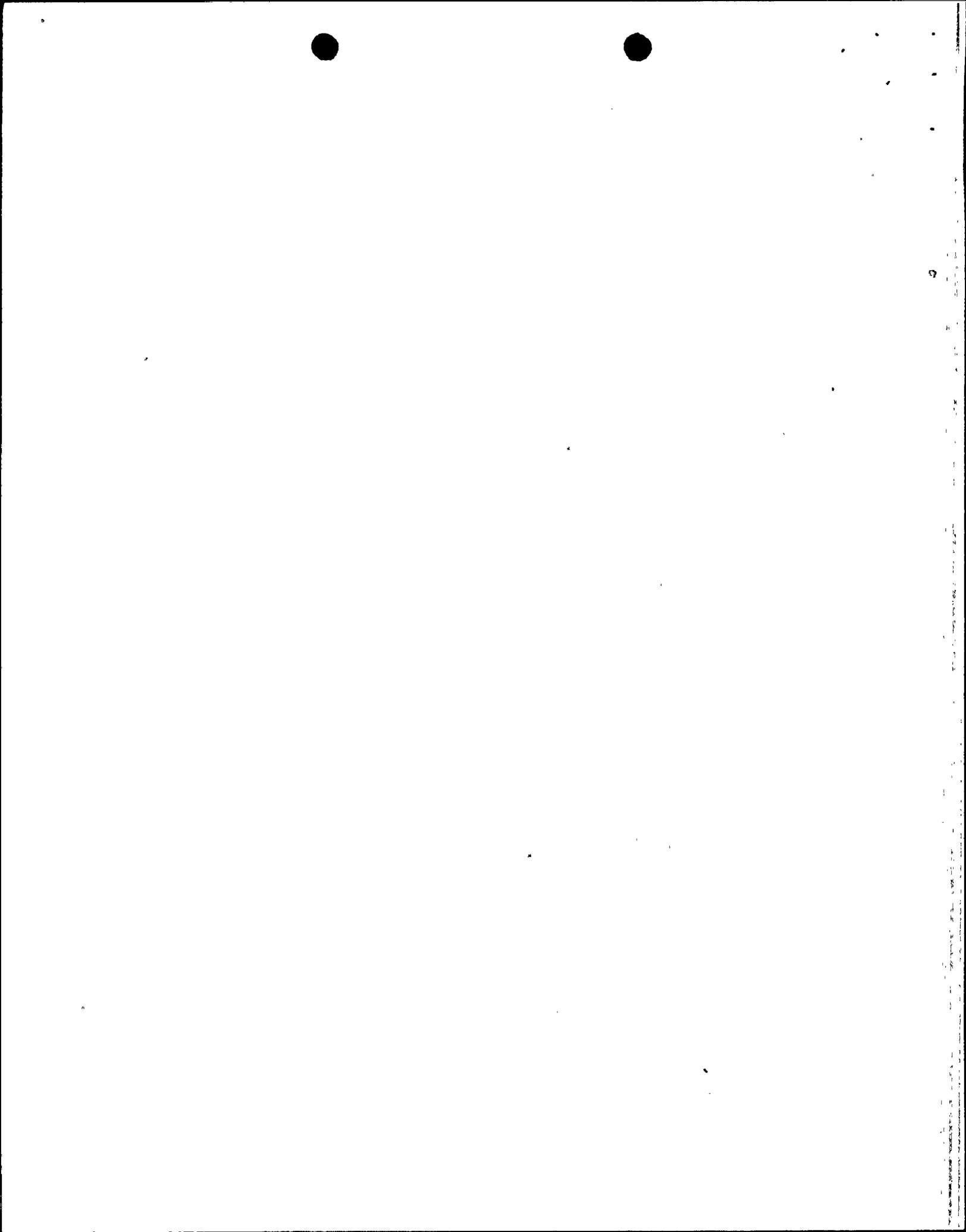
The SSER on all matters except for emergency preparedness was issued in January 1981. A joint exercise (including NRC, FEMA, the utility, local and State agencies) was conducted on April 8, 1981. A favorable report from FEMA on the adequacy of off-site emergency preparedness was received on April 24, 1981. Since the issuance of the January 1981 SSER the staff has identified additional items related to fire protection that required review prior to the licensing of Salem 2, in particular failures of the licensee to provide promised information and to complete items on the licensee's schedule. Staff review of the fire protection matter was completed in mid-May. The SSER on emergency preparedness and fire protection was issued on May 15, 1981. A full power license for Salem Unit 2 was issued on May 20, 1981.

Full Power License for Sequoyah Unit 2

The SSER for a full power license for Sequoyah Unit 2 is scheduled to be issued on May 26, 1981. A Commission decision on the issuance of a full power license is anticipated in early June.

CONSTRUCTION PERMIT APPLICATIONS

The Commission is completing its efforts to develop a new rule concerning the manner and extent to which new requirements resulting from the Three Mile Island 2 accident (TMI Action Plan) should be applied to pending CP and OL applications. The Commission published a proposed rule on TMI-related construction permit requirements in the Federal Register for public comment on March 23, 1981. The public comment period for the proposed rule expired April 13. The staff has reviewed the public comments that were received from over 34 commentors, and has prepared a final rule for Commission consideration. Following a Commission decision on this rule, detailed schedules will be provided for the pending CP applications.



Tables:

1. Licensing Schedules CY 1981 - 1982 Plants
2. Licensing Schedules CY 1983 Plants

Attachments:

DOE Estimates of Costs Due to Licensing Delays

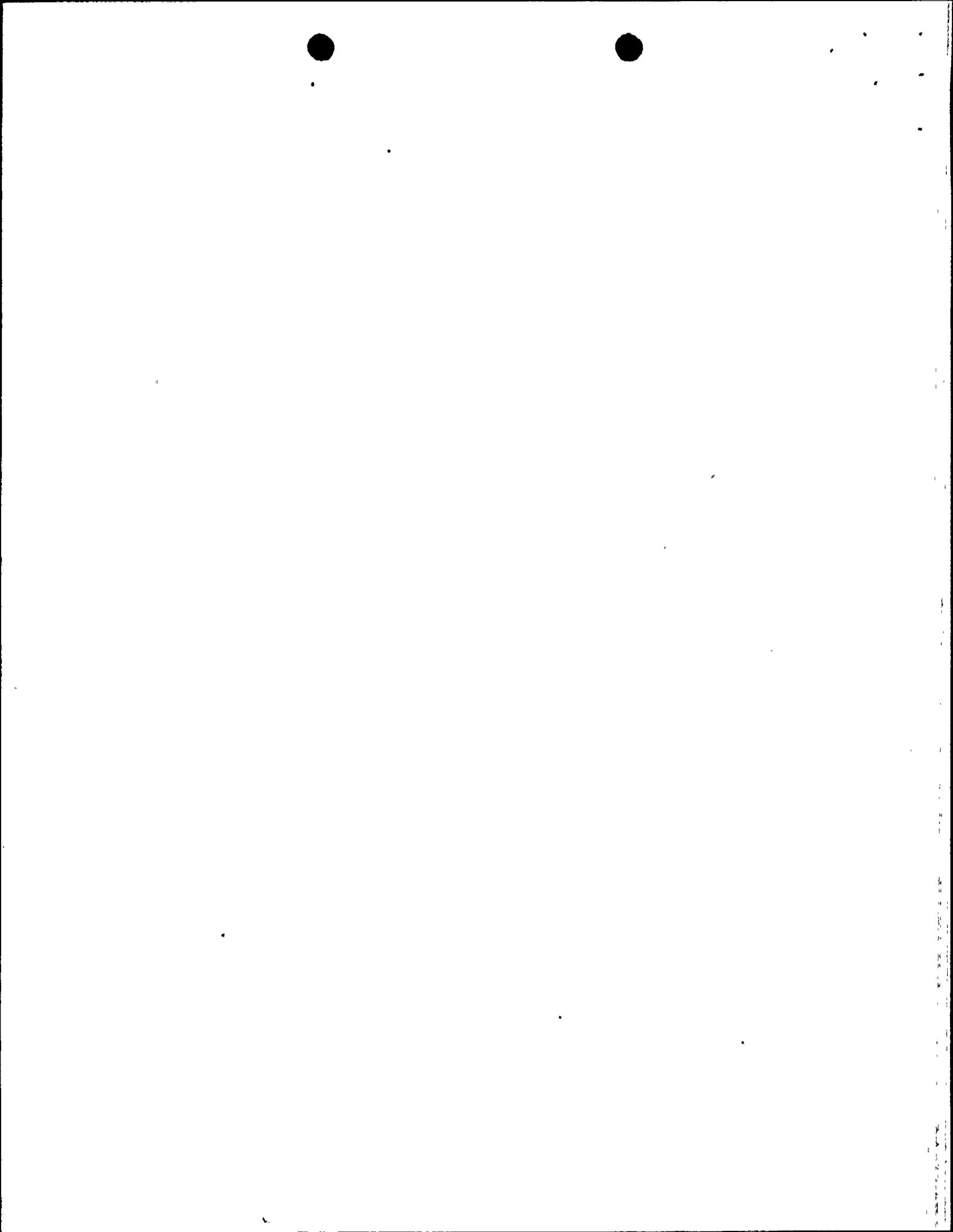


TABLE 1

CY 1981 - 1982 PLANTS

Division of Licensing 5/20/81

Plant	Estimated Delay (Months)	Issue DES	SER		ACRS Mtg	Issue FES	SSER		Start of Hearing	ASLB Initial Decision	Commission Decision Date	Applicant Construction Completion
			Staff Technical Input to DL	Issue SER			Staff Technical Input to DL	Issue SSER				
LaSalle 1	0	C	C	C	C	C	5/15/81	5/29/81	None	None	06/81	09/81
LaSalle 2	0	C	C	C	C	C	4/01/82	5/01/82	None	None	06/82	06/82
San Onofre 2	8	C	C	C	C	C	C	C	07/81	01/82	02/82	06/81
San Onofre 3	0	C	C	C	C	C	6/01/82	7/01/82	07/81	01/82	08/82	08/82
Diablo Canyon 1	12	C	C	C	C	C	C	C	09/81	12/81	01/82	01/81
Diablo Canyon 2	3	C	C	C	C	C	C	C	09/81	12/81	01/82	10/81
McGuire 1	5	C	C	C	C	C	C	C	C	C	06/81	01/81
McGuire 2	0	C	C	C	C	C	4/01/82	5/01/82	C	06/81	06/82	06/82
Shoreham 1	3	C	C	C 1/	8/06/81	C	8/20/81	8/20/81	01/82	07/82	08/82	05/82
Summer 1	5	C	C	C	C	5/15/81	C	C	06/81	12/81	01/82	08/81
Susquehanna 1	2	C	C	C 1/	8/06/81	6/15/81	8/20/81	8/20/81	10/81	05/82	06/82	04/82
Sequoyah 2	0	C	C	C	C	C	5/15/81	5/26/81	None	None	06/81	05/81
Zimmer 1	6	C	C	C	C	C	5/01/81	5/29/81	10/81	04/82	05/82	11/81
Waterford 3	1	C	5/08/81	5/30/81	7/09/81	8/08/81	7/16/81	7/31/81	03/82	10/82	11/82	10/82
Comanche Peak 1	10	C	5/22/81	6/11/81	7/09/81	8/12/81	7/17/81	8/12/81	01/82	09/82	10/82	12/81
Ferrel 2	0	C	6/10/81	6/30/81	8/06/81	8/31/81	8/14/81	8/31/81	02/82	08/82	09/82	11/82
Grand Gulf 1	0	5/31/81	8/14/81	9/07/81	10/13/81	9/15/81	10/25/81	11/15/81	None	None	12/81	12/81
Callaway 1	0	9/25/81	9/11/81	10/09/81	11/12/81	1/15/82	11/20/81	11/27/81	04/82	09/82	10/82	10/82
St. Lucie 2	0	9/25/81	9/11/81	10/09/81	11/12/81	1/15/82	11/20/81	11/27/81	04/82	09/82	10/82	10/82
Watts Bar 1	0	C	9/11/81	10/09/81	11/12/81	C	11/26/81	12/11/81	None	None	01/82	06/82
Palo Verde 1	0	10/23/81	10/09/81	11/06/81	12/10/81	2/12/82	12/18/82	12/31/81	05/82	10/82	11/82	11/82
WNP-2	0	7/31/81	2/12/82	3/12/82	4/09/82	12/31/81	4/30/82	5/28/82	None	None	07/82	12/82

1/ SER has been issued; Pre-ACRS SSER is scheduled to be issued June 26, 1981

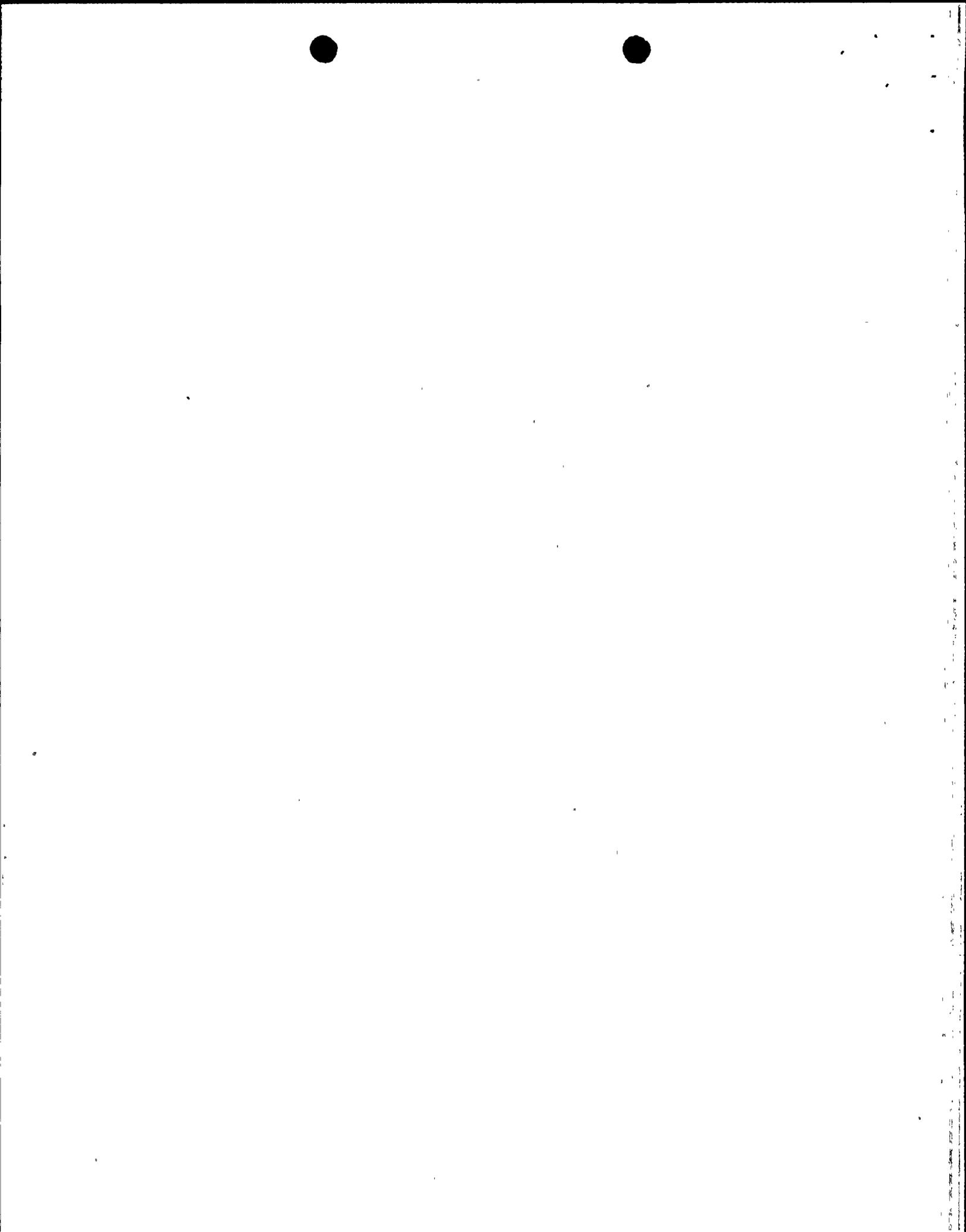


TABLE 2

CY 1983 PLANS

DIVISION OF LICENSING -- 5/15/81

<u>Plant</u>	<u>Estimated Delay (Months)</u>	<u>Issue DES</u>	<u>Issue SER</u>	<u>ACRS MTG</u>	<u>ISSUE FES</u>	<u>Issue SSER</u>	<u>Start of hearing</u>	<u>ASLB Initial Decision</u>	<u>NRC Decision Date</u>	<u>Applicant Construction Completion</u>
Seabrook 1/2	0	11/81	01/82	02/82	03/82	02/82	07/82	12/82	01/83	11/83
Clinton 1	0	11/81	01/82	02/82	03/82	02/82	07/82	12/82	01/83	01/83
Wolf Creek 1	0	01/82	04/82	05/82	06/82	05/82	10/82	03/83	04/83	04/83
Dyron 1/2	0	01/82	04/82	05/82	06/82	05/82	10/82	03/83	04/83	04/83
Perry 1/2	0	02/82	05/82	06/82	07/82	06/82	11/82	04/83	05/83	05/83
Hilland 1/2	0	04/82	07/82	08/82	09/82	08/82	01/83	06/83	07/83	07/83
Catawba 1/2	0	05/82	08/82	09/82	10/82	09/82	02/83	07/83	08/83	08/83
So. Texas 1/2	0	06/82	09/82	10/82	11/82	10/82	03/83	08/83	09/83	09/83
River Bend 1/2	0	07/82	10/82	11/82	12/82	11/82	04/83	09/83	10/83	10/83

