

COMANCHE PEAK PLAN FOR
THE COMPLETION OF OUTSTANDING
REGULATORY ACTIONS

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COMANCHE PEAK PLAN FOR THE COMPLETION OF OUTSTANDING REGULATORY ACTIONS

I. PURPOSE AND SCOPE

On March 12, 1984, the EDO directed NRR to manage all necessary NPC actions leading to licensing decisions for Comanche Peak and Waterford. A copy of that directive is included as Attachment 1. This plan establishes the program for Comanche Peak.

The purpose of this plan is to assure the overall coordination and integration of the outstanding regulatory actions regarding Comanche Peak, and achieving their resolution prior to a licensing decision. This plan encompasses all licensing, inspection, hearing, and allegation issues. Further, this plan addresses the scope of the work needed, specifies the critical path issues, identifies the responsible line organization, the schedule for completion, and (where applicable) the need for additional resources to meet the schedule.

The planned completion date for all regulatory actions is assumed to be October 1, 1984, and resource needs are predicated on that assumption. A status report will be issued to management every two weeks starting two weeks after the approval of the plan.

II. BACKGROUND

Comanche Peak Steam Electric Station Unit 1 is in the final stages of the operating license review process. The Construction Permits for Unit 1 and 2 were issued on December 19, 1974. Texas Utilities docketed their application for operating licenses on April 25, 1978. The Final Environmental Statement was issued September 24, 1981. The Safety Evaluation Report (SER) was issued on July 14, 1981. Because of the large number of outstanding issues identified in the SER, the staff recommended delaying the ACRS review. SER Supplement No. 1 was issued on October 16, 1981, and the ACRS meeting was held on November 13, 1981. The ACRS, by letter dated November 17, 1981, supported issuance of an operating license. The latest SER supplement was issued on November 23, 1983.

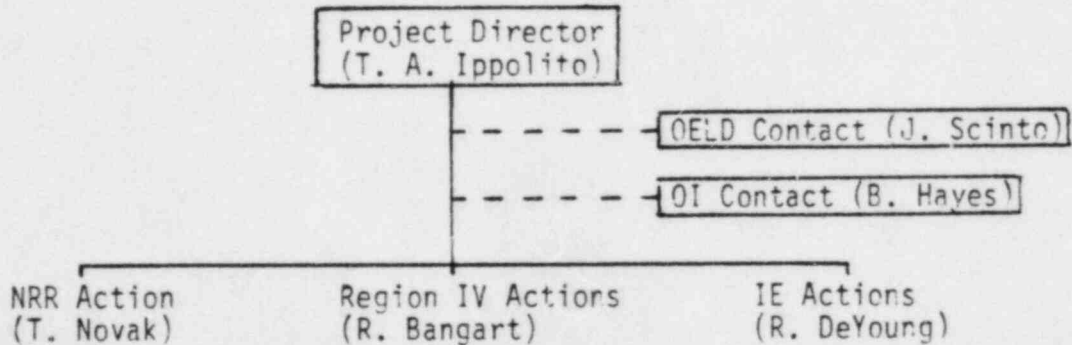
Comanche Peak has been in a heavily contested hearing for over two years. All but one contention have been dismissed. The remaining contention questions the ability of the applicant's Quality Assurance/Quality Control Program to prevent deficiencies in the design and construction of the plant. The Licensing Board has admitted many allegations of design and construction deficiencies into the hearing as relevant to this contention.

The Applicants are currently projecting a fuel load date for Unit 1 to be in late September 1984. The basis for this projection was provided to the staff on May 7, 1984. This fuel load date appears achievable but allows no flexibility for unexpected events in a very tight schedule. The number of hearing issues and uncertainty regarding the timing of the Licensing Board's initial decision may impact the fuel load.

III. PLAN FOR THE COMPLETION OF OUTSTANDING REGULATORY ACTIONS

This plan describes the method in which coordinated regulatory actions are to be taken by the staff to be ready to support an NRC decision regarding Comanche Peak licensing. As stated in the Purpose, the plan encompasses all licensing, hearing, inspection, and allegation issues. This summary addresses the scope of work needed, identifies the responsible line organization, the schedule for completion, and the resource needs to meet the schedule.

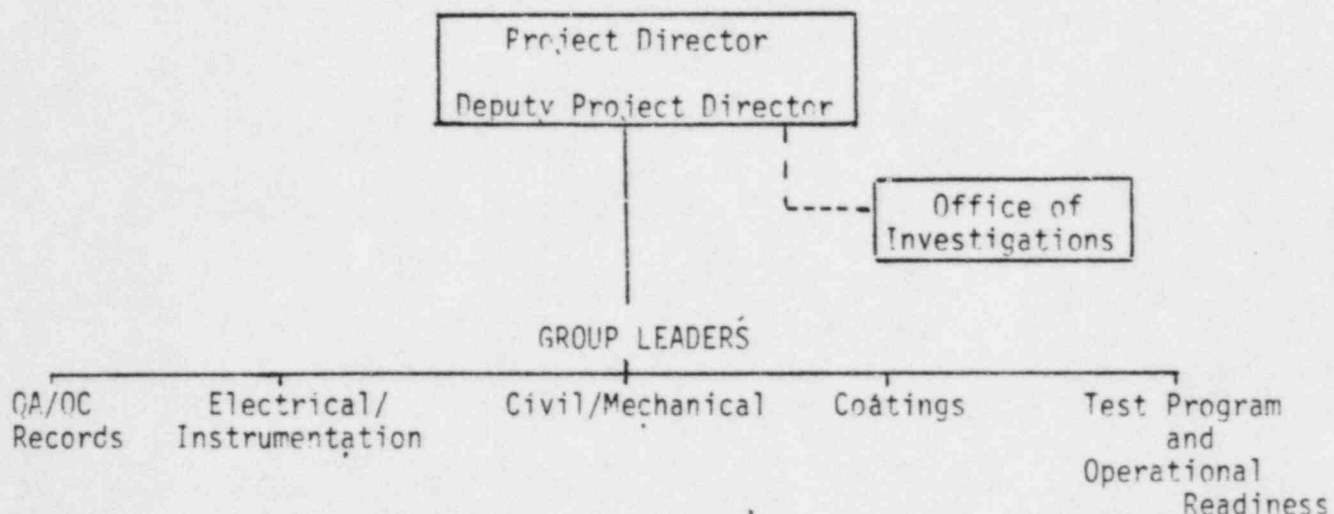
The management organizational arrangement responsible for directing the overall effort and coordinating actions by the various involved offices is shown graphically in the enclosure to the EDO memorandum of March 12, 1984 (Attachment 1). The management is under the overall direction of T. A. Ippolito, who reports to the Director of the Division of Licensing. The managers responsible for implementing and directing this organization are the following individuals:



The line offices will continue to manage their own responsibilities regarding Comanche Peak in accordance with the schedule and objectives of this plan. Line office activities are to be coordinated with the program management organization via their representative as identified above. Additional resources are expected to be necessary to support licensing, hearing, and inspection issues, and substantial resources are necessary to respond to the approximately 400 allegations regarding Comanche Peak.

This plan proposes the formation of an Technical Review Team (TRT) to evaluate and resolve a number of technical issues, including allegations, presently identified. A proposed organizational chart of the TRT is shown below. The groups identified will be assigned to evaluate and resolve technical issues and allegations that have been grouped into five technical areas: QA/QC, Electrical/Instrumentation Civil/Mechanical, Coatings, and Test Programs. The groups will be comprised of a group leader and reviewers that are specialists in the particular technical area.

Comanche Peak Technical Review Team (TRT)



The staffing of these groups will be drawn from the various NRC offices and/or contractors as arranged between the Project Director and line management. The TRT may be called together for a specified period of time, dispersed back to the individual's parent office, and then reconstituted in whole or in part as needed to complete resolution of like issues.

The TRT will be under the direct supervision of the Project Director. In accordance with the EDO memorandum of May 25, 1984, the TRT organization is scheduled to be in place and functioning by June 4, 1984.

Detailed guidance will be issued by the Project Director to the Technical Review Team and other participants in this effort. This guidance will address the following:

- Method and approach for identification and disposition of allegations
- Tracking System
- Preparation of Documentation and Records
- Protection of Individuals
- Initiation of Special NRC actions, such as Confirmation of Action Letters or 50.54(f) letters
- Manpower accounting

The basis upon which the schedules and resource estimates have been developed is that the Comanche Peak fuel load date is October 1, 1984. Figure 1 is an overall schedule and Figures 2 through 5 are individual schedules for the resolution of Licensing, Hearing, Inspection, and Allegations Regulatory Actions, respectively.

The major issues, schedules, and resource estimates needed to meet the schedules are summarized as follows:

A. Licensing Regulatory Actions

Licensing Actions are those things resulting from the design review of the FSAR. NRR is responsible for the resolution of these action items.

The total number of outstanding action items is 37.

Four of these action items are considered to have the potential for impacting the schedule. These items relate to 1) the adequacy of the TDI diesel generators, 2) the Applicants' exemption request for relief from GDC-4, 3) review of the Cygna Report of an independent assessment of design and construction, and 4) electrical equipment environmental qualification.

NRR experience with other facilities involved in complex licensing reviews (Diablo Canyon, Seabrook, and Shoreham) indicates that additional project management resources are necessary. Two additional project managers for the period from June-September will be needed, for a total of 8 man-months of additional effort.

The technical resources presently assigned by NRR to evaluate and resolve the remaining open licensing actions are sufficient to meet the schedule shown in Figure 2. Additional IE resources are not expected to be required as the CAT inspection is complete and QA/QC reviews and emergency preparedness reviews are essentially complete.

B. Hearing Regulatory Actions

Hearing Actions are those issues in contention before the ASLR.

There are three major issues each with a number of sub-issues. The three major issues are Design Adequacy and Quality Assurance, Construction Adequacy, and Construction Quality Assurance.

There are two critical path actions: Design Adequacy and Construction Adequacy. The design adequacy action concerns an IDVP being performed by the Applicants at the staff's request. CYGNA is performing the review for the Applicants. This is currently under review by the staff. Cygna personnel actions may have contributed to be prenotification of inspection areas to Applicant QA/QC personnel. Resolution of this concern may make it necessary to request additional independent assessment activities.

The critical path issue concerning Construction Adequacy is containment liner coating (painting).

The resources presently available are sufficient to resolve all hearing actions with the exception of the critical path issues. It is estimated that 10 man-months are required to resolve the Design Adequacy Action, and 6 man-months to evaluate the Construction Adequacy Action (painting). The design adequacy review will require a team composed of IE and NRR personnel, similar to the Cygna IDVP effort.

Coordination of Hearing activities is expected to be extensive and involve integrating the activities of NRR, OELD, and Region IV with the Technical Review Team. An additional senior manager (SES-level) is needed to manage this effort as it is expected that the Project Director will devote full time effort to management of the technical review team actions commencing June 4, 1984.

These estimates assume that the reviews will conclude that the existing circumstances are acceptable to the staff and/or no major corrective actions are required of the Applicants. Should this prove otherwise, additional resources will be required for resolution. See Figure 3 for Hearing Testimony Completion Schedule.

C. Inspections Regulatory Actions

Inspection actions are those that assure that adequate completion of plant construction and the readiness of the Applicants to operate the plant. These actions are the responsibility of Region IV.

The total number of outstanding action items is 377. These may be grouped as follows:

- SER verification: 30 actions
- Routine construction inspections, preoperational test program and operational readiness inspections and startup test program: 121 actions
- Operating Licensing: 20 actions
- Open items inspections (unresolved items, violations, 50.55(e) items, inspector follow-up items and Part 21 items: 201 actions
- Room inspections: TBD
- CAT follow-up: 5 actions

All the inspection items require resolution prior to OL issuance. Many require applicant actions prior to inspection or relate to hearing issues. Particularly significant is the retest inspection effort as the applicant plans to re-run approximately 25 preoperational tests to confirm system readiness subsequent to various modifications and design changes. Many of these tests will be witnessed by the NRC and test results will be evaluated as appropriate. Systems involved include safeguards systems, reactor protective system, service water, component cooling water, and the diesel generator.

The number of inspection items represents a sizeable effort that could impact fuel load.

Some additional resources will be required to complete the routine inspection program and resolve the many open items. It is expected that this area could require approximately 46 man-months. Considering the number of items and based on Waterford experience, the Region estimates that much of this effort can be handled with existing resources but that approximately 18 man-months additional resources will be required. See Figure 4 for the Inspections Schedule.

D. Allegations Regulatory Actions

The Allegation Actions are those concerns reported by various individuals, intervenors and action groups regarding the safety of construction of the plant. Concerns regarding wrongdoings, intimidation, etc. are not included in the technical review team effort but are referred to OI or OIA as appropriate.

To date the number of individual actions is approximately 400. These actions are grouped into specific categories to facilitate their resolution. Resolution of these actions will involve the Technical Review Team, NRR, OI, and Region IV.

The organizational group with primary responsibility for resolution of these actions is the Technical Review Team (TRT). The resources required to resolve these actions are identified below according to the Team functional group:

<u>Functional Group</u>	<u>No. of Allegations</u>	<u>Resource Estimate (man-months)</u>
QA/OC Records	180	17
Electrical/Instrum.	5	2
Civil/Mechanical	97	17
Coatings	11	4
Test Programs	14	2
Estimated Totals	<u>307</u>	<u>42</u>

The TRT effort is expected to require additional administrative support (secretarial) of approximately 3 man-months. Hence, the total TRT resource needs are 45 man-months.

The total program for resolving the allegations actions is a critical path item. See Figure 5 for the schedule for completion of the review of these allegations.

In addition, 97 allegations will be handled by the following offices:

<u>Functional Group</u>	<u>No. of Allegations</u>	<u>Responsible Head Office</u>
Intimidation	30	OI
Design Pipe/Pipe Supports	19	NRR
Vendor/Generic	18	NRR/IE
Independent Assessment Program	7	NRR
Miscellaneous	23	RIV

Design of pipe and pipe supports, and the Independent Assessment Program allegations will be dispositioned by NRR personnel that are handling these issues for the hearings. Intimidation allegations will require additional OI resources, as discussed later in this section. Existing resources in the Vendor Inspection Branch, IE and NRR will disposition the vendor/generic allegations. Existing resources in Region IV will be responsible for the miscellaneous allegations.

E. Office of Investigation Actions

OI actions are those actions necessary to support the resolution of allegations. They involve issues where wrong-doing, intimidation, or harrassment may be involved.

It is clear that with the present resources assigned to the Comanche Peak investigation (one investigator) the schedule for resolving the allegations and wrongdoing issues will not be met. We estimate several additional investigators will be required on full time basis from June through September, for a total of 12 man-months of effort. During this 4-month period OI will require the full-time support of one individual with a technical background, as many allegations are a combination of technical and wrong-doing issues, for a total of 4 man-months.

The NRC staff effort to complete the actions in the licensing, hearings, inspections and allegations areas will be substantial and the impact will be felt by several Offices. The foregoing summary lists a total of 821 separate actions requiring approximately 100 man-months of effort above the existing (budgeted) resources. Personnel for much of this effort will be obtained from contractors. It is estimated that approximately \$1 million will be necessary to fund contractor assistance in support of Comanche Peak reviews during the remainder of FY 1984. The estimates are somewhat fragile and assume that no major new issues are raised, that the Applicants meet their projected schedule, and that staff review of the identified issues will conclude that the existing circumstances, or the resolution, is acceptable.