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MEETING WITH NIAGARA MOHAWK POWER CORPORATION TO DISCUSS CONSTRUCTION SCHEDULE AND READINESS FOR FUEL LOAD

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4	MEETING WITH NIAGARA MOHAWK POWER CORPORATION
5	TO DISCUSS
6	CONSTRUCTION SCHEDULE AND READINESS FOR FUEL LOAD
7	
8	Nuclear Regulatory Commission
9	Conference Room 422
10	7920 Norfolk Avenue
11	Bethesda, Maryland
12	Monday, November 18, 1985
13	The meeting convened, pursuant to notice, at
14	1:20 p.m.
15	NRC Participants:
16	M. HAUGHEY
17	H. DENTON
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carysimons 1	н.	THOMPSON
2	В.	BERNARO
3	T.	NOVAK
4	w.	BUTLER
5	J.	LINVILLE
6	w.	BUTLER
7	R.	SCROGGINS
8	м.	VIRGILIO
9	R.	GRAMM
10	D.	CRUTCHFIELD
11	c.	MILLER
12	в.	BORDENICK
13	E.	WEINKAM
14	s.	BLACK -
15	Niagara	Mohawk Participants:
16	w.	DONLON
17	В.	HOOTEN
18	c.	MANGAN
19	R.	ABBOTT
20	D.	QUAMME
21	Α.	ZALLNICK
22	G.	AFFLERBACH
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## Also Present:

- T. CONNER, JR.
- F. GIACCIO
- P. EDDY

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## PROCEEDINGS

MS. HAUGHEY: My name is Mary Haughey. I am the Licensing Project Manager for Nine Mile Point 2.

We are meeting today to discuss the schedule for completion of Nine Mile Point Unit 2 with the corresponding schedules for licensing and inspection activities.

These meetings are held whenever there are large differences between the staff's and the applicant's projections for the date of plant readiness for fuel load.

In keeping with the NRC procedures for this type of meeting, a transcript of our discussions will be made and a copy of the transcript will be placed in the public document rooms here in Washington, D.C. and in Oswego, New York.

Also in keeping with NRC policy, this meeting is open to the public to attend as observers. We note that there are some members of the public present today.

In order to introduce the participants at this meeting, we will go around the room and I will request that each person identify himself or herself and state the organization you represent and your position.

Since we have a court recorder here today, please speak up so that she can hear you clearly. I will begin to circulate an attendance sheet. Members of the public who

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marysimons 1	are here as observers do not need to sign this attendance
2	sheet.
3	Again, I am Mary Haughey and I am the Licensing
4	Project Manager for Nine Mile Point 2.
5	MR. BUTLER: Walt Butler, Chief, Licensing Branch
6	No. 2.
7	MR. QUAMME: Dean Quamme, Project Director for
8	Niagara Mohawk.
9	MR. ABBOTT: Rick Abbott, Station Superintendent,
10	Unit 2.
11	MR. MANGAN: Chuck Mangan, Senior Vice President
12	Nuclear, Niagara Mohawk.
13	MR. DONLON: Bill Donlon, President, Niagara
14	Mohawk.
15	MR. HOOTEN: Bill Hooten, Executive Director
16	Nuclear Construction, Niagara Mohawk.
17	MR. CONNER: Troy B. Conner, counsel, Niagara
18	Mohawk.
19	MR. NOVAK: Tom Novak, Assistant Director for
20	Licensing, NRC.
21	MR. SCROGGINS: Ron Scroggins, Controller and
22	Director, Office of Resource Management, NRC.
23	MR. THOMPSON: Hugh Thompson, Director of the
24	Division of Licensing for NRR.
25	MR. BERNERO: Bob Bernero, Director of the

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marysimons 1	Division of Systems Integration for NRR.
2	MR. DENTON: Director of NRR.
3	MR. LINVILLE: James Linville, Chief, Reactor
4	Projects Section 2C, NRC, Region I.
5	MR. GRAMM: Bob Gramm, Senior Resident, Nine Mile
6	2, Region I.
7	MR. VIRGILIO: Marty Virgilio, Group Leader, Tech
8	Spec Review Group, NRR.
9	MR. CRUTCHFIELD: Dennis Crutchfield, Assistant
10	Director of Safety Assessment, NRR.
11	MR. MILLER: Charles Miller, Technical Assistant
12	to the Assistant Director of C_fety Assessment, NRR.
13	MR. GIACCIO: Frank Giaccio, Consultant to the New
14	York Public Service Commission.
15	MR. EDDY: Paul Eddy, Construction Monitoring, New
16	York State Public Service Commission.
17	MR. BORDENICK: Bob Bordenick, Office of the
18	Executive Legal Director, NRC.
19	MR. WEINKAM: Ed Weinkam, Technical Assistant to
20	the Assistant Director of Licensing, NRR.
21	MS. BLACK: Suzanne Black, Technical Assistant to
22	the Director of Licensing, NRR.
23	MR. ZALLNICK: Tony Zallnick, Niagara Mohawk,
24	Nuclear Licensing.
25	MR. AFFLERBACH: Gerry Afflerbach, Niagara Mohawk,

Nine Mile 2 Project Manager.

MS. HAUGHEY: I have here the agenda that we are planning to follow today.

One thing I would like to note is we have Mr.

Gramm who name is noticed here. Instead of Mr. Gramm it will be Mr. Linville make the presentation for the Region.

We also have some copies of the agenda which I will pass around.

At this point I would like to turn the meeting over to Mr. Denton.

MR. DENTON: Thank you. We have licensed about 30 plants since TMI, and I don't think we have unnecessarily held any of those 30 up, but that is since we resumed licensing in about 1980.

Our only interest in dates, and Hugh will elaborate further on this, is scheduling of our own resources. We are not given by Congress resources to do all plants at once. So it is just a question of priority for us to try to allocate the licensing resources and the inspection resources in a schedule commensurate with your construction schedule, and it is not our intent to hold you up in any way. But I don't want to divert resources to your plant if in fact I know that your schedule won't be met and someone else's schedule will be met.

The policy the Commission has adopted in this

area, after several Congressional hearings on how we should do scheduling, is that if we are within six months of each other on the completion schedule we will work toward your schedule because that is close enough for the intent of what we use it for.

If it gets further apart than six months,

Commission policy requires that we meet, such as we are

doing today, to attempt to understand why we are not closer

together and to assist the staff in allocating its

resources. Of course, the actual completion date is

completely under your control and it depends on the

resources you apply to it and to some extent what you have

with the preoperation startup test.

Hugh, would you like to add some comments?

MR. THOMPSON: Yes. I think you have covered the basic background very well, Harold.

The one thing I guess, and specifically with respect to Nine Mile Point 2, one of the key elements we need to decide today is in fact the completion date for our review of the proof and review copy of tech specs, and also if indeed that completion date is beyond February 24th, we have to decide specifically how that is reflected in the Bevil report to Congress as to whether our licensing review in fact results in an impacted or delay in your own licensing activities.

Those are I think the key factors we need to decide and that we need to keep on schedule so that we can get Mr. Denton's position. What we would like to do is hear from the case load forecast panel, what their basis is for their late 1986 construction completion date, then have your presentation, some discussion between the two groups and then a proposal by the licensing staff as to what they would propose as a course of action and then hear from you as to what you believe is the course of action that Mr. Denton should direct.

MR. CONNER: Hugh, can I ask a clarifying question?

MR. THOMPSON: Yes.

MR. CONNER: It is not clear I think in everybody's mind, and certainly not in mine, as I understand it, the tech specs have generally been circulated, discussed and so forth prior to the proof and review copy. It has been reviewed by the Tech Spec Branch, but has not sent to the Technical Branches for final review. Am I correct in that? And that is the holdup from my viewpoint.

MR. THOMPSON: The status is that we are prepared, and we have developed a revised set of tech specs which reflects what we believe the FSAR is today that is inhouse, and we are prepared to send that out in the proof

and review stage.

The major question is when is the response due date for that review. Typically that will be a one-month type of review date. I think we can get into more details of what we would like to propose after everybody hears your position as to where you are in the construction as well as to hear from the case load forecast panel.

MR. DENTON: One other twist on that, too, Troy, is we could have sent out tech specs three years ago, but in order to conserve our resources we want to be sure we have what is your final application so that when we do a proof and review that we don't then get hundreds of pages of changes the next month which means we have to recycle the thing.

This is a problem we found in other cases. It might not be a problem in yours, but it is what has led to our basis for scheduling which is mainly to have a complete final application before starting down the tech spec road so that we can go through it one time and then not have to face changes in the application.

MR. CONNER: Harold, let me ask one more clarifying question that I didn't understand again. The reorganization is really not in place yet. So there is no dichotomy between boilers and PWR review of tech specs, and sort of the same people are doing both still. Am I right

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on that or wrong?

MR. DENTON: That is right, but I think if we are going to get to the meat of the debate then we had better move ahead.

MR. NOVAK: I think the only point I would add is you are generally correct, up until this point in time the lead engineer who has been handling your tech specs has worked as the need arises with certain specific technical branches within NRR. But at this point in time when we would send the proof and review copy back to the NRR staff it would be for a total review of that document versus the FSAR as to the in-house status.

MR. DENTON: And it would probably go into Bob Bernero's division, who will be the head of the boiling water group, and that is why he is here today.

MR. THOMPSON: Right. The proof and review will be sent to the region, to yourself and to the reviewers.

MR. DENTON: Onward. Fifteen minutes, Walt.

MR. BUTLER: I will try to do it in less.

(Slide.)

What I will do is give you a cursory summary of the case load forecast panel review for Nine Mile Point 2.

The panel members, or the panel was constituted of Al Schwencer, who previously was chief of the position that I am in now, Mary Haughey, the Project Manager, Dick

Hartfield, who comes from the NRC's Resource Management
Branch, Bob Gramm, the Senior Resident at Nine Mile 2 and
Tony Cerne from Seabrook.

The activities of the forecast panel are listed there. It started out with its first meeting in February of '83. At that time Mr. Lovelace was part of the panel. And their findings in '83 were that the fuel load date was projected around late 1986.

A second meeting was held on this occasion with Hartfield taking Mr. Lovelace's place in October of 1984. At that point in time the Niagara Mohawk people were changing over and bringing on some people from MAC, and the people decided not to make its findings at that point, but rather to defer until around June to see whether the changeover of people will in some fashion improve the schedule.

The meeting was held in June and the findings of the June meeting were consistent with the initial panel meeting, that is the forecast fuel load date was still late 1986.

(Slide.)]

The bases for that finding, what the panel does is go into a large number of elements that go into forecast of the fuel load date.

Among the things they look at is the number of

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months from the date that the cold hydro is performed until fuel load. We have examined that kind of parameter for about a dozen plants and find that on the average it is around 12 or 19 months.

We examined the circumstances that surround the conduct of the cold hydro, how far along has the plant come at the time that the cold hydro is conducted.

Then subsequent to that we examined progress relative to the commodities, the large and small bore piping, terminations, electrical terminations, building turnovers, system turnovers, pre-op testing, progress on surveillance testing and the development of procedures.

After reviewing, not only the accomplishment at that point in time, but reviewing also the slope or the rate of change of those parameters, the panel makes a judgment as to what the expected fuel load date should be.

(Slide.)

Here is some of the backup information that leads us to our finding of nominally 18 or 19 months on the average.

MR. DENTON: Walt, can I just clarify something?

MR. BUTLER: Yes.

MR. DENTON: Therefore we look at past practice, and to the extent that reflects real life, that is what we are projecting, right? If other utilities had difficulties

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or a test had to be repeated several times, that is built into with data?

MR. BUTLER: That is correct.

MR. DENTON: So when we talk about what is projected here, it is if they perform like the average comparable plant has done in the past?

MR. BUTLER: That is correct. It is pretty much empirical. If they do better, they indeed can improve on that schedule.

We found that the second unit at a site experiences a somewhat better schedule because they don't run into the kinds of problems the first unit encountered.

(Slide.)

Another chart that is indicative of the progress here is a comparison of Nine Mile 2 with the progress on Hope Creek.

Hope Creek is a similar plant. There are some minor differences. It is a BWR-4 and not a 5 and it is a Mark I and not Mark 2. But if you take a look at the number of pre-op test procedures that are needed, it is 149 versus 106 needed, and progress to date is shown in the numbers there.

You will find that for Nine Mile 2 results reviewed by the review committee, the site operating review committee, is pretty near zero as of November 11th.

MR. NOVAK: And, Walt, you might point out that that plant was chosen because it also was forecasting '86.

MR. BUTLER: Yes. The utility's date to date has been December 1 of '85. However, they are telling us that they are going to officially write us of a slip to January 15th. But our regional inspectors judge that plant to be a March plant. So it is nominally a time frame of February of '86, and we see much greater progress at Hope Creek than we see at Nine Mile 2 relative to completion of February of '86.

(Slide.)

The last viewgraph I have here is an examination of some of the elements that go into the critical path method of analysis on plant progress.

We just took a look at a couple of elements wherein the scheduled completion date is in the recent past. Now I recognize that solid rad waste is not an important system for fuel load. It is something that can reasonably be deferred, but the utility has this for completion around the end of October. And we find that as of this point in time they have not completed the preliminary testing on the solid rad waste system.

A second activity in the utility's critical path method of analysis is the reactor protection system. The construction release was scheduled for November 7, and as

of this point in time it has not been released. So we see nominally a week or two of further delay.

The utility has reported around 13 weeks of negativity in their schedule. In other words, they have a negative float relative to a February 24 date of some 13 weeks.

When you add those up, you find that the utility's present date if they don't improve on their schedule, is late May 1986.

MR. THOMPSON: Walt, would you again tell me exactly what these two activities were selected from? This was that the case load forecast panel did what? Can you tie that back to what the case load forecast panel is doing?

MR. BUTLER: Yes. This was two pieces of data taken from a critical path method of analysis that was furnished by the utility of those activities that needed to get done by fuel load. And we took a snapshot of a couple of activities that are in the present time frame of late October or early November just to see how the utility is meeting its target milestones. That is with respect to these two activities, we find that the utility is beginning to slip a week or two beyond what they had targeted as recently as October of '84.

MS. HAUGHEY: I think this is actually September.

MR. BUTLER: September, okay.

So at that point I would like to turn it over to the utility for around a 15-minute response, and then we will follow that with a recommended course of action first by myself and then by the utility as to where do we go from here.

MR. DENTON: And let me preface before you begin by saying we sure don't want a delay. You know, that is not our intent. It is to assign resources that keep us off the critical path. And there have been one or two instances in the past where we have been wrong and we have had to really plow resources into that case in order to avoid delays and we are willing to do that.

So our responsibility is to meet your realistic date, and I think your responsibility is to put on the table a realistic date so that I don't turn my schedules topsy-turvy and then find that it take you much, much longer than had been anticipated so that I in effect put resources on yours instead of putting them on some other vital Commission activity.

MR. DONLON: We do understand what you are saying, Mr. Denton, and as you will hear in our presentation, we do not agree with the conclusion that has just been outlined and perhaps even with some of the process in arriving at that conclusion as far as the case load forecast panel is

concerned.

In fact, we look upon our fuel load date and our schedule as we look down the road as possibly being impacted upon right now insofar as the tech specs not being released for proof and review.

We think we have a number of differences between what could be called the average plant and we will discuss what those are. Eighteen months from cold hydro in our case to fuel load, we do not see that time all being necessary.

With that, I will turn it over to Dean Quamme and Dick Abbott.

MR. QUAMME: I want to use just about a half a dozen slides, if I may, and these are typical of what we utilize in our project review meetings. I didn't make up anything special for this meeting.

(Slide.)

This gives you a snapshot as of 11/13 of where we stood on progress. We were reporting ourselves at about 94 percent complete against a 97 planned, and significantly here in the period, that is the accounting month of November, we earned 1.33 percent against a .72 planned.

(Slide.)

We are on a trend that is upwards as far as recovery of reported schedule losses are concerned, and in

recovery or report

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a curve standpoint it looks like this, with this being data as of the 13th of November.

MR. DENTON: I didn't really follow that.

MR. QUAMME: I am sorry about that.

MR. DENTON: You said recovery of ---

MR. QUAMME: Well, this is a plan curve across the top. This was the curve that was generated in January of 1985 and we fell behind that curve. We developed our earning rules in January of '85 and started measuring ourselves against those earning rules and this was our actual progress or has been through sort of the calendar year and actually since ---

MR. DENTON: Walt said that you were scheduling then as if you were going to pick up 12 or 15 months. Does that mean that you expect your completion curve to pass the solid line?

MR. QUAMME: Pardon me? I didn't ---

MR. DENTON: Are you going to gain 12 or 15 months on your plan schedules?

MR. OUAMME: You mean weeks?

MR. DENTON: Weeks, I am sorry. Yes, weeks.

MR. QUAMME: I think we have every indication that we can do that if we trend this on up. We are looking at a January/February point in time when we catch up with the plan.

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I think, you know, we can talk a lot about percent complete. Every utility and every construction site develops their own earning rules and a percent complete means something different to just about every other utility who is in this kind of a business.

I think from my perspective I would like to leave you with one message, and that is when we say it is done, it is done. We don't claim total completion of any activity until in fact all of the paperwork that is associated with that activity that is required for permit holding is in fact reviewed, accepted and in the vault.

So we are including in our percent complete calculations the paperwork that goes with the activity.

MR. THOMPSON: Would that include surveillance procedures being developed and validated for a system?

MR. QUAMME: Yes.

MR. ABBOTT: What we are doing now is developing our surveillance procedures in conjunction with pre-ops.

So that, yes, at the end of a pre-op test and acceptance by sort for a given system we will also have run, or we will intend to run surveillance procedures and proof tests.

MR. DENION: When you say turned over to operations, what is the average number of open items that go with it?

MR. QUAMME: We have been running at the turnover,

and this is what we call the startup test report at the completion of preliminary testing.

The turnover for the initial initiation of the preop or acceptance test, our open items have been averaging
less than 100 per system, the majority of which are
software, which are inspection reports that need to be
closed or an engineering change paper that needs to be
incorporated.

We are running right now somewhere around 4,000 open items on turned-over systems and we have about 50 systems turned over, in that neighborhood.

(Slide.)

I think I would rather concentrate, as opposed to project for saying complete, on trends of what we have been doing. This chart indicates the four different steps that we take, this being the completion in construction of testable subsystems and this being those testable subsystems that make up a total system.

You will note we broke the plant up into actually 360 testable subsystems. Those comprised a total of 108 systems for test. That is the 100 percent completion point on this line.

The turnover is the STR that I talked about, the startup test report where the system has been depunched and the software and open items have been worked down to an

acceptable level, one that we can test from without any fear of having to retest as a result of a closure of an open item, and of course the last line being the actual conduct of the pre-op or acceptance test. There are 137 tests total required.

As of the end of the November reporting period we had 351 of the 362 testable subsystems construction complete turned over into the startup people's hands for preliminary test. We had 106, and that should be 106 as opposed to 91, 106 of the 108 systems that were completed out of the hands of construction and into the hands of the test group for preliminary testing.

On turnovers at the time that this particular data was put together we were at 48. We had intended 62, and we are somewhere in excess of 50, and that is changing on an hour-by-hour basis. But we are in this range on turnovers.

On pre-op tests Gerry has in excess of 40 tests that are now either currently in process that are under review for completed data or they have in fact been completed. So 40 roughly of the 137 tests as of today have either started or have been completed.

(Slide.)

Looking at this in a different manner in just plain bar charts, and this again is data that was a little bit old. But this now is colored up to this point. This

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is colored up to this point, that is activities completed. System turnovers are in this range. Building turnovers, we are at 10 out of a total of 30. And system tests, we are in excess of 40 either in process or completed. Obviously the object is to color all these lines black.

(Slide.)

The paper that goes with turnovers ---

MR. THOMPSON: How many have you completed out of that 40?

MR. AFFLERBACH: Well, actually completed and reviewed, and we have two review processes, the joint test group and then SORC, we are talking about 15.

MR. THOMPSON: Fifteen that have been through the quality review process.

MR. AFFLERBACH: No, they haven't been through SORC. None have been through SORC.

MR. THOMPSON: Okay, but 15 have been through the joint test group.

MR. QUAMME: Right.

MR. AFFLERBACH: Fifteen as of this coming
Wednesday because I have two that are on schedule for this
Wednesday and they will make it through.

MR. QUAMME: If I look at these whole systems by system number and designator, this is what we looked like when we move from left to right.

This column is indicative of those systems that still have pieces of them remaining in construction. We have now as of today only two systems out of the entire plant left in construction.

Post-construction completion is that activity that is initiated under the guidance of Gerry Afflerbach and schedule control of him to depunch the systems when they come over on an "A" release, as we call it, a preliminary release that comes with a punch list. This activity results in the depunching of those systems, both hardware and software.

These two columns indicate our administrative turnover process where the reviews are taking place and agreements by everyone that punch list items that are open are acceptable or need to be closed.

And, lastly, this column indicates these systems that are ready to be scheduled for pre-operational or acceptance tests, and this column indicates those systems that are currently under test or complete.

So you can see we are moving the plant very rapidly. If you looked at the trend lines before, we are moving very rapidly out of the construction phase and into the pure depunching and preoperational acceptance test phase.

(Slide.)

The records that go with these systems, we have an overall goal to have 85 percent of our plant required records in the vault at fuel load in February of '86. That consists of course of generic records, administrative records and system records, and also obviously we have 100 percent of the system related records vaulted at the time of fuel load.

As of the end of this reporting period we were 61 percent overall complete on records and 60 percent of the system records were vaulted. So we are progressing with the records review, approval, acceptance and vaulting consistent with the turnover schedules and the support of Gerry Afflerbach's test program.

MR. DENTON: What is going on inside of the containment? Do they still have scaffolding up?

MR. QUAMME: Yes. In containment we are completing the final electrical work in containment, we have painting going on in containment and that is basically it. There is, you know, a little depunching work going on on some of the hangers and whip restraints, but other than that basic construction is essentially completed.

MR. DENTON: What about your plans to actually complete the facility prior to asking for a license?

MR. QUAMME: Are you referring to the potential of asking for a deferral of certain things?

MR. DENTON: Yes.

MR. QUAMME: Our intent is to ask for the deferral of nothing. Our plan includes the completion of the plant, recognizing that punch lists will carry on beyond fuel load that will require completion as we progress on through towards commercial operation or even beyond. I would anticipate a substantial amount of painting that would remain after fuel load, and there would be some penetration seals that will have to be put in.

MR. DENTON: I think the idea of completing the plant is a good one. Another plant in your region,
Susquehanna, took the same sort of approach as to not try to do construction in the balance of plant area and plant operation at the same time, and that tends to really slow down that book operation, but I am glad to hear that you are going to really complete the plant.

MR. QUAMME: That is right, yes. Very honestly, we have looked at that and we have said let's identify some potentials out there and see what we can do, but always when we looked at it we said is it truly an advantage to us or does it merely put the burden on the power ascension test program, and in most cases we find it puts the burden on the power ascension test program. So our decision has been to continue pushing on construction to complete and on varied tests, and that today is what our current plan calls

for.

(Slide.)

Milestones. Reference has been made to our project critical path schedule. We have identified the following dates as milestone dates as a result of a recent reanalysis of our Project 2 schedule.

We had cast that Project 2 schedule last summer and used it for primarily two purposes. One was to make sure that Gerry's test program was sequenced properly to give us the best fuel load date, but more importantly to drive construction to completion as far as getting work out of them into the hands of Gerry so that he could test it.

We had a logic that was defined that had those two goals in mind. One was to force plant completion and the other to give Gerry systems in the right order.

We have now relooked at that in light of where we are today and we have mentioned a couple of milestones that we missed, and that is true, we did, and our new demand schedule that still shows 24 February as a fuel load date shows these dates as now milestones.

And you will note, for those of you who are familiar, that as an example the loss-of-power test has slipped from the 7th of November or early November until mid-January. This still fits the overall logic of the test program that would allow a fuel update as early as

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February.

MR. THOMPSON: Is there any negative aspect of that schedule at this time?

MR. QUAMME: I mentioned this is a demand schedule. We are close enough in running it front to back that we still felt that we were comfortable with issuing a demand schedule that indicated what people had to do in order to support that fuel load date.

The negativity if we ran it front to back on a worst cases basis right now would show a mid-May fuel load date. That is the worst case on the system testing basis.

There is still potential for improvement in that schedule. From a scheduling stanfpoint we as utility people have got to force these plants to completion as early as we can. There are possibilities to improve upon the mid-May and we are going to continue to push the site and our test people to the earliest fuel load date that we possibly can.

Yes, sir.

MR. BERNERO: Is it fair to say that February 24th is the earliest achievable date and May 24th is what you are saying is the worst case latest achievable date?

MR. QUAMME: Well, you know, that is from the basis of this schedule analysis. Obviously we don't have room in here for the failure of a recirc pump or these

2513 01 01 marysimons 1 kinds of things. But if the tests progress in the manner 2 that we now have them scheduled and we don't have major problems, your characterization of the schedule is 3 accurate. 4 5 MR. THOMPSON: Well, would you say you have any contingency in the plan right now for any problems in the 6 7 May date? 8 MR. QUAMME: Well, you know, you always have 9 potential to look at work around for specific pieces of equipment that don't start upright. We still have that. 10 11 MR. DENTON: How long has the plant been under construction? 12 13 MR. QUAMME: Bill, I will let you answer that. 14 MR. DONLON: Well, we actually broke ground in 15 1975 and we stopped on two occasions which was 1979. 16 MR. QUAMME: I think it is interesting that the 17 schedule that we are working on today that shows the 2/24 18 fuel load date was actually put on paper in June of 1981. 19 The milestones that we look at up here for this 20 energization of the main electrical system, the integrated 21 flush and hydro, were accomplished against dates that were

> MR. DENTON: I was thinking of the River Bend case. I think that after they had done the site preparation it took them like six and a half years and they

established in 1981.

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had a number of unique features such as union agreements and other attempts to expedite the schedule. .

(Slide.)

MR. QUAMME: The last slide that I have is at the request of the region. We have responded to — and this may be too small to actually read — their request in providing schedule information against key activities that they will look at in their assessment of readiness for fuel load and our dates that we have given them when we will be ready to sustain an audit in such things as the operations, maintenance and surveillance area, staff training, procedure preparation, et cetera, fire protection system, procedures, training and equipment, radiological controls, security and safeguards, quality assurance and preoperational testing.

The milestone dates that we have committed to the region still are supportive of an early February date.

These activities, we still start withstanding audits I am sure from the region or others as early as December of this year and go on through the February time frame.

(Slide.)

One last slide on general audits from my
perspective. This gives a graphic illustration of some of
the more important audits as we saw them and the current
status of those audits.

We have been through Appendix R. We are anticipating in December equipment qualification, tech specs status, TMI issues and the NDE van visit. We are preparing for each of those and will be ready for those when those come forward.

With that, unless there are questions, I will sit down and let Dick Abbott speak for a few moments.

MR. ABBOTT: There is just one comment I would like to add about the JTG and SORC reviews that may be a little different from Hope Creek in that we have some representation on the Joint Test Group both for the review of the procedure and results. So that when JTG does review pre-op test results, they will have also have a SORC representative in that same capacity, and when it gets to SORC then I don't anticipate really any problems with the results of pre-op tests as far as the SORC Committee goes.

I just want to make a couple of points on tech specs. Obviously I would like to see the tech specs finalized as soon as I can so that I can get them in the hands of my operating people and my technical staff people and various supervision in the nuclear generation organization so that we can enable everyone to thoroughly understand the content, that we can live by the tech specs right from the word go when we start our startup test program and load fuel.

I think the more time we have to train our people and to become familiar with our tech specs, I think the better off we are going to be from both a safety and an efficiency standpoint, and frankly I think the better off your region people may be. They will have the opportunity to thoroughly study and understand I think our Nine Mile 2 tech specs.

I mentioned that we are developing our surveillance procedures in conjunction with pre-op tests. I think the sooner we have finalized the surveillance requirements and our tech specs the sooner I can get those procedures finalized and proof test them again for both safety and efficiency's sake when we start our fuel load and our policy program.

MR. DENTON: Are you ready to certify that the tech specs match the plant and the plant matches the application and be inspected on that basis?

MR. ABBOTT: I really can't certify the tech specs yet until I get them back in a final state.

(Laughter.)

MR. DENTON: Well, obviously, but I mean if we send them out based based on today's application. We have had cases where after we go through the proof and review and review and everybody does all the arduous work then there are a lot of changes made later. So it depends on

whether you are licensing the state of the plant in terms of final application and do we have an application that is really the final application so we can get it through. No one wants to hold up the tech specs obviously. It is just the question of doing it one time.

MR. ABBOTT: We still have amendments to turn in on the FSAR, but as far as potential changes, we don't see anything looming out there as far as design changes and things like that. It is always possible ---

MR. DENTON: Do you have any estimate of how many more pages of changes you are going to file?

MR. DONLON: Tony, do you have those open items?

MR. ZALLNICK: We did an estimate and we looked at somewhere between two to five percent of the numbers that may change, and those probably will be decided in the next couple of months through a proof and review process. There are things, for example, like what starting pressure to put down in the diesel generator air receiver tank. We have to run a test to come up with that number and that will be run in the next couple of months and we will have that

Those are the types of numbers that I see in the two to five percent that we need to fill in in the next couple of months.

MR. DONLON: And we have scratched our brain on

number.

the project to try to identify if there were potential engineering changes out there that would have to impact to tech specs in the overall license and collectively we couldn't come up with any. The engineering is at that stage where we are doing final stress reconciliation and beating the final equipment quals to death, and in general it is in support of construction and the test mode, and basic engineering is out.

MR. THOMPSON: One of the things I understand, and correct me if I am wrong, that you have underway is kind of a validation of the FSAR compared to the as-built. When will that process be completed such that the FSAR that the proof and review copy is either benchmarked against or will not be able to be benchmarked? Can you give me a feel for where you are on that, like December 24th.

MR. ABBOTT: Well, it is the end of the year, the end of December.

MR. THOMPSON: The end of December. So that would be when, as you would see it, the FSAR then would be as close as you could get it today to match the plant as built.

MR. DENTON: I am sure you are aware of the --MR. ZALLNICK: The verification has been going on
for almost a year, and at the present time they have found
that the FSAR is 95 percent accurate and they have a five

percent error rate. Three percent is what they call editorial, which is the reference to the wrong figure or the reference to the wrong table for two different numbers, and that is the verification effort to date which is close to being done. So they are finding a very low error rate in the FSAR.

MR. DENTON: I think our intent would be to avoid the Grand Gulf type situation where they called for many, many changes after the original license had been issued and then the recriminations that flowed back from that as to why that happened. I would like to have a set of tech specs that fully matches the application and the plant before we proceed with licensing.

MR. ABBOTT: One more point. We are right now developing our surveillance schedule and computerizing and cross-referencing the surveillance test requirements with LCO's and again that is a considerably amount of work that we are going to have to do. And the more final our surveillance requirements are and the more linal the LCO's are, obviously it provide for a better work product and as early as possible.

MR. DENTON: Walt, you had a proposal to make and then maybe you have one and we will talk about it and have a meeting of the minds.

MR. BUTLER: I don't know how much time we have.

I was hoping to break it into two parts, one where I described the residual work to be done and then with a recommended course of action. Do you want me to pass up the residual work to be done?

MR. THOMPSON: Well, if you can go through it quickly, I think we will have a better feel for it.

MR. BUTLER: You want me to go through it quickly? All right.

(Slide.)

The residual work to be done for Nine Mile 2 includes resolution of SER open and confirmatory issues.

At the time the SER was issued there were 18 open and 55 confirmatories. At this point in time the corresponding numbers are 9 and 37 which await applicant's submittal of information.

The tech specs clearly, as indicated earlier, all parties would like to see it issued and we all need it for our ongoing work. But we want good tech specs to work with. For regional activities I have a better viewgraph that indicates that coming up after this one.

(Slide.)

Right here is a summary comparison of Nine Mile,
Hope Creek and Clinton, which are three plants that are at
about the same status of construction.

In terms of the confirmatory items which tend to

have a greater impact on plant schedules, you will see that the Hope Creek and Clinton stations have substantially fewer confirmatories and will be ready for those when those come forward.

With that, unless there are questions, I will sit down and let Dick Abbott speak for a few moments.

MR. ABBOTT: There is just one comment I would like to add about the JTG and SORC reviews that may be a little different from Hope Creek in that we have SORC representation on the Joint Test Group both for the review of the procedure and results. So that when JTG does review pre-op test results, they will have also have a SORC representative say forget the case load forecast panel's date and forget the utility's date, that is the published date or the target date, and let's look at something realistic.

Mr. Butler: The first bullet, staff should work with a May '86 date for the estimated fuel load date and schedule its licensing and inspection activities with that end date in mind.

As the time goes on, in the time frame of December/January we will take another look at the schedule and see whether we should hang on to this schedule.

Bullet two, the staff should begin this week, the

end of this week with the proof and review cycle for the technical specifications. We are prepared to issue the specs, and we propose to issue it on Friday, requesting comments back by January the 24th.

However, consistent with that, we need for the utility to file its final large amendment to the FSAR by around Christmas Eve. That will give us a month or so in which to review the proof and review tech specs against the final version of the FSAR.

We would look towards completion of the proof and review cycle in the time frame of late February or early April. The specific date to be adjusted based on the reevaluation that will take place is in the time frame of January of '86.

Finally, we ask that the applicant keep the regional office apprised of its progress on startup testing so that the regional people can schedule its inspection resources consistent with the needs of the plant.

That is what we have as a recommended action, and I don't think it calls for any particular resolution of a date for the forecast panel.

I would entertain a presentation by the utility on alternatives.

MR. THOMPSON: Can you clarify one point here. We talk about completion of the proof and review cycle will

occur between the 24th of February and the 4th of April time frame. What does that ultimately mean with respect to fuel load? What does that tell you, the earliest that that would say fuel load would be and what would be the latest?

MR. BUTLER: If we were to complete the proof and review cycle on April 4th, it means that that is consistent with a tech spec being ready for fuel load by about the 24th of May.

If we, on the other hand, accelerate that schedule to a time frame of late February, that means that we can accommodate a fuel load date around five weeks earlier or mid April.

MR. DONLON: Why does it take a month and a half between the completion of that and the issuance of the low-power license?

MR. THOMPSON: Marty, you might want to provide an answer.

MR. VIRGILIO: What we then do is go back to the step. Once we have resolved the comments, the first step is to issue the proof and review and collect the comments from yourselves and from our technical staff within the region. We resolve the comments. Then we go back to the staff for concurrence and we go back to you and ask you to certify that your tech specs do in fact match the plant as built and the FSAR and the SER. And we have an independent

consultant do an audit of all of that and we get his results back. So it is about a month time period in there to allow for those things to take place.

MR. CONNER: Have you ever tried to do it on an ongoing basis rather than waiting until all of this is in place before having the consultant do his thing and whatever?

MR. VIRGILIO: We would like to have him lock at a final product, and at that point in time we have got a final FSAR and a final SER.

MR. THOMPSON: This approach was the one that was established by Mr. Denton after the Grand Gulf tech spec review which you might consider was one of the more ongoing less systematic approach which produced the set of tech specs there when the plant was in the throes of finalizing construction and rushing things through at the end and resulted in the difficulty we experienced there.

MR. CONNER: Understood, but I was really asking have we learned enough since Grand Gult with all the other boilers to maybe try something different that might speed it up?

MR. BERNERO: This is not unique to boilers.

MR. CONNER: Well, all right.

MR. THOMPSON: I guess our review, the most recent one would be River Bend, and we found that in the last

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phase there were still significant changes that were being made at the last minute because of a verification of the asbuilt versus the FSAR versus the SER. So there were all these, you know, our experience would say it would take about a month. It might take three weeks, but I mean it is not something you just do in a day.

Mr. Mangan.

MR. MANGAN: Well, I want to wait for Harold. Is Harold coming back?

MR. THOMPSON: I am more than willing to find out.
(Laughter.)

Why don't we take a five-minute break and I will find out.

(Brief recess.)

MR. THOMPSON: Harold, we have gone through the staff's presentation which indicated a staff proposal which would -- you might put the chart back up on the last point.

(Slide.)

It would end with the proof and review copy I believe between the February 24th and the April 24th time frame which would support licensing, and the earliest would be early April I believe ---

MR. BUTLER: Mid April to late May.

MR. THOMPSON: Mid April to late May would be the time frame that that schedule would be. We would I think

say to take anything else out of that you would have to have a proof and review date earlier than the 24th of February. And I believe that is predicated on getting the FSAR revision ---

MR. BUTLER: Around Christmas Eve.

MR. THOMPSON: --- around the end of December, Christmas Eve or something like that.

And I guess we were now going to hear from Niagara as to what their proposal would be and the basis for it.

MR. DONLON: Well, I will ask other people.

Obviously the support puts the meat on the bones of what I am about to say. But basically what you are proposing here automatically results in a pinchback in our schedule.

Whether we consider February 24th to be the very best case, it still as far as we are concerned achievable. The May date as far as we are concerned is very definitely the worst case. And in any event, what you are proposing is the very best we could do no matter what we do on our side of the fence, so to speak, is load fuel in mid April. That clearly represents a considerable impact on our corporation and on the costs of this plant in the event we can meet the schedule that we believe we can meet.

I think the track record with respect to the turnover of systems that we have experienced right on up through this past week will demonstrate that we can do

better than the assumed average plant of again going from RPV to fuel load.

Frankly, this kind of a schedule is unacceptable.

I will have problems with my Board and understandably so,
and no one has shown me under any circumstances why we
cannot, if we don't meet February 24, come much closer than
May and very likely much closer than mid April.

And in any event, from what I hear also is that we are going to wind up getting these at the last minute to begin with in getting back to what Mr. Abbott said, and we need these as soon as we can get them to begin with both for purposes of training our personnel, the ultimate safety in operations and the whole works.

Dean, can you add, or Chuck or Rick?

MR. DENTON: I think it is clear that our staffs disagree. We have seen a lot of plants be built in the last five years and finished and many of them are right on schedule and we don't disagree with.

I would propose to do two things, go ahead and send out this set of tech specs on Friday that you are talking about and that gets the ball rolling and delegate Bob Bernero, who is going to be with your plant for the next 40 years ---

(Laughter.)

--- if he can stand it that long, to take a

personal look as soon as you can get it scheduled because I don't think there is any way we can resolve it here in the room. Obviously our intent is the same as yours, which is not to get on the critical path, and if we can agree that we are not wasting our own resources and we can readjust them. We just want to be sure that your realistically facing your own challenge without shape it though. We just want to follow it.

MR. MANGAN: Harold, implicit in what you say is that if a review of this kind say a month from now, or I don't care, at some point in time were to show more progress than the staff now thinks, could you shrink the schedule say in a month so as to accommodate an earlier fuel loading date? In other words, you could put more resources on it is implicit in what you say, and I am just wondering if I understand that correctly?

MR. DENTON: Well, I don't think there has been but one plant that got completed faster than our case load forecast panel said.

Bob, do you want to comment on what your batting average has been?

VOICE: Which one was that?

VOICES: St. Lucie 2.

MR. BERNERO: I think it is more to the point, you know, what Walt proposed is the very first step of your

proposal and our proposal be the same, issue the proof and review tech specs, and we are ready to do that.

The next step in what Walt proposed was that you would make your last big FSAR amendment. You have got a lot of confirmatory and loose end items up there.

Now he proposed approximately one month from now as the date for that. Are you prepared to do that tomorrow or Friday or something like that? Right there is a month.

MR. DENTON: We need time to get your last design issues in to review them. I mean you can't dump 2,000 pages on us on the last day and say, you know, where is our license.

The sooner you could do that and complete and close out these loose ends, the sooner we will be. What I would like nothing better in the case, and there have been a few, is where we complete the safety review. We have the SER and the license comes up and lies there on my desk and ages while we wait for you to finish the plant. And if we could get in that same posture here, I would love to be there.

But I think it is up to you to close out these loose ends where we don't agree and get a final application and then things can be totally determined by you.

Mr. DONLON: Can you comment on that now, Tony, or do you want to ---

MR. ZALLNICK: Well, we can get a lot of those changes in. I just think it is not fair to characterize it as we haven't supplied this information. We supplied a lot of information and we are waiting for the staff on 80 percent of the stuff that was went back. They haven't talked back to us.

MR. DENTON: All right. Well, we will have to gear up to talk back if your schedule is as early as you think it is. I think it is true that we have not seen your plant as February '86 plant in our own thinking about it, but I would say let's take the steps we can take.

Bob, can you get up there between now and a month from now with whatever assistance you need?

MR. BERNERO: Yes, I can, certainly.

MR. DENTON: Maybe some people to help decide whether we need to put more resources on this or not. It is not that we are reluctant to do it. If we had infinite resources we would try to.

I guess you should be aware that our best judgment is you are not going to make February, not that we care one way or the other.

MR. BERNERO: But given a choice of priorities, as some of the evidence indicates, should we lean toward Hope Creek first and then you people second or vice versa? And you seem to be saying no, take us first, you know. We

think Hope Creek isn't going to make February.

MR. MANGAN: We are not suggesting that you reorient your priorities.

MR. BERNERO: Oh, no, no.

MR. MANGAN: All we want to do is ask you for support.

MR. DENTON: We will certainly support you. We have this discussion on and off.

How does the region feel about this plant compared to the other plants?

MR. LINVILLE: I think the region feels that Hope Creek is definitely ahead of them at this point. I think we view the Project 2 schedule for pre-ops that shows a May completion as being optimistic, but we are prepared to support whatever they are able to achieve of course in our inspection effort.

I think that some of the things that happened in the pre-op program, as someone indicated earlier, are inputs into the tech specs. Somebody asked why it takes five weeks. Some of the things that happen in the pre-op program determine parameters which go into the tech specs and that is one reason why it has to be in that sequencing that was indicated earlier.

MR. CONNER: No, my question was different. The fine-tuning I understand. I was thinking you were saying

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you didn't turn any of this over to say the consultants until the last "jotile" was in place. I don't think you meant that now and I don't think that was what was meant initially.

MR. LINVILLE: The region is prepared to do tech spec audit with the consultant in January of the proof and review version of the tech specs also.

MR. QUAMME: Which won't be available according to this schedule.

MR. LINVILLE: They will be available next week?

VOICE: No, they come out Friday.

MR. LINVILLE: They will be available next week.

MR. ABBOTT: This proof and review copy that is being ---

MR. LINVILLE: That is what we use to do that audit.

MR. THOMPSON: The staff is going to use it, the region is going to use it and you I guess will use that same document both to develop procedures as you verify it. And according to the proposal, Walt, is that all of those responses would be in on January 24th.

MR. BUTLER: Right.

MR. THOMPSON: Which you are saying that that

January 24th then has a typical completion date for turn
around resolution of those issues. If in fact your plant,

if there are no issues and it is perfect, you know, then you are not going to need a month's turn-around time. That is the more differences that you identify between the FSAR and the as-built of the plant or the procedures haven't been run and you say we don't have this one, you are not able to make a final set for your final certification that in fact these are precisely the tech specs you are ready to use.

So that is the key. It is kind of a blending of the completion of the construction as well as the documentation that support those two. And our best judgment is that as a program which goes with a January 24th date provides a sufficient amount of time for you to complete the up-front work and have the dialogue with the staff and finalize the TSAR by the end of December which gives the staff then that four weeks that it does to complete the final review and certification.

If you were able to come in sooner, then the document has few changes in the FSAR and that would just be set as the end date and then we could ask the staff to, you know, respond earlier, January 15th. But typically our experience has been that it takes two to three weeks to get back in and do that difficult review and that is a period of time that is important to do the quality type review that you need to do.

MR. DENTON: I think when you send in this submittal in late December it would be important maybe to be sure you flagged in any changes you are proposing the changes in the tech specs that should result so they don't get lost. In other words, you will have this so-called proof and review, but it seems to me since you made the originating changes, then you could just put in there a section somehow that naturally these conforming changes would have to be made and give you the burden of identifying in the first instance the changes that would have to be made as a result of your submittal.

And my thought was that since it is such an important issue to have Bob or whoever he wants to assist him do an onsite look, not to supersede the case work forecast panel ---

MR. BERNERO: And replay the act perhaps in the second week in December, or something like that.

MR. DENTON: The last time you were up there I guess was June, and you can take another look to see what you would recommend.

MR. BERNERO: That would give you a chance to look at those tech specs and also to satisfy yourself, you know, on the final FSAR, the loose ends, and also you have got some very ambitious -- you are recovering that schedule curve and you are eating up the negativity in your

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schedule. That is what you are asserting today, and you have got a couple of more weeks of proving that you are maintaining that pace.

MR. DENTON: And if I can get up there with him, I will try to take a look before the end of the year and that way we can decide how close you really are. It is certainly not our intent to delay for delay's sake. We just want to be sure you are not overly optimistic. That is why we had the six-month window as a general guideline, and we are not within six months here.

MR. DONLON: If I understand this, and I could very well misunderstand, but what I hear you saying is that the tech specs will be issued on Friday the 22nd.

MR. BERNERO: Yes. They are ready to go right now.

MR. DONLON: And there isn't anything that will take place between now and roughly a month from now, the 24th of December or thereabouts, and we will do what we can as far as completing the FSAR. Up to that point everything is on go as far as we are concerned unless we start slipping one way or the other. Is that correct, and I am looking at our fellows now?

Would you do anything less, let me put it that way, than you would otherwise be doing?

MR. DENTON: Well, certainly not anything less.

We might be doing more.

MR. BERNERO: What Walt proposed is we give you the tech specs this week, we wait until December 24th for your final FSAR major submittal, and then one month after that we complete our effort.

Now if we are to put resources in to beat an April date, we have got to do that fairly soon and not wait until January 24th.

MR. DONLON: All right. That would not be sufficient for us to meet the early schedule.

MR. BERNERO: Now if you get the tech specs this week and within about two weeks we meet again, then we have the basis to accelerate the application of resources and not waiting until January 24th but coming in a little sooner.

MR. DENTON: And it is vital I think for you to close out these open lines and the issues between us, and if we haven't closed them, push us to close them. If you are really that close, you need to close out these open issues, and to wait until the end of the year for a plant and expect to be licensed in February is really pushing the resolution, and we need to tell you we are not going to adopt your method or you want a hearing if you don't agree with us or vice versa soon so they don't linger.

I am sure they must not be difficult issues since

other plants that have dealt with the same design have gotten through this hurdle. We just need to close out the technical issues. That is really what completes our review. Then you are driven by their schedule, and I think the most tests you complete the more resources you will see the region pour in. And if you suddenly have a chance to meet, I am sure the Regional Administrator will provide resources to monitor it.

We just wanted to share with you the reason we were doing what we were. And I would say then, after Bob has had a chance to look at it, he can get back with you and tell you what we have concluded and whether we can do anything more or not.

MR. HOOTEN: Mr. Denton, are we doing anything here to force an extension of the February fuel load date? I don't see that we are, but I want to be sure that we are not.

MR. DENTON: Not deliberately, but I wasn't reassigning resources either today. So we are not forcing it.

MR. BERNERO: In order to meet a February fuel load date, we would have to get from you and apply by us resources during the month of December that were not covered in what Walt Butler said.

So if we followed the pattern Walt Butler said

about a December 24th submittal from you and a January 24th response from us, that is an accomplished fact of actually reflecting the April 18th or ---

MR. HOOTEN: And we can't tolerate that in our schedule.

MR. BERNERO: We hear you and that is why we are saying the first step is the same in both cases, to give you the tech specs.

MR. DENTON: The best thing you could do is to not wait until December 24th to get your filing in. Get it in by the 1st of December.

MR. THOMPSON: See, we can drive you. Once you get that filing in then ---

MR. DENTON: Our review is driven by the status of your application readiness. And at the moment you are only allowing in there 30 days for us to do what we have to do to close up the SER. The sooner you can close it up and tie a bow around it, and this is the plant design, then the sooner we can finish tech specs and finish the SER and finish the inspection and just wait for you. So I don't think you ought to let your licensing side slide on scot free. You have got to complete the licensing review as well as complete the plant.

MR. DONLON: But you also, Tony, need some expeditious response, right?

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MR. ZALLNICK: Yes, sir.

MR. DONLON: So we have to work on that, too.

MR. DENTON: Some people have put an office here in town somewhere that really facilitates around-the-clock meetings until these issues close up.

MR. SCROGGINS: And we intend to schedule them at your convenience.

MR. DENTON: Mary, do you have any comment on how we might move faster on the open issues?

MS. HAUGHEY: As far as I am concerned, I think the reviewers have been turning things around almost as fast as we have been getting them. We have an SER that should be out hopefully within the next week or two. It is in the process of being printed.

MR. DENTON: Since we have got enough people here to finish the plant, what do you see as the major barriers in a safety review that need to be pointed out?

MS. HAUGHEY: The most dangerous one I see is non-support of downcomers. The only other plant that has ever come in with that before was Shoreham and they revised it and put lateral supports under their downcomers. But the biggest reason I see that as a problem is that could mean a lot of hardware changes if it is not acceptable.

MR. DENTON: I take it our staffs are not closed on that.

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MS.	HAUGHEY:	They	have	not.
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MR. DENTON: Are there any others that maybe everyone should be aware of? Fire protection or EQ?

MS. HAUGHEY: The fire protection program has been very good. However, I believe there is a lot of implementation still left to be done.

The equipment qualification program, they have had their SQRT and pump and valve audit. There are a number of things to be closed which were identified at the audit and will be identified in this SER coming out.

However, they have not had their environmental qualification audit. It is scheduled for the middle of December.

MR. DENTON: How about operator accreditation training and staffing issues? Is that ---

MS. HAUGHEY: I think the region might be better able to address that.

MR. LINVILLE: They have sent one class of operators up to get licensed. The SRO's did very well and the RO's, they had a pretty high failure rate.

Their second group of operators are scheduled to be examined in December. So we will have to see how that develops.

MR. DENTON: If they all pass would they be enough for their operation of the plant?

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MR. LINVILLE: I am not sure if there are enough RO's based on the December date.

MR. QUAMME: Right now we have three RO's, and in our class coming up we have 21 RO's in class. So that would give us a potential for 24. We have 10 SRO's currently, and we have 12 more going up this December.

MR. BERNERO: Do you use separate STA's?

MR. QUAMME: Our assistant shift supervisors also qualify for STA's and the second SRO on shift?

MR. THOMPSON: They are degreed individuals with college degrees?

MR. QUAMME: Yes.

MR. DENTON: Maybe I should ask you if there are any issues that you think conversely are major undecided issues on your side?

MR. DONLON: Tony?

MR. ZALLNICK: Well, I guess my estimate of where we are, if there are quite lot of the confirmatory items which really need to have an NRC walkdown on audit, I think it looks like nine or ten of them and most of them are scheduled right now.

MR. DENTON: Do you know of any other issues in which we appear at loggerheads that management needs to focus on?

MR. ZALLNICK: The one that I can think of that we

haven't been able to seem to get a resolution on is what format to use for Section 6 of the tech specs, which is the administrative control section. It is our position that they should be consistent with Unit 1 since there is no reason to make them different. With an operating unit already there, the administrative control section should be the same. And the staff in what they have been saving to us has been pushing the standard tech specs, and that would either cause us to change Unit 1 or have two different administrative programs, and we don't think that is appropriate. We are at loggerheads on that one.

MR. DENTON: That is one that we ought to be able to focus on and solve pretty quickly.

MR. DONLON: Could you put a memo out on that?
(Laughter.)

MR. THOMPSON: We can solve that on this section of the proof and review copy that goes out and there should be no long time to do that.

MS. HAUGHEY: I don't believe we are still pushing them on that issue and I believe there were some things that were ---

MR. BERNERO: You ought to be able to tell by looking at this set.

(Laughter.)

MR. DENTON: How about issues that are more

hardware oriented, things that if we and you don't close that you have to take down and redo?

Mk. ZALLNICK: The only one is the one Mary mentioned, the downcomers, and I think that is resolvable if we get the right people at the NRC together.

MS. HAUGHEL: We still don't have the outstanding information we are looking for on that.

MR. ZALLNICK: Well, you have to tell us what it is you want.

MS. HAUGHEY: Okay. Well, we did receive a package about a week and a half ago and I think there is more coming over today this afternoon.

. MR. ZALLNICK: We keep responding to follow-up questions, but I think it really requires getting the Structural Branch involved in this. This has been know for two years about the unsupported downcomers. So it is really a question of just I think getting enough, like we did in geology, just getting enough information on the record to say yes, we can make the decision.

MR. DENTON: Well, I realize it is an important issue to you and I hope you see the need for us to have reasonably accurate information. I would like nothing better than for it turn out that we agree with your date and move forward on that basis, but we will see what we can do. At the same time, we feel some obligation to all our

other clients to be sure that your projections are not too far out of line if they are.

MR. THOMPSON: All I can say is from this meeting we will issue a set of tech specs as soon as we can and no later than Friday, and we can issue them earlier, we will issue them earlier.

MR. DONLON: We were going to bring them back with us if you had them.

(Laughter.)

MR. THOMPSON: We will give you an advance copy so you can start looking at them. But the one thing we will not do at this particular time is establish a response date until Mr. Bernero comes back, and that will depend in part on when you get your FSAR submittal and his site visit.

MR. BERNERO: I will consult with regional staff and our own people, and what I will contact you for is I would expect the first week of December that we should revisit the subject. You will have had a chance then to look at those tech specs, to get about two more weeks of progress and I think sometime in the first week of December would be the earliest we should meet again. And then if it is appropriate, then the resources have to be realigned.

MR. DENTON: And I would suggest that when you visit there, Bob, not to focus on paper, but on the outside of the plant and see exactly how the plant looks and the

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marysimons 1	control room and how much work is remaining.
2	· MR. DONLON: Okay. Very good, if we open that
3	up. If you will see fit, Bob, to come the second week of
4	December to
5	MR. BERNERO: You just slipped it a week.
6	(Laughter.)
7	MR. DONLON: It is going to take a few days.
8	Going up on a Friday that means Monday.
9	(Laughter.)
10	MR. DENTON: We want to get there before the deep
11	freeze sets in.
12	(Laughter.)
13	MR. DENTON: Well thanks for coming down.
14	MR. DONLON: Thank you.
15	(Whereupon, at 2:40 p.m., the meeting concluded.)
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#### CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

NAME OF PROCEEDING: MEETING WITH NIAGARA MOHAWK POWER

CORPORATION TO DISCUSS CONSTRUCTION SCHEDULE AND READINESS FOR FUEL LOAD

DOCKET NO .:

PLACE:

BETHESDA, MARYLAND

DATE:

MONDAY, NOVEMBER 18, 1985

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission.

(TYPED)

MARY SIMONS

Official Reporter

ACE-FEDERAL REPORTERS, INC. Reporter's Affiliation

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Mary Haughen VIEW LINNING H.R. Donten R.M. BERNERO H. UGH THOMPSON R.M. SCROGGINS T.M. NOVAKE Troy & Conner of B.G. HODTEN W. J. DONLON C. U. MANGAN R.B. ABBOTT a.b. QUAMME W.R. BUTLER RA GRAMM MJ VIRGILIO Dennis Crutchfield Charles Miller Frank J. GIACCIO Paul D. Eddy 3. M. Bordenick E. J. WEINKAM SuzANNE BLACK A.F. ZALLNICK G.K. AFFLERBACH

1182 - Licensing : rover - Linea MRC RI CHIEF REJETOR PLOTECT ZL NRR NRR/DSI, DIRECTOR NRR/DL NAC- CONTROLLER +DIRECTOR, AM NRC/NRR/OL Conner & a etterhala, P.C., Council N.H. NMPC - Ex. Director Nuclear Coustr. MMPC - HesideNT NWPS-Sr. V.P. NMPC - STATION SUPT. NMPC - project Director NRC - LB#2 NRC - SR RESIDENT INSP. NIRC/DC NRC/ NRRDE NRC/NRR/DL consultant to N.Y. P.S.C NYS PSC NRC - ELD NRC/NRR/OL NRC/NRRIDL NMPC - MANNOER Nuclear Licensing NMPC- SIM MOR. NAP-2

Charles Alexander

### REMAINING LICENSING AND INSPECTION ACTIVITIES

### RESOLUTION OF OPEN/CONFIRMATORY ITEMS

°OF THE 18/55 OPEN/CONFIRMATORY ITEMS IDENTIFIED IN THE SER (FEBRUARY, 1985), 9/37 AWAIT APPLICANT ACTION TODAY.

OUTSTANDING INFORMATION, MOST OF WHICH IS SCHEDULE FOR SUBMITTAL BETWEEN NOW AND THE END OF DECEMBER.

#### PREPARE TECHNICAL SPECIFICATIONS

\*APPLICANT NEEDS THE PROOF-AND-REVIEW COPY OF THE TECHNICAL SPECIFICATIONS
FOR USE IN PREPARING SURVEILLANCE TEST PROCEDURES.

\*REGIONAL INSPECTORS NEED DRAFT T/S FOR USE IN ITS INSPECTION ACTIVITIES.

\*RECENT EXPERIENCE HAS SHOWN THAT MORE TIME AND RESOURCES NEED TO BE ALLOCATED TO THIS ACTIVITY BY ALL AFFECTED PARTIES.

## REGIONAL INSPECTION ACTIVITIES

°CONSTRUCTION

\*PRE-OPERATIONAL/START-UP TESTING

\*SURVEILLANCE TESTING

\*PROCEDURES

## STATUS OF LICENSING ISSUES

	OPEN		CONFIRM	IATORY
	SER	11/18/85	SER	11/18/85
NMP-2	18	9	55	37
HOPE CREEK	14	7	37	5
CLINTON	20	5	66	8

## SELECTED INSPECTION ACTIVITIES

(11/11/85)

*AS-BUILT VERIFICATION, PRELICIENSING	5%
°SAFETY COMMITTEE INSPECTION	0%
*OPERATING PROCEDURES INSPECTION	0%
°MAINTENANCE PROCEDURES INSPECTION	0%
*EMERGENCY PROCEDURES INSPECTION	0%
PRE-OP TEST PROGRAM IMPLEMENTATION	10%
°CILRT RESULTS REVIEW	5%
*RADIATION PROTECTION	20%
*EMERGENCY PLANNING	0%
°SECURITY	15%

#### RECOMMENDED

#### COURSE OF ACTION

- SCHEDULING ITS LICENSING AND INSPECTION ACTIVITIES. THIS DATE TO BE ADJUSTED DEPENDING ON PROGRESS AT THE PLANT.
- "STAFF TO BEGIN AN EXTENDED PROOF-AND-REVIEW CYCLE FOR THE TECHNICAL SPECIFICATIONS ON NOVEMBER 22, 1985
- \*APPLICANT SHOULD FILE ITS AMENDMENT TO THE FSAR AS A RESULT OF ITS ONGOING AS-BUILT CERTIFICATION PROGRAM BY DECEMBER 24. 1985.
- \*COMMENTS ON THE PROOF-AND-REVIEW COPY WILL BE REQUIRED NO LATER THAN JANUARY 24, 1986.
- \*COMPLETION OF THE PROOF-AND-REVIEW CYCLE WILL OCCUR IN THE 2/24/86 4/4/86 TIME-FRAME.
- °DURING WEEK OF JANUARY 27, 1986, STAFF WILL CONDUCT A MAJOR REEVALUATION OF THE NMP-2 REVIEW SCHEDULES.
- \*APPLICANT SHALL KEEP THE REGIONAL OFFICE APPRISED OF ITS SCHEDULES TO ASSURE THAT THE INSPECTION ACTIVITIES CAN BE ACCOMPLISHED IN A TIMELY MANNER.

## CASE LOAD FORECAST PANEL

### MEMBERS

- ° AL SCHWENCER, LEADER
- " M. HAUGHEY
- · R. HARTFIELD
- ° R. GRAMM
- . A. CERNE

## ACTIVITIES

- ° FIRST MEETING: FEBRUARY, 1983
  - FINDINGS: FLD = LATE 1986
- ° SECOND MEETING: OCTOBER, 1984
  - FINDINGS: DEFERRED TO 3RD MEETING
- ° THIRD MEETING: JUNE, 1985
  - FINDINGS: LATE 1986

## CLP FINDINGS

- \* ESTIMATED F.L.D.: LATE 1986
- BASES

°MONTHS FROM COLD HYDRO

\*PROGRESS AT TIME OF COLD HYDRO

\*SUBSEQUENT PROGRESS

COMMODITIES

BUILDING TURNOVERS

SYSTEM TURNOVERS

PRE-OP TESTING

SURVEILLANCE TESTING

PROCEDURES DEVELOPMENT

## PREOPERATIONAL TEST PROGRAMS FOR OTHER BWR'S

## (COLD HYDRO TO LOW POWER LICENSE)

FIRST UNITS POST TMI	DURATION (MONTHS)
LA SALLE 1	17
SUSQUEHANNA 1	21
WNP-2	16
GRAND GULF 1	18
FERMI 2	32
LIMERICK 1	14
RIVER BEND	15
(SHOREHAM NOT INCLUDED)	-
AVERAGE	19
SECOND UNITS POST-TMI	
LA SALLE 2	14
SUSQUEHANNA 2	9

COLD HYDRO AT NMP-2: APRIL 1985

## COMPARISON OF PREOPERATIONAL TEST PROGRAM STATUS

## (11/11/85)

	NINE MILE POINT 2	HOPE CREEK
TOTAL NO. OF PRE-OP TESTS	106	149
NUMBER OF APPROVED PROCEDURES	80	110
TESTS COMPLETED	8	53
RESULTS REVIEWED BY SORC	0	34
RESULTS APPROVED BY SORC	0	28

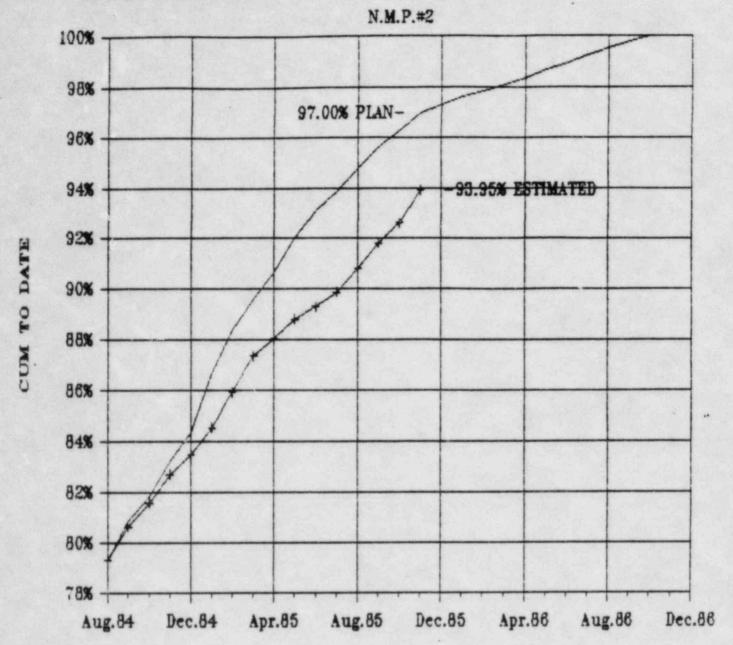
# PROGRESS AGAINST 13 WEEK NEGATIVITY SCHEDULE

SOLID RADWASTE	SCHEDULE DATE	ACHIEVED
		(AS OF 11/11/85)
CONSTRUCTIONCOMPLETION	10/25/85	NO
START PREL. TEST	10/28/85	NO
COMPLETION PRE-OP	4/11/86	N/A
REACTOR PROTECTION SYSTEM		
CONSTRUCTION RELEASE	11/07/85	NO
COMPLETION COLD FUN. TEST	05/26/86	N/A

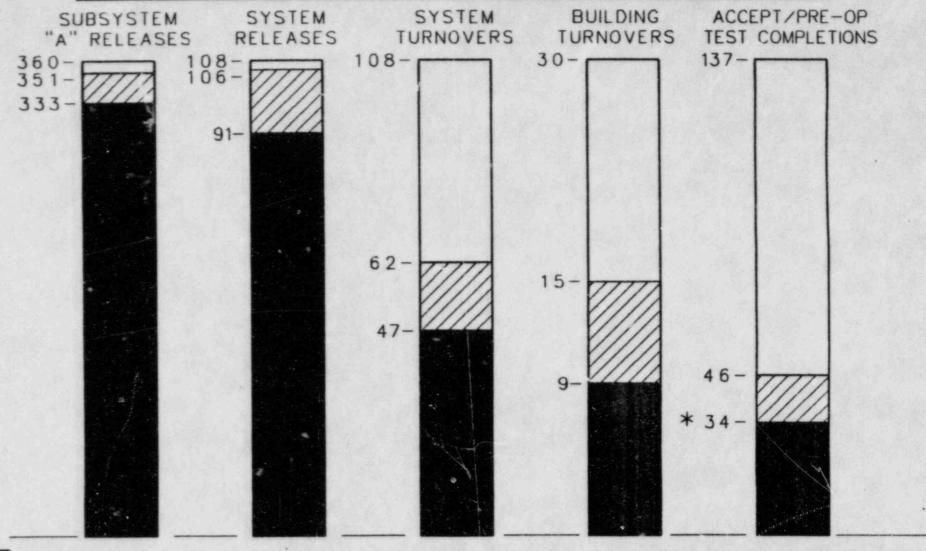
# PROJECT STATUS EST. AS OF 11/13/85

0	PERIOD % COMPLETE	1.33	vs.	.72	PLANNED
0	PROJECT % COMPLETE	93.95	vs.	97.00	PLANNED
0	PERIOD \$'S EXPENDED	\$65.9M	vs.	\$51.4M	PLANNED
0	YEAR-TO-DATE EXPENDED	\$641.5M	vs.	\$625.1M	PLANNED

# ESTIMATED PROJECT PERCENT COMPLETE



# KEY PROJECT COMPLETION ACTIVITIES





TARGET FOR NOVEMBER 15, 1985

PRESENT STATUS

- STATUS -NOVEMBER 11 ,1985

\* 11 COMPLETE

# SYSTEMS COMPLETION TRANSITION

		A" E			S Y S	
	CONSTRUCTION	POST CONSTRUCTION COMPLETION	CONSTRUCTION RELEASE FORMS SIGNED	STO APPROVAL T PROCESS	AVAILABLE FOR AT/POT TESTING	AT POT TESTING PROGRESS
SEP 18TH	32, 304	1(A) 220	,/	,/,,	333	1(\$)
OCT	21 194	28 261	1(2)	13	1(A) 241	318)
NOV	2/20	36 331	"	15	21(P) 261	6(P) 18x
	84 101	1 11 13 17 31 34 40 41 45 47 52 53 56 67 77 79 80 81 82 85 86 88 90 92 94 97 103 104 105 107	27 28 29 30 35 37 50 78	19 20 21 33 36 38 42 43 46 51 55 68 72 100A 100B	6 7 8 10 A 18 22 C 23 26 39 44 57 58 59 B 59 C 63 64 65 67 70 71 A 71 B 74 84(P) 91 95 106	2(S) 3(S) 4(S) 5(S) 9(C) 10B(S) 10C(S) 12(C) 14(S) 15(C) 16(C) 17-1(S)(P) 17-3(S)(P) 22A-1(S) 22A-2(S) 22B(C) 24(C) 25(S) 32(S) 49-1(S) 49-2(S) 49-2(S) 49-3(S) 49-4(S) 54-1(C)(P) 58-3(S)(P) 66-1(S)(P) 66-1(S)(P) 66-1(S)(P) 73-1(C) 73-2(C) 74-2(S)(P) 74-2(S)(P)

STARTED TEST

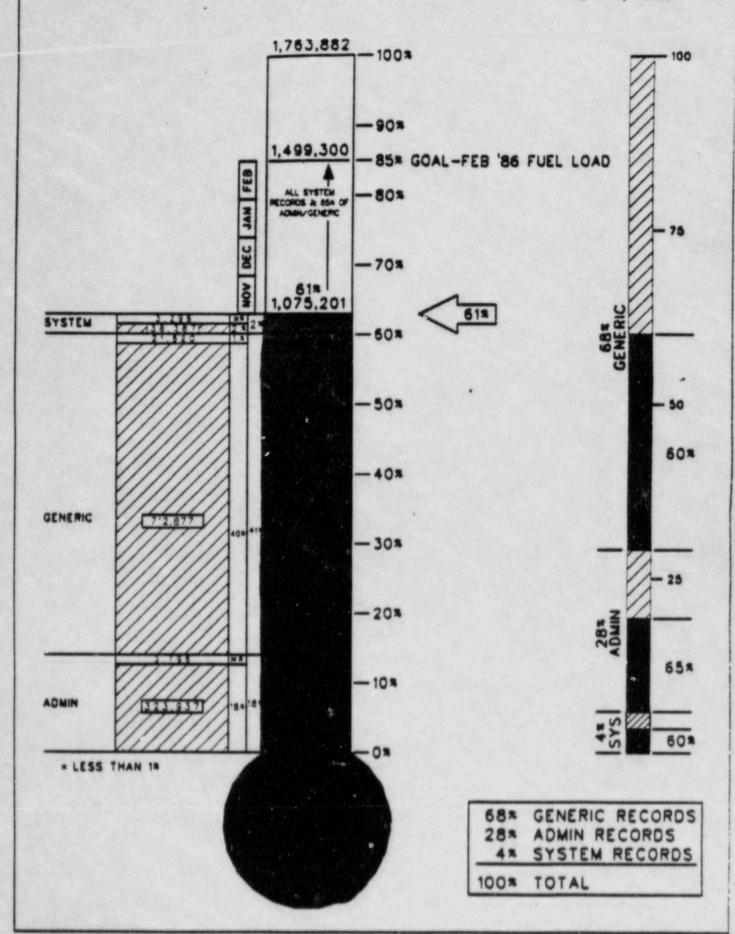
# MILESTONES

			STATUS
1.	4160V ENERGIZATION	co	MPLETE
2.	DIESEL GENERATORS	IN	PROCES
3.	INTEGRATED FLUSH/RPV HYDRO	co	MPLETE
4.	TURBINE GENERATOR VACUUM PULL	IN	PROCESS
5.	VENTILATION BALANCING		FEB 86
6.	INTEGRATED LEAK RATE TEST	4	FEB 86
7.	RADWASTE SYSTEM	20	FEB 86
8.	FUEL RECEIPT AND TRANSFER	7	NOV 85
9.	LOSS OF POWER/ECCS	14	JAN 86
10.	FUEL LOAD	24	FEB 86
11.	COMMERCIAL OPERATION		OCT 86

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FACILITY READINESS	1. Operations, Maintenance and Surveillance	6. Licensed Operator Requalification.	o Surveillance Test Pracedures	d. System Operating Procedures.	1.3 Implementation of Survey lance Testing	2. Fire Protection	7.2 Training	Equipment.	3.1 Procedures			6 Socuelly and Salanned.	1 dn		5.3 Establishment and implementation of the	6. Queilly Assurance		5 3 On Training and Staffing	6.1 Procedures	6.2 Colegory I System Jeste	6.3 Wilestones	b toss of Offsite Possy Test	6. Fuel Receipt (Readiness for fuel Receipt)		

## OVERALL RECORDS TURNOVER PROGRESS

NOV 11, 1985



# NRC AUDITS

•	PVORT/SQRTCOMPLETE
•	SPDSCOMPLETE
•	APPENDIX R (FIRE PROTECTION)
•	EQUIPMENT QUALIFICATIONDECEMBER 85*
•	TECH SPECS STATUSDECEMBER 85
•	TMI ISSUESDECEMBER 85*
•	NDE VAN VISITDECEMBER 9-20
•	NRC COMMISSIONER'S VISITSFALL/SPRING
•	DIRECTOR, OFFICE NUCLEAR REACTOR REGULATION READINESS VISITSPRING 86

\*CHANGED SINCE LAST CO-TENANT MEETING

### MEETING SUMMARY DISTRIBUTION

Docket No(s): 50-410

NRC PDR Local PDR BWD #3 r/f

J. Partlow (Emergency Preparedness only)

E. Adensam Attorney, OELD F. Jordan

Grimes Alar (10)

Fi ject Manager \_ M. Haughey

Hylton

#### NRC PARTICIPANTS

M. Haughey

J. Linville

H. R. Denton

R. M. Bernero

H. Thompson

R. M. Scroggins

T. Novak

Troy B. Conner, Jr.

W. Butler

R. A. Gramm

M. J. Virgilio

D. Crutchfield

C. Miller

R. J. Giaccio

B. M. Bordenick

E. J. Weinkam

S. Black

Cortified by Jul M Cl

bcc: Applicant & Service List