

EXHIBIT B

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DOCUMENT NUMBER-DATE

05569 AUG -8 =

FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: NUCLEAR COST RECOVERY) DOCKET NOS:110009-EI
CLAUSE)

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THE DEPOSITION OF RAJIV S. KUNDALKAR

- - -

Wednesday, June 29, 2011
301 Clematis Street
Suite 3000
West Palm Beach, Florida 33401
1:02 - 4:55 o'clock p.m.

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I N D E X

WITNESS:

PAGE:

RAJIV S. KUNDALKAR

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(All Exhibits Are Attached Hereto).

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P R O C E E D I N G S
- - -

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7 The deposition of RAJIV S. KUNDALKAR, a
8 witness, was taken before me, Rebecca L. Zinn,
9 Professional Reporter and Notary Public, State of
10 Florida at Large, at 301 Clematis Street, Suite 3000,
11 West Palm Beach, Palm Beach County, Florida, on the
12 29th day of June, 2011, commencing at 1:02 o'clock
13 p.m., for the purpose of discovery and for use as
14 evidence in the above entitled cause, pursuant to
15 notice heretofore filed, on behalf of the Citizens of
16 the State of Florida in the above-titled cause
17 pending before the above-named Commission.

18
19 - - -
20
21 THEREUPON,

22 RAJIV S. KUNDALKAR,
23 Being by the undersigned Notary Public,
24 first duly sworn to testify the whole truth as
25 hereinafter certified, testified as follows:

DIRECT EXAMINATION

BY MR. McGLOTHLIN:

Q. Please state your name for the record, sir.

A. My name is Rajiv S. Kundalkar.

Q. What is your address, Mr. Kundalkar?

A. I live at 11591 Buckhaven Lane, West Palm Beach, Florida.

Q. Sir, my name is Joe McGlothlin with the Office of Public Counsel. I have some questions for you today. I would like to pause for a second and perhaps take care of a couple preliminaries.

I have spoken to counsel for FPL about the fact that I will be using some documents that they have flagged as confidential, and it's my understanding that everyone in the room and on the phone is cleared to see and hear discussions about those documents; is that correct?

MR. ROSS: That's correct.

MR. McGLOTHLIN: At the conclusion of the deposition, the court reporter will provide the full transcript to FPL for their review and possible redaction.

And that's the way we're going to handle the confidential materials.

1 BY MR. McGLOTHLIN:

2 Q. Mr. Kundalkar, have you been deposed
3 before?

4 A. Yes, I have been.

5 Q. So you're familiar with the routine,
6 then, of a deposition?

7 A. Yes, I am.

8 Q. I will ask this of you: If at any point
9 during the deposition you don't understand my
10 question or something about the question is
11 unclear to you so you are not confident about what
12 you have been asked to answer, please inform me of
13 that and you and I will work on communication to
14 the extent necessary so that my question is clear
15 to you and the transcript will reflect clear
16 communication between the two of us.

17 Is that okay with you?

18 A. Thank you, sir. I understand that and I
19 will follow through with that.

20 Q. I want to begin, Mr. Kundalkar, with a
21 few questions about the testimony that you
22 provided to the Public Service Commission in
23 Docket 090009-EI, and I have some excerpts from
24 the transcript for your review, and I would ask
25 the court reporter to have that marked.

1 I will give you a better one.

2 I have a certified copy to give the
3 court reporter for Exhibit Number 1, excerpt of
4 testimony, Docket 090009.

5 And let's see how many copies I can hand
6 around the room.

7 (Thereupon, Exhibit Number 1 was Marked
8 for Identification and is attached
9 hereto.)

10 **BY MR. McGLOTHLIN:**

11 Q. You will see that the first page is a
12 cover page of the particular volume of the
13 transcript from which the excerpt was taken.

14 A. Yes, I do.

15 Q. And the balance of the excerpt is the
16 testimony, both live and prefiled, that was
17 submitted in the hearing in that case.

18 A. Yes, I understand.

19 Q. Mr. Kundalkar, during your testimony you
20 provided some information about a restructuring of
21 the nuclear division that occurred in
22 December, 2008.

23 Do you recall that series of questions
24 and answers?

25 A. In 2008?

1 Q. A restructure that was put in place in
2 2008.

3 A. Yes, I do. I would like to refer to the
4 testimony, but I do recall giving that testimony.

5 Q. I will refer you to page two
6 forty-seven, if you will take a look, to refresh
7 yourself on that.

8 A. Yes, I am familiar with this
9 description, even though I have not read every
10 page of this. I would like to refer back to this
11 when you ask specific questions back to the
12 testimony I gave.

13 Q. Certainly.

14 As I understand this testimony, you were
15 describing some changes in the organizational
16 structure of the uprate section, the nuclear
17 uprate section --

18 A. Yes.

19 Q. -- that was put in place in
20 December, 2008, to be in effect in 2009; is that
21 correct?

22 A. I think they were in effect in December,
23 middle or third week of December of 2008, and may
24 have started functioning by the end of the year,
25 but that is what I recall.

1 Q. And one of the changes that you describe
2 was the decision to place a senior manager on the
3 site of each unit that was going to be the subject
4 of the uprate activity?

5 A. Yes, that is correct.

6 Q. Were those senior FPL directors, as you
7 described them in your testimony, in place as of
8 December of 2008?

9 A. I would like to verify that, but I don't
10 remember. I believe they were, but I would like
11 to verify that. Subject to check.

12 Q. My question is this: Are you describing
13 a change that existed only on paper, or was this
14 change implemented with people in place in the
15 modified job descriptions?

16 A. My recollection is the people were in
17 place. There was one Mr. Graham, I think, on one
18 site and I do not recall the name of the gentleman
19 in St. Lucie, but there was a gentleman in that
20 function at St. Lucie as well.

21 Q. Again, as I understand the testimony
22 that you provided at that time, the purpose of the
23 change was to place more management expertise
24 closer to the activity itself?

25 A. Yes, that was the reason for doing that,

1 and at the same time you may see the earlier part
2 of the description. There was an engineering
3 director in Juno Beach, and a licensing director,
4 and the site functions for those activities
5 reported to central location.

6 MS. KAUFMAN: I'm sorry to interrupt,
7 but can Mr. Kundalkar, maybe, get closer to
8 the speaker, maybe? I am having a hard time
9 hearing.

10 THE WITNESS: I'm very close to the
11 speaker.

12 MR. McGLOTHLIN: We can turn the
13 microphone. That may help.

14 MR. FEIL: This is probably the best we
15 can do, Vicki.

16 MS. KAUFMAN: Okay, I will try to
17 listen harder. Thank you.

18 MR. FEIL: It's not a new-wave
19 technology by all appearances of the phone.

20 THE WITNESS: Yes, on page five, the
21 engineering director and the licensing
22 director both reported directly to me, Vice
23 President of Nuclear Power Upgrades.

24 I'm on page two forty-seven, maybe line
25 six, seven, eight, something like that.

1 MR. McGLOTHLIN: Yes.

2 BY MR. McGLOTHLIN:

3 Q. And on the same page you will see at
4 lines nineteen and twenty that the change was
5 made, according to your testimony, to provide the
6 appropriate level of oversight during the
7 modification and engineering implementation phases
8 of the project, correct?

9 A. Yes, that is correct.

10 Q. So the project entered a new phase that
11 required more close-up attention?

12 A. That is correct, yes.

13 Q. Was this change in the nature of a
14 decentralizing of the former structure?

15 A. These were initial steps towards
16 decentralizing because we had recently selected
17 Bechtel as the EPC contractor. They would start
18 bringing some of the similar functions,
19 engineering, construction planning to the site.
20 Therefore, we wanted to have oversight of those
21 functions at the site and monitoring them at the
22 site.

23 At the same time there were a number of
24 common activities on the way, such as licensing
25 application for both sites, procurement activities

1 for both sites, which required engineering
2 participation, preparation of specs, oversight for
3 commonality, synergy of work on both sites.

4 So, the engineering directors still
5 reported to me and they were in Juno Beach.

6 Q. Well, here is something that I want to
7 ask you to clarify for me. In some responses to
8 discovery in this case we have seen references to
9 what is described as an organizational change that
10 occurred in the July, August time frame of 2009.
11 And it was described as being done because the
12 project was evolving into a different phase and
13 there was a desire to decentralize the structure
14 of the organization.

15 And my question is, if you know: Was
16 this a separate and second reorganization, or was
17 this part of the 2008 reorganization?

18 A. 2008 reorganization were the initial
19 steps to start that local oversight function. The
20 middle of 2009 organization was to make those site
21 functions more self-sufficient and completely
22 remove some of the day-to-day oversight functions
23 from the central headquarters and also provide
24 senior oversight for construction from the -- so
25 there was a south implementation, a VP assigned

1 or, a senior director assigned, so that he could
2 keep track of the construction aspect of both
3 Florida sites from being closer to the sites.

4 So, I think the December reorganization
5 was the initial start of starting to set up an
6 engineering function at the site while there were
7 still common engineering functions, such as
8 engineering analysis, licensing analysis in
9 progress, procurement of these items.

10 But in the early part of 2009, as
11 Bechtel started staffing and ramping up their
12 construction forces, more decentralized oversight
13 function needed to be on the site and that was the
14 purpose of middle of 2009 reorganization.

15 Q. Were the changes that occurred in the
16 July, August, 2009 time frame known in part and
17 were they part of the plan when the reorganization
18 was put in place in 2008?

19 A. These steps are the same steps we take
20 for all of our larger capital projects. When we
21 replace steam generators, when we replace reactor
22 heads for our Florida nuclear units, we started
23 these functions in the corporate headquarters with
24 engineering licensing in one place.

25 As the planning of these jobs

1 progressed, as the licensing activities had taken
2 some root, shape, and form, and some planning
3 activity had evolved to a mature level, then and
4 those larger projects also, we shifted those
5 responsibilities to self-sufficient implementation
6 organization led by implementation people at the
7 site because they are more into construction phase
8 or approaching planning for the construction
9 phase.

10 Q. As vice president of nuclear uprates,
11 I'm sure you must have been involved in the
12 December, 2008 reorganization; were you not?

13 A. Yes, I was.

14 Q. And so when the 2008 reorganization was
15 put in place and the changes were made and
16 implemented, did you understand at the time that
17 additional changes would occur in the July, August
18 time frame, 2009?

19 A. Absolutely. I mean, I have not known
20 exactly the time or the date when we would
21 implement those changes, but like I said,
22 comparable to our larger capital projects where
23 implemented, we would reach a stage where the
24 implementation becomes the major focus of activity
25 and these functions would be completely shifted

1 back to the sites, headed by people who are more
2 experienced and knowledgeable in implementation
3 aspect of it. That goes to engineer and licensing
4 aspect.

5 Q. Now, the excerpts include both the
6 prefiled testimony that you submitted in March of
7 2009, and the additional prefiled testimony that
8 you submitted in May, 2009.

9 In the May, 2009 testimony you said to
10 the Commission that you were providing the annual
11 nonbinding estimate of capital costs associated
12 with the uprate projects, and that you were
13 providing the same capital cost estimate that had
14 been used in the prior year, correct?

15 A. Can you refer me to what you're
16 referring to in the testimony so I can look at the
17 actual pages and reference what you are
18 discussing, sir?

19 Q. It will take me a moment.

20 A. Okay.

21 Q. The section begins at two sixty-six.

22 A. Are we into May, or are we still in
23 March?

24 Q. This is May.

25 A. Two sixty-six, did you say?

1 Q. Yes, and the pertinent passage begins at
2 line eight.

3 A. Okay.

4 Q. You said: At this time, FPL has not
5 identified any need to revise the total nonbinding
6 cost estimate provided last May in Docket
7 08009-EI.

8 A. Yes, that is correct, sir.

9 Q. And the value for that nonbinding cost
10 estimate is also the same that was in the
11 indicative bid that was provided by Bechtel; is
12 that correct?

13 A. That is correct, yes.

14 Q. That was dated in 2008 also; was it not?

15 A. I would like to check, but, yes, it was
16 based on the Bechtel indicative bid and was
17 similar to what was the estimate at that time.

18 Q. This phrase: Indicative bid is
19 something of a term of art from engineers; is it
20 not?

21 A. Ask the question again, sir.

22 Q. A term of art among engineers, that
23 term: Indicative bid?

24 A. No, it's not a term of art at all. It
25 is quite clear in my mind, sir.

1 Q. Well, let me rephrase the question then.

2 A. Okay.

3 Q. Would you explain the term: Indicative
4 bid --

5 A. I understand.

6 Q. -- for the laymen in the room?

7 A. Okay.

8 For complex projects such as this
9 project, where the entire scope of the project is
10 not fully defined because this being a fast-track
11 project, the engineering function is not
12 completely done. Engineering analysis is not
13 done. Therefore, engineering designs are not
14 complete. However, a description of what these
15 individual modifications would be is identified by
16 way of a scoping study.

17 So, taking those scoping studies into
18 account, any experienced EPC vendor, engineering,
19 procurement, and construction vendor, who has
20 done -- has extensive experience in these areas,
21 based on the view of the completed reports,
22 walkdowns, their experience in implementing
23 similar projects, would, or should come up with a
24 man-hour estimate to implement these jobs that
25 requires an indication of approximately how much

1 this project would cost.

2 But they are nonbinding because the
3 engineering is not done, designs are not complete,
4 and those steps are required before you can say
5 this is now a firmer estimate, or a more realistic
6 estimate.

7 Q. You used another term that we've seen
8 frequently in documents in this docket and that is
9 scoping study.

10 What is a scoping study?

11 A. Scoping study, sir, is like a
12 feasibility study. If we were to -- let's just
13 stay with this project -- if we wanted to increase
14 the thermal output of these nuclear plants or
15 electrical output of these nuclear plants, then
16 based on available design information that exists
17 on thousands of pages of analysis, literally tens
18 of thousands of pages of analysis, mathematical
19 margins, and the experience of the people who
20 supply components and experienced engineers in
21 building power plants, operating, or upgrading
22 power plants to look at the required systems,
23 components to see how much output can be
24 increased, how much margin exists in these
25 systems.

1 At the same time, if we were able to
2 make certain selections -- selected modifications,
3 how much -- what is the optimum output that we can
4 obtain from these power plants? So, they study
5 that document system-by-system review, not a
6 detailed analysis, system-by-system review, based
7 on existing analysis, plus some scoping analysis.

8 Scoping analysis would be a smaller
9 scale analysis of what the final analysis would be
10 required. They will have a complete comprehensive
11 report which will describe the scope of the
12 project based on the work completed. And this is
13 normally how these complex projects like uprate
14 are started. And we have done this activity on
15 many similar uprate projects. Within our
16 division, we have done those.

17 Q. So the indicative bid that Bechtel
18 provided to FPL was based on a scoping study and
19 both of those terms are used to describe
20 activities for which engineering has not been
21 accomplished?

22 A. Detailed design engineering has not been
23 accomplished. Some portion of engineering
24 analysis has been accomplished to develop high
25 enough confidence that once we go through detail

1 engineering analysis, we will end up approximately
2 at the same place.

3 Q. Well, the detailed design engineering
4 has not been accomplished?

5 A. That is correct.

6 Q. And in 2009 you provided this same value
7 that was in the 2008 indicative bid --

8 A. Correct.

9 Q. -- as the nonbinding estimate of capital
10 costs for the uprate projects?

11 A. Yes, that is correct.

12 Q. The next document I'm going to hand to
13 you is a one-page e-mail from you, Mr. Kundalkar,
14 to Mano Nazar dated May 30th, 2009.

15 A. Can I look at it?

16 Q. Yes, sir. This is just preliminaries.

17 MR. McGLOTHLIN: I'm going to ask the
18 court reporter to mark that as Exhibit
19 Number 2.

20 (Thereupon, Exhibit Number 2 was Marked
21 for Identification and is attached
22 hereto.)

23 THE WITNESS: Yes, I have looked at
24 this e-mail.

25 MR. McGLOTHLIN: Bear with me, sir.

1 I'm going to change the sequence on you and
2 ask you about this document next.

3 THE WITNESS: As opposed to this
4 e-mail?

5 MR. McGLOTHLIN: Yes.

6 (Thereupon, Exhibit Number 3 was Marked
7 for Identification and is attached
8 hereto.)

9 BY MR. McGLOTHLIN:

10 Q. So that we can continue the sequence,
11 this will be Exhibit 3, because I will refer to
12 the other one, but this caption is: Extended
13 Power Upgrades, Executive Steering Committee
14 Update, St. Lucie and Turkey Point, May, 2009.

15 A. Okay.

16 Q. Mr. Kundalkar, you provided your
17 prefiled testimony very early in the month of May,
18 2009, correct?

19 A. That is correct.

20 Q. First of all, having reviewed, take the
21 time you need to review this, but do you recognize
22 this as the power point presentation that was
23 submitted by managers of the uprate project to the
24 FPL Executive Steering Committee in May, 2009?

25 A. Let me take a minute and review it.

1 I scanned this document, but there is a
2 lot of information here, so I would like to refer
3 back to it based on what you are going to ask me.

4 Q. Certainly.

5 As vice president of nuclear uprates,
6 you were very familiar with the type of power
7 point presentations that the uprate managers made
8 to the monthly meetings of the Steering Committee;
9 were you not?

10 A. Yes, I was.

11 Q. Were you involved in the preparation and
12 presentation of those?

13 A. I was. I was involved always in the
14 presentation of the material. I attended this
15 meeting. I may not have been involved in each and
16 every page of that document. It would come as
17 input from managers of those areas of
18 responsibility.

19 Q. But you would have been involved, you
20 would have attended the meeting, and you would
21 have been involved in the presentation of the
22 power point slides?

23 A. Absolutely. Yes, sir.

24 Q. The first page is simply captioned:
25 May, 2009, and I know that some time has

1 transpired, but do you recall during what portion
2 of the month of May the meeting occurred?

3 A. I don't know, sir. I don't have a
4 calendar. I have been retired for more than a
5 year and-a-half now, so I don't have any
6 recollection of...

7 Q. Please turn to page four of the
8 document, which is Exhibit 3.

9 A. Okay.

10 Q. The caption on page four is: Cost and
11 Budget Summary, St. Lucie.

12 Do you see that?

13 A. Yes, I do.

14 Q. Now, to the right of the vertical
15 headings, there are three columns, and the first
16 on the left-hand side is: Proforma?

17 A. Uh-huh.

18 Q. Do I understand that to be the same as
19 the indicative bid or the current estimate that
20 was submitted in your May, 2009 testimony?

21 A. Yes, it is. It is the current estimate
22 which is in that 2009 testimony.

23 Q. Looking at the bottom value shown, it
24 reads: Six hundred and eighty-two million dollars
25 in proforma, six hundred and eighty-two million

1 dollars for the April 1st, 2009 forecast and,
2 again, six hundred and eighty-two million dollars
3 for the May 1st, 2009 forecast, correct?

4 A. Those are the numbers here, yes.

5 Q. That's another way of indicating that
6 the overall estimate has not changed over time to
7 that point, correct?

8 A. I don't remember what the -- if the six
9 hundred eighty-two was the original estimate, yes,
10 sir.

11 Q. Now, one of the items in the left-hand
12 headings is called: Implementation?

13 A. Yes.

14 Q. Please take a moment and explain the
15 term implementation as it's used here.

16 A. Implementation would be all activities
17 required to construct a completed design. So it
18 will be all the construction-related activities.
19 It would be construction support-related
20 activities.

21 That's probably the simplest explanation
22 I can offer you, sir.

23 Q. According to this schedule, while the
24 proforma or the original budget included four
25 hundred and seventy-five million dollars for --

1 I'm sorry -- [REDACTED] million dollars
2 for implementation for the months of April and
3 May, 2009, an increased number is shown of [REDACTED]
4 [REDACTED] million dollars, correct?

5 A. Yes, it is.

6 Q. So while the overall estimate is
7 constant at this six eighty-two, some of the
8 components of that have changed over time from the
9 time the indicative bid was submitted to May,
10 2009?

11 A. Yes. I would like to explain that, but
12 go ahead, ask me a question, I guess.

13 Q. I think we will get to that.

14 There's another column called: Scope
15 not estimated. What does that term mean?

16 A. Mr. McGlothlin, this was a fast-track
17 project, so when we undertook this project, we
18 were doing a number of these functions in
19 parallel. And normally when we execute these
20 large complex projects, we do initial scoping
21 study, then do detailed engineering analysis, and
22 then we do detailed engineering design. And once
23 those drawings are available, then we do
24 construction planning, and then do construction
25 estimate, and at that time establish for the

1 contingency or the implementation of that job and
2 then implement.

3 That process, in the initial planning
4 stage, would have taken us many years past the
5 year in which there was need for electricity for
6 Florida's customers. Originally, this project was
7 going to be completed much later. So when we --
8 so when we established there was a need for
9 electricity of a certain magnitude in 2012 and we
10 were asked if we were to do this as a fast-track
11 project, can we implement that, and in doing so
12 what are the unknowns?

13 And one of the unknowns, or one of the
14 things, risk factors we need to account for is
15 identify and allocate that there may be certain
16 scope activities not identified as part of the
17 scoping study and they could be discouraged. So
18 allocate appropriate amount of money for scope not
19 identified, which will be identified as part of
20 the detailed analysis, part of the detailed
21 design. That's part of discovery.

22 Therefore, a large percentage of amount
23 was placed in that bucket, which is here described
24 as scope not estimated. As I recall it may have
25 been in the range of forty-five or fifty percent,

1 roughly like that. So, that's what that amount
2 was.

3 Q. You indicated that at one point the
4 uprate projects were contemplated to go into
5 service at a much later date?

6 A. Yes.

7 Q. Can you tell me approximately what time
8 frame that planning took place?

9 A. I don't know. I don't remember exactly,
10 but it was many years beyond 2012 is what I
11 recall. To go and do these -- all these major
12 activities I talked about, scoping, engineering
13 analysis, design and then implementation in series
14 would have put us many -- a significant amount of
15 time beyond 2012, and that was not in the best
16 interests of customers of Florida because the need
17 for electricity was in 2012.

18 Q. You were asked about what would a
19 fast-track approach accomplish. Who would have
20 posed that question to you?

21 A. I don't understand your question, so
22 could you, maybe, clarify what you are trying to
23 ask me?

24 Q. I will try.

25 In an earlier answer you said: We were

1 asked about the fast-track possibility after FPL
2 had originally planned to construct the uprates in
3 the more typical fashion and have it placed in
4 service at a much later date.

5 When you say: We were asked about the
6 fast-track, who would have been posing that
7 question to you?

8 A. It would be senior executive management,
9 and as I recall it was a -- about the time when
10 the Glades coal-fired plant was not approved for
11 construction or implementation by PSE, so it may
12 have been earlier part of 2007.

13 I'm going back on memory here, but that
14 was about the time.

15 Q. Going back to this schedule, page four.

16 A. Okay.

17 Q. Exhibit 3.

18 As I understand the math that's
19 presented here, certain components of the overall
20 total, such as engineering and the implementation
21 that I referred you to earlier, increased over
22 time. And as I understand it, any increases in
23 the total of those other components were matched
24 by offsetting reduction in the scope not estimated
25 and that's how the proforma of six eighty-two

1 remained constant over time?

2 **A.** That was part of the plan that was
3 approved, that if a new scope is identified, or if
4 certain component cost goes up because of the
5 market conditions, this would be the place from
6 which the drawdown would be used, but it will be
7 clearly identified so the balance sheet summary
8 book is clear and accurate and it's fully
9 explained to everyone who's reviewing the picture.

10 **Q.** Explain to me rationale for approaching
11 a presentation like this in that manner.

12 What is the rationale for maintaining a
13 constant estimate by offsetting any increases with
14 a reduction in scope not estimated?

15 **A.** No. No. It is not an effort to keep
16 the bottom line constant. What I'm explaining
17 here is the scope not estimated line item was
18 developed just for that purpose because this
19 initial forty-five or fifty percent allocation at
20 the beginning stage is what I talked about. So
21 here was a Shaw, Stone and Webster scoping study,
22 which was approximately the same as the Bechtel
23 indicative bid, but the implementation portion of
24 it, we had added approximately forty-five to fifty
25 percent of dollars above and beyond that to create

1 this bucket called scope not estimated or
2 identified with the full knowledge that as we go
3 through these detailed steps there will be things
4 that will come up by either increasing costs or
5 newly identified scope, and this will be the place
6 where we would use the drawdown.

7 So this was the purpose of that specific
8 line item. And that's exactly how it was used.

9 Q. In your answer you said it was not the
10 purpose to maintain a constant estimate, but isn't
11 that the practical effect?

12 If you reduce scope not estimated by the
13 amount of increases you observed, doesn't that
14 result in constant estimate?

15 A. That's the result, but that's the -- you
16 are using that line item for which it is designed.
17 It is to address those newly identified scope
18 items so that you can fund them.

19 Q. Now, the caption on this same schedule
20 is: Cost and Budget Summary.

21 Do you see that?

22 A. Where are you?

23 Q. The same, page four, upper left-hand.

24 A. Yes.

25 Q. But the schedule itself includes some

1 estimates; does it not?

2 A. This page itself includes some
3 estimates.

4 Can you elaborate on that, or?

5 Q. Well, for instance, the entry for
6 materials in May, 2009 are [REDACTED]
7 million dollars.

8 That, at the time, was an estimate; was
9 it not?

10 A. It was either estimate or a combination
11 of both. There was certain contracts let out at
12 that time, so it included the actual value of
13 those material components. For example, we had
14 let out contracts for feedwater heaters,
15 separators, condensers. So those firm contracts
16 that were part of -- were already in place, so
17 they were included in these numbers.

18 Q. In fact, the right-hand column is
19 captioned: Source of Cost Estimate, and it
20 includes several items or I see a couple of items
21 that use the word: Estimate, correct?

22 A. Yes. It says seventy-seven percent of
23 it is based on the contracts issued, or eighty
24 percent of it is based on the contract issued.
25 And on the next line it says: Part of it may be

1 vendor estimate as well.

2 Q. Now, under proforma is the caption:
3 Budget in millions of dollars, correct?

4 A. That is correct.

5 Q. Now, the other columns for April and May
6 are captioned: Forecast in millions of dollars?

7 A. Uh-huh.

8 Q. But do they correspond with the budget
9 in terms of the purpose and use of the value shown
10 there?

11 A. No, they do not, sir. The budget is
12 something that is approved, reviewed, challenged,
13 vetted, accepted as the estimated cost of the
14 project to put in service.

15 Forecast is an item which changes
16 weekly, monthly. It is summarized monthly based
17 on activities in place.

18 These are many times estimates like the
19 remarks column indicates, and until you complete
20 those activities, the forecast does not
21 automatically become budget or the cost to
22 complete the job unless you have gone through all
23 the exercise to establish that.

24 Q. What is meant by the term -- by the
25 caption: Cost and Budget Summary?

1 A. It is -- I don't think there is any
2 legal tie except to summarize that we are
3 comparing today's known information with the
4 original budget of proforma and what our original
5 plan or assumptions were.

6 Q. Turn to the next page, page five.

7 A. Okay.

8 Q. This displays information concerning the
9 estimates for April, 2009 and May, 2009, correct?

10 A. That is correct.

11 Q. So is this a breakdown of the values
12 shown on page four for those two columns?

13 A. Yes. For example, the engineering line
14 item is broken down into four different
15 engineering functions. That's in-house, FPL's
16 engineering staff, "N" triple "S" is Westinghouse,
17 B-O-P would be Shaw, Stone, and then maybe others
18 doing modification engineering.

19 Q. Now --are you through?

20 A. I'm sorry. Yes.

21 Q. On page five there's no reference to any
22 aspect of the proforma amounts, is there?

23 A. No, the purpose is not -- no, there is
24 not.

25 Q. Underneath the upper left-hand caption

1 that says: Cost and Budget Summary, what is the
2 other large caption in bold type there?

3 Read that to me.

4 A. It says: EPU Budget Details. It is --
5 the intent of that title is to describe. This
6 page provides the details to the previous page, so
7 that makes the previous page described in a little
8 bit more detail, and on the next page.

9 Q. As it relates to the April, 2009 and
10 May, 2009 values?

11 A. Yes. The purpose is to compare the
12 month-to-month changes.

13 Q. If you will, turn to page fourteen of
14 the document.

15 Take a moment and review page fourteen,
16 Mr. Kundalkar.

17 A. Give me a minute.

18 I have looked at page fourteen.

19 Q. And you will see under the main caption
20 EPC Estimates, the first bullet point states:
21 Estimates have increased over the indicative bids.

22 Do you see that?

23 A. Yes.

24 Q. Now, this was at some point in the month
25 of May, 2009.

1 If you remember, was this the first
2 occasion on which uprate managers communicated to
3 the Steering Committee that estimates had
4 increased over the indicative bids?

5 **A.** No, sir. This is probably described in
6 certain level of detail here, but potential to
7 have some new challenges in the implementation
8 costs were highlighted, as I recall, as far back
9 as January of '09. There's some reference to that
10 in the presentations February, March, April.

11 I'm pretty sure there were discussions
12 as well as things in those presentations to
13 communicate that to the Executive Steering
14 Committee.

15 **Q.** On the lower right there's a caption:
16 Plan for Resolution. Do I understand correctly
17 that the steps shown under the caption:
18 Challenged Items were identified as matters that
19 FPL intended to more or less iron out with Bechtel
20 in terms of a mutual --

21 **A.** Yes, it was. It was a plan -- so let me
22 give the background.

23 We had discussions with Bechtel.
24 Engineering is hardly completed. One, or two, or
25 three percent engineering. Bechtel construction

1 resources and supervision is just starting to
2 arrive on site. We had asked them to take a look
3 at and now they are here on site. And what would
4 be -- take a second look and validate the
5 estimates.

6 They had come back with some initial --
7 scope initial numbers, forecasts, which are based
8 on new engineering done and their assumptions of
9 how much man-loading they may need over a period
10 of next three or four years with some assumptions
11 that this is how they would man-load certain jobs.

12 So we are in discussions with Bechtel
13 and we are going through the process of
14 challenging their assumptions because they are
15 overstating how much it would cost to do some of
16 these jobs. So these are some of the steps that
17 were identified that we need to ask them to see
18 how resources can be shared between, say, Turkey
19 Point site and St. Lucie site.

20 For example, they were talking about
21 creating two independent redundant organizations
22 on both sites, even though our outages are spaced
23 apart. So our approach was: Can you use the
24 resources in outages, which is in, say, April and
25 May on this site, and then shift large portion of

1 those resources to the other site when the outages
2 will be June, July, for example, or maybe in fall
3 of the same year? So that's sharing of resources
4 between site.

5 And similarly, there is explanation for
6 each one of those subsequent line items. There
7 were activities we challenged them to pursue to
8 better define those forecasts, you know, better
9 define their view of how much project construction
10 work costs.

11 Q. Better define and also reduce?

12 A. Absolutely. That is best interest of
13 the customer. We were not going to accept a
14 number just because Bechtel said that was the
15 right number.

16 It was our obligation to make sure it
17 was chiseled down to what is essential to perform
18 the job safely and deliver benefit to our
19 customers.

20 And that was the effort here.

21 Q. With respect to the plan for resolution,
22 there's a time frame shown there and the time
23 frame was essentially a thirty-day period between
24 late May and late June during which the uprate
25 managers intended to accomplish this resolution,

1 correct?

2 A. Yes. These dates were arrived at in
3 discussions with Bechtel and then Bechtel said we
4 need this much time to revisit what you're asking
5 us to do. So that's how these dates, as I recall,
6 were put together.

7 Q. Please turn to page fifteen, the next
8 page.

9 A. Give me a minute to see what it says.

10 Q. Yes.

11 A. I have looked at page fifteen.

12 Q. The central caption reads: Bechtel EPC
13 Estimates, correct?

14 A. Yes.

15 Q. And the first bullet point reads:
16 Estimates are based on preliminary design. And we
17 discussed that aspect of the situation.

18 Underneath that first bullet point
19 appears this passage: Some undefined scope is now
20 identified. And I would like you to clarify
21 whether there's any difference between the term
22 undefined scope as it's used here and the term
23 scope not estimated as it appeared in earlier
24 pages.

25 A. No, it is the same thing.

1 **Q.** The last bold bullet point reads: The
2 improved estimate process includes developing best
3 case, worst case, and P50 viewpoints.

4 For our record, the transcript of this
5 deposition, explain what a P50 is.

6 **A.** P50 is a property of fifty percent that
7 it will be middle of the road estimate. So it
8 cannot have overly conservative assumptions. Want
9 to make as if everything is going to be the worst
10 day of the year that you can imagine occurring
11 every day, what's the best case where everything
12 would be ideal and perfectly.

13 So those are from the two extremes and
14 what would be normally done if things go
15 reasonably as normally and planned.

16 **Q.** Do I understand correctly that the
17 preparation of these scenarios, best, worst, and
18 P50 were considered a part of the plan for
19 resolution that was identified earlier?

20 **A.** Absolutely. Because our assessment was
21 they were giving us the worst case estimate and
22 therefore in a way over man-loading, and therefore
23 preparing these loaded large manpower estimates,
24 which was to their benefit, but not to the benefit
25 of the customers because their fees depended on

larger the estimate, the more money Bechtel makes.

That was not the best thing for the customers.

Q. Please turn to page twenty-one of this document.

You may want to review that and the prior pages to give it a bit of context.

A. The title of this -- I looked at this page.

Q. The caption reads: Evaluating Project Margins and Scope.

What does that mean?

A. I like to start with the title says: Scope Validation, and then my page, left-hand, top says: Scope Validation.

Q. You're correct.

A. Please, go ahead, sir.

Q. Well, the next caption in the center of the page it reads: Evaluating Project Margins and Scope.

A. That is correct.

Q. Explain what that means and what the additional information is intended to convey.

A. I can recall what the last part of that title says, scope. The effort here is to see the

1 scope of work activity at any part in the scoping
2 study is that still all of it required or has the
3 engineering analysis developed further enough and
4 has identified opportunities that instead of
5 replacing all feedwater heaters, maybe we need to
6 replace only half of those. That's a simple
7 enough example to give you, based on the detailed
8 analysis of the margins and the system.

9 The scoping analysis may have said --
10 this is St. Lucie, so we may have to replace four
11 feedwater heaters, but now the work has progressed
12 since whenever it started to May. Do we have high
13 enough confidence that maybe you don't need to
14 replace all of those and the answer in each and
15 every indication was, yes, we don't need to.

16 So, I think that's why it says feedwater
17 heater scope. Similarly, exciters. Even though
18 in the original scoping study it said we will have
19 to rewind the exciters, or replace, I don't recall
20 exactly what -- I would have to go back and review
21 it -- and the final analysis indication was maybe
22 we may not have to. If we perform certain testing
23 or inspection of things like that because they are
24 new, they can handle those.

25 So those are some examples of what is

1 being conveyed on this page.

2 Q. So when the presenters used the term
3 evaluating project margins, the margins they are
4 referring to there are technical margins and not
5 monetary or profit margins?

6 A. That's my recollection, sir. But
7 reading this page a year and-a-half to two years
8 later, that's my recollection. But that is what
9 is being conveyed here, yes.

10 Q. There's a reference to a Technical
11 Challenge Board in last bullet point. Who or what
12 is a Technical Challenge Board?

13 A. Good question, sir.

14 So before we -- I mentioned there was a
15 scoping study -- detailed scoping study done in
16 Shaw, Stone and Webster, that with a certain
17 scope, that we would do these modifications. If
18 we were going to delete or make modifications as a
19 result of the detailed engineering analysis, we
20 wanted to have that reviewed by an independent
21 party which was not part of the project team. And
22 this was headed by a vice president. And
23 different subject matter experts were called into
24 do this.

25 That's what it was called: Technical

1 Review Board. And so all these deleted items, or
2 even scope addition items, would be brought for
3 their review with independent expert technical
4 input to see if this conclusion is a valid
5 conclusion or not. Is that in the best interests
6 of the project as well as the plant and nuclear
7 safety?

8 Those are the three, four things that
9 the technical party was asked to look at. So it
10 was an independent vice president, not me, but an
11 independent vice president, with enough
12 operational engineering background.

13 Q. Were these people in-house to FPL?

14 A. These would be in-house people, but
15 depending on what expert was needed, we may draw
16 upon a Westinghouse expert, or a Shaw expert, or a
17 transmission group expert from FPL. Things like
18 that, yes.

19 It would be largely FPL, but we would
20 draw best available expert that we or the
21 Technical Review Board thought they needed to seek
22 input from.

23 Q. Was this Technical Challenge Board
24 created specifically for the uprate project, or
25 did they have a larger role?

1 A. This board was dedicated to the uprate
2 project, yes. In fact, it is described somewhere
3 in the procedures of the project as well.

4 Q. Please turn to page twenty-three. Take
5 a minute and review that, sir.

6 A. It's a very detailed page. If I were to
7 read all of it, it would take a long time, but I
8 will scan through it and then I can focus on the
9 specific questions you may have.

10 I have scanned a few line items and I
11 have a general idea of what this page says.

12 Q. Let me ask you a few questions using the
13 first entree as an example. And my purpose is
14 simply to make sure I understand the information
15 that's being presented and use of the information
16 that's being made.

17 You will see the -- under Risk Event
18 Description, the first one reads: Implementation
19 and schedule execution may cost more than
20 proforma.

21 Do you see that?

22 A. Yes, I do.

23 Q. I understand that to be one of the
24 various risks that the uprate managers have
25 identified as being associated with the project.

1 A. Not necessarily an uprate manager. It
2 could be anyone. And we would write a condition
3 report. And if it gets identified, then the
4 manager would look at it. And unless it can be
5 fully evaluated, make that entry into the risk
6 matrix to see subject of evaluation.

7 Q. Now, if I understand correctly, the
8 balance of the columns are an effort to quantify
9 that risk in dollars, give, or assign a value of
10 dollars to that risk. Am I right?

11 A. Yes, it's a very rough magnitude effort
12 to describe is this bigger than the bread basket,
13 or smaller than it, and is it bigger than a truck
14 that carries the bread? Things like that.

15 Q. The second column is H-M-L, does that
16 mean high, medium, and low?

17 A. Yes, sir.

18 Q. And if it's assigned a high risk, that
19 would indicate the expectation that it's more
20 likely than not to happen? Am I right?

21 A. Can you ask me that question again?

22 Q. Yes. The designation high, medium, and
23 low.

24 A. Right.

25 Q. As I understand it, that relates more to

1 the possibility that the risk will occur, as
2 opposed to the dollar amount that would be
3 associated with it?

4 A. Not necessarily so. The risk is a
5 combined effect of probability of occurrence and
6 the consequence of occurrence.

7 Q. Okay.

8 A. So the consequences could be disaster,
9 but probability at point oh-oh-oh-oh-one, so that
10 the risk would be minimal.

11 So this is what -- so therefore, you
12 will see high does not always mean significant.
13 If you look at the fourth line and medium still
14 can have a significant impact if it were to take
15 place.

16 Q. But in any event this was assigned a
17 place in the high category, right?

18 A. It was in the high category and could
19 have significant impact. That's why the next
20 column says: Significant.

21 Q. And significant means dollars, right?

22 A. Significant, in this case, would mean
23 dollars, schedule. Things like that. A type of
24 cost.

25 Q. Again, there's a column that is

1 captioned: Maximum cost exposure. That would be,
2 as I understand it, the worst case dollar impact?

3 A. It's a place holder. It's a place
4 holder. Yes, that is somebody's effort to
5 quantify that without any basis. It is: What is
6 my gut feeling this afternoon after lunch, or one
7 hour after lunch based on my experience? I think
8 it could be fifty million, but, you know, next
9 month if somebody goes through the vetting
10 process, that number could be ten million, or
11 five, or whatever number turns out, or the other
12 way.

13 So, it is a rough order of magnitude
14 exposure.

15 Q. And the type of estimate, I gather,
16 R-O-M is an acronym for rough order of magnitude.

17 A. Yes, very rough magnitude. Yes.

18 Q. Would I be correct in assuming that the
19 term rough order of magnitude means that the error
20 could be significant on the high on both sides of
21 that?

22 A. It just means that we don't have
23 detailed backup to come up with this number.

24 There is no detailed analysis. There is
25 no detailed estimates. There is no study. Just,

1 it can be as high as fifty. Another gentleman
2 here may say, no, I think it should be
3 thirty-five. One could say sixty-five.

4 So, until we complete all the actions to
5 resolve that -- but it gives you a ballpark. It
6 is not three hundred million. It is not five
7 dollars. It is in the range of fifty million,
8 plus or minus.

9 Q. And then the next column is shorthand
10 for probability level; is that correct?

11 A. That is correct.

12 Q. And how does one arrive at the
13 probability level to assign to this high risk
14 item?

15 A. It is just based on experience. It
16 could be fifty-fifty. It could be fifty-fifty
17 chance it could go up, or it could go down.

18 Q. Then the next column is Weighted Risk
19 Exposure in Dollars. That appears to be simply
20 the result of applying the probability level of
21 fifty percent to the maximum cost exposure?

22 A. That is correct.

23 Q. Let's look at page twenty-four of this
24 document.

25 At the bottom of page twenty-four, you

1 will see this entry: Weighted high risk items
2 total approximately thirty-six million dollars.

3 Do you see that?

4 A. Yes.

5 Q. What is the significance of that
6 statement?

7 A. It just means, not having gone through
8 and checked this, but my recollection is if you
9 add up all the weight of this exposure column
10 numbers, they would -- they may add up to
11 thirty-five, thirty-six million dollars.

12 I have not gone through that exercise,
13 but maybe that's what was being conveyed here.

14 Q. Let me follow up.

15 I suppose what I am really asking is why
16 are the high risk items broken out here and
17 presented as a separate entry, and the other,
18 meaning the low levels, are not included?

19 Is that because of the greater dollar
20 impact?

21 A. No, because it's -- probably there's a
22 certain -- I don't know all the specific
23 discussions that went down for each one of those
24 line items, but maybe there's a judgment that
25 after detailed analysis, the likelihood of some of

1 those medium and low items to stay on the risk
2 matrix could be low and therefore you need to go
3 through that exercise.

4 I do recall looking at this and then
5 found that in subsequent months some of these same
6 numbers have reduced significantly when those
7 analysis activities were completed or taken off
8 the risk matrix.

9 So I just want to leave you with that
10 part.

11 Q. Earlier when you were describing the
12 fast-track approach to the planning and
13 construction of the uprate projects, you indicated
14 that because of the different sequence in which
15 the engineering takes place, compared to a more
16 typical approach, it was necessary to assign a
17 contingency level to that to take that uncertain
18 risk out. And we have seen indications that the
19 original contingency was forty-five percent and if
20 you would just accept that for purposes of my
21 question, I would like to understand how that
22 initial assignment of contingency to the first
23 estimate relates to what we have been talking
24 about here, which is the risk matrix during which
25 individual risks are identified and quantified.

1 Is this related to the subject of
2 contingency and, if so, in what way?

3 A. So, yes, it is related to the
4 contingency portion, subject to completing all the
5 actions associated with those individual line
6 items to come to a conclusion.

7 For example, line item four, or three:
8 Unit one, P-R-A, total loss of feedwater indicates
9 something is undersized and right now there is a
10 line item which says five million or four million.

11 At the end of that activity, if it turns
12 out to be five hundred thousand, then that would
13 be the total exposure for that line item and
14 that's what we need to focus on as the cost of
15 doing that. But until that activity is completed,
16 just to make sure it has a full fund, work is done
17 on that, recognize how big of an impact it could
18 have so it is not forgotten.

19 So that's how it would be. And as the
20 engineering analysis is completed and these
21 activities are either closed out or a value, a
22 separate assigned scope defined and included into
23 the first summary page saying what the newly
24 discovered scope item is and whatever the
25 modification is that we need to do associated with

1 that.

2 Q. Let me follow up on that.

3 A. Okay.

4 Q. Beginning with the original indicative
5 bid based upon the scoping study and engineering
6 at two percent completion at this point.

7 A. A very small percentage, yeah.

8 Q. At some early point, FPL assigned a
9 contingency at forty-five percent to that, at the
10 outset of that uprate fast-track approach?

11 A. Larger than forty-five percent. It was
12 not strictly contingency in the way you're
13 describing. It was to cover contingency as well
14 as scope unidentified. It was for both of those
15 purposes.

16 Q. Okay.

17 And the April and May, 2009 time frames,
18 the managers are going through the exercise of a
19 risk matrix where they tried to identify specific
20 risks and assign a monetary impact value to those
21 risks and then add them up as I understand it?

22 A. Uh-huh.

23 Q. That having been done, does that
24 supplant the original contingency, or is that
25 somehow married to the original contingency, or is

1 it subtracted from the original contingency?

2 I'm not sure yet on how one is related
3 to the other.

4 A. It will not be subtracted from the
5 original contingency until there's a resolution
6 of: Is this a valid risk item or not?

7 Once that analysis is complete to say
8 what is it that really this is relating in, not
9 just identification of the issue, but a resolution
10 of the issue, then it would be either a new scope
11 item or a reduction from the bucket identified as
12 scope, new scope or scope previously unidentified.

13 Q. So the original scope not estimated
14 carries forward unless it's changed either by
15 reduction that occurs when an increase in one of
16 the components is identified or may be increased
17 when additional scope is identified?

18 A. Yes, increase original scope identified.
19 No. No.

20 Adjusted if original scope is identified
21 or increased if there's a deletion of certain
22 scope item.

23 For example, if you recall in earlier
24 pages here I showed examples of exciter or
25 something for condensate pumps, so the exciter

1 rewind was not required, as I recall it turned
2 out. Then those dollars would be put back into
3 that bucket, so it will not be just a drawdown,
4 but a replenishment of scope deleted work items.

5 So the material here has been identified
6 contract value of buying so many feedwater heaters
7 and we need only half as many. Then the money for
8 the other half would be put back into that
9 account. So it's not just a one-way change.

10 Q. So the original scope not estimated can
11 be either drawn down or, in your word,
12 replenished, based upon the development of the
13 project?

14 A. In this stage of the project because you
15 have to remember we are in still early stage of
16 the project where engineering has hardly begun.

17 As you mature further then the ideal
18 thing to do, and I believe the project may have
19 done that, is separate that into risk contingency,
20 new scopes, so it is a little more spelled out.

21 But right now we are at the beginning of
22 doing engineering analysis and engineering design,
23 so I don't think all that scope is going to be
24 nailed down. So, until we get to that point, they
25 will be in one place and then it can be separated.

1 This being a fast-track job, to do that
2 exercise right from day one, would have been very
3 difficult to manage.

4 Q. I'm sorry. I was looking at a note and
5 I didn't catch all of that last statement.

6 Can you repeat it for me?

7 A. Yes, I will. I said: This being a
8 fast-track job and the scope is not defined,
9 engineering is just beginning to happen, it does
10 not make sense to have a separate bucket for
11 contingency and scope and risk because the risk
12 items are not defined yet. The scope items are
13 not defined yet.

14 So, let's get to that point and then we
15 can allocate appropriate contingency for the
16 firm -- what's described as firmly approved scope
17 of work.

18 That's what I mean, a proration which I
19 believe this project must have done subsequently.

20 Q. Having discussed Exhibit 3, I want to
21 turn to Exhibit 2.

22 THE WITNESS: Is this a good time to
23 take a five-minute break, Mr. McGlothlin?

24 MR. MCGLOTHLIN: Sure.

25 (Thereupon, a brief break was taken.)

1 BY MR. McGLOTHLIN:

2 Q. Mr. Kundalkar, I have asked you to look
3 at a document that we have marked as Exhibit 2,
4 which is the one-page e-mail memo from you to Mano
5 Nazar.

6 Am I saying his name correctly?

7 A. It's pretty close.

8 Q. Who is Mr. Nazar?

9 A. Mr. Nazar was my supervisor, chief
10 nuclear officer for nuclear division while I was
11 at FPL.

12 Q. You've had an opportunity to review this
13 document; have you not?

14 A. Yeah, you gave it to me, and I had a
15 minute or two to look at it. Yes, sir.

16 Q. As I understand the content, you were
17 using this as a vehicle to inform Mr. Nazar that
18 the PSE staff was collecting copies of previous
19 presentations made to the chief nuclear officer
20 and to the Executive Steering Committee, correct?

21 A. The purpose was just to keep him
22 informed of where we are in general. That may
23 have been step number one. He may have been
24 traveling. I may have been traveling. I don't
25 know my schedule when or where I was on May 30th,

1 but just brief him on where we are.

2 Q. Yes, sir.

3 And in terms of telling him where you
4 were at the time in this particular briefing, you
5 were informing him that the PSE staff had asked
6 for all copies of presentations to the chief
7 nuclear officer and, I imagine, the Steering
8 Committee, correct?

9 A. That is correct, sir.

10 Q. You begin by saying that you had
11 discussed the implications with Bryan Anderson of
12 legal and Tiffany Cordes of regulatory affairs,
13 correct?

14 A. Yes.

15 Q. Both with FPL, correct?

16 A. That is correct.

17 Q. And specifically, you pointed out that
18 the materials requested by the PSE staff would
19 show estimates of capital costs higher than those
20 contained in the May prefilled testimony; is that
21 correct?

22 A. I think that -- are you referring to
23 Item B, bravo, there?

24 Q. Yes.

25 A. So Bechtel's forecast, or Bechtel's wish

1 list for the forecast -- yes, yes. I'm conveying
2 to him that this info that I received from Bechtel
3 with respect to their preliminary forecast numbers
4 based on what is being done, and based on the
5 man-loading that they are assuming is higher than
6 their original indicated nonbinding proposal.

7 And then the paths the team was taking
8 to resolve those issues with Bechtel.

9 I think that is listed there.

10 Q. Looking at the paragraph that begins
11 with the words: In previous planning discussions.

12 Do you see that?

13 A. Yes, sir.

14 Q. You report that you had informed Armando
15 Olivera, is that the Armando?

16 A. Yes, it is Mr. Armando Olivera.

17 Q. And the legal staff, that the estimates
18 from Bechtel could be higher than the seven-fifty
19 for Turkey Point and six-fifty for St. Lucie,
20 correct?

21 A. We had informed him of, like the
22 sentence says: Based on Bechtel's recent view,
23 they could be higher, but we also had pointed out
24 that we are challenging Bechtel's view. We do not
25 accept that and there are certain things they can

1 do to bring them to the right scope and -- scope
2 and estimate assumptions and outage optimizing and
3 things like that.

4 Q. And the seven hundred and fifty million
5 dollars for Turkey Point and six-fifty million for
6 St. Lucie correspond to the indicative bid values
7 that you included in your prefiled testimony,
8 correct?

9 A. I know you refer to that as indicative
10 bid earlier also, but I think these are the Needs
11 filing numbers. That's what they are.

12 Input from Shaw, Stone scoping studies
13 and the indicative bids came almost a year later.
14 So the Needs filings were in late 2007, September,
15 October, 2007. Bechtel indicative bids came, I
16 think, in late 2008.

17 But, right, they are very, very close to
18 each other. But I'm referring to the Needs
19 filing. That's what I'm referring to.

20 Q. So on the one hand in the Needs filing
21 and in the May, 2009 testimony, you had presented
22 testimony reporting that the overall cost estimate
23 was unchanged and at the same time PSE staff had
24 requested copies of presentations which would
25 indicate that from the Bechtel perspective those

1 costs were increasing, correct?

2 A. It was a long question you asked, so
3 please ask me that question again because I lost
4 you there in the question.

5 Q. I will take this from the memo that you
6 have explaining to Mr. Nazar that on the one hand
7 in the Needs case and in the Nuclear Cost Recovery
8 case, most recently in the May, 2009 testimony,
9 FPL had presented a cost estimate that had not
10 changed either from the Needs case or slightly
11 from the indicative bid. And it indicated that
12 there was no need to modify it at this time,
13 correct?

14 A. Yes, that is correct.

15 Q. And then the additional piece of
16 information conveyed to Mr. Nazar was that the PSE
17 staff had requested copies of presentations which
18 would have reflected the fact that the estimates
19 being received from Bechtel were higher than those
20 being report in your testimony?

21 A. I don't think I would -- the purpose of
22 this memo was to, well, first of all, make him
23 aware that there was some confidential
24 presentation information being requested.

25 So that's part one.

1 Part two is make him aware that our
2 current status with Bechtel, which is input --
3 preliminary input, unverified, not challenged,
4 based on preliminary engineering, are higher and
5 we are in the process of resolving those as they
6 are discussed in these presentations.

7 And so that's what -- that's all I'm
8 trying to communicate here.

9 Q. As chief nuclear officer, he would have
10 received the presentation for the May, 2009
11 Executive Steering Committee, correct?

12 A. He would have, but I don't know if he
13 was here, or if he was traveling. I just don't
14 recall. I just don't recall.

15 I just wanted him to be aware that there
16 are some confidential -- these -- as you saw the
17 label, they are confidential presentation
18 packages, and I wanted him to be aware that
19 certain information is being requested and we are
20 going to make that available.

21 And it has the following things because
22 he may be traveling. I just don't know where he
23 was. I just wanted to make him aware of that --
24 what is being communicated to the -- and how we
25 are fulfilling staff's request.

1 Q. And in the first paragraph you say that
2 you had discussed the implications of the PSE
3 staff's request.

4 Isn't it true that the implications
5 include the fact that FPL's testimony filed in
6 May, 2009 contained one estimate of overall costs,
7 whereas the presentations being made to the chief
8 nuclear officer and the Steering Committee showed
9 a trend of increasing costs above that level?

10 MR. FEIL: Object to the form of the
11 question.

12 It's leading.

13 You can answer the question if you
14 understand it.

15 THE WITNESS: No, I don't understand
16 the question, sir.

17 Can you break it down into simpler
18 questions for me to understand?

19 BY MR. MCGLOTHLIN:

20 Q. Well, for instance, were you concerned
21 about the fact that the presentations being made
22 to the chief nuclear officer and the Steering
23 Committee contained indications of costs higher
24 than those that were being reported to PSE?

25 A. Absolutely not. Absolutely not, because

1 the same presentations also highlighted, as you
2 went through that earlier package, steps being
3 taken to resolve those differences and address
4 those concerns.

5 So absolutely not.

6 Q. Yes, they indicated steps were being
7 taken to resolve the differences between FPL and
8 Bechtel and as one ramification of that, did you
9 have in mind when you wrote this memorandum that
10 in conjunction with resolving the differences with
11 Bechtel, you would also take whatever steps would
12 be appropriate to reconcile, if that's the right
13 word, the testimony to the estimates being
14 resolved?

15 A. None of that even crossed my mind.

16 This was strictly to make him aware that
17 these -- this information is being requested. It
18 has these discussions. At the same time there's
19 higher megawatt output being produced by the
20 plant, make him aware of that. The Needs filing
21 had different numbers, and this information would
22 be provided to the Commission.

23 Just make him aware of that.

24 Q. If you will, read for me the two
25 paragraphs beginning with the words: In previous

1 planning discussions.

2 **A.** In previous planning discussions with
3 Armando and the legal staff, we had made them
4 aware of the expected dollar estimates could be
5 higher than seven hundred and fifty million for
6 Turkey Point and six hundred fifty million for
7 Port St. Lucie based on Bechtel's recent view.

8 Therefore, in May testimony we indicated
9 that FPL would update this related information as
10 soon as final analysis and designs are completed.
11 Armando's advice at that time was to introduce the
12 topic and collect and finalize the facts and scope
13 for further submittal at appropriate time.

14 **Q.** And the next paragraph, please?

15 **A.** Therefore, the timing of getting the
16 scope firmly defined and validation of estimates
17 becomes very important. We have laid out a
18 schedule that Bechtel and Turkey Point and
19 St. Lucie and corporate headquarter team are
20 working to be ready for FPL/Bechtel meeting
21 scheduled for June some date. And we will need
22 the same information for your review and Robo for
23 meeting in May to late June.

24 **Q.** Do I understand correctly that when you
25 said the timing of needing the scope firmly

1 defined and validation of estimates are becoming
2 very important, that relates to the fact that the
3 May testimony maintained the original estimate
4 with the proviso that it would be updated at the
5 appropriate time?

6 A. No, there was no such tie. It was
7 strictly: We need to get this scope firmly
8 defined and estimates validated as soon as
9 possible because we have a meeting, a new Exec.
10 Steering Committee meeting, coming up with
11 Mr. Robo in mid to late June. We need to have
12 that information. The sooner we resolve these
13 differences, we can have a firm picture of where
14 we stand.

15 Q. When you use the terms getting the scope
16 firmly defined and validation of estimates, you're
17 referring to the process of resolving your
18 differences with Bechtel, correct?

19 A. Yes.

20 Q. And --

21 A. Go ahead.

22 Q. And that resolution was to take place as
23 we discussed earlier within the thirty-day time
24 frame from late May to late June?

25 A. As it was laid out in that May

1 presentation, yes, sir.

2 Q. As we discussed, engineering of the
3 project at this stage was at a very early point,
4 correct?

5 A. Very low percentage of engineering, yes.

6 Q. So when you say getting the scope firmly
7 defined, you don't mean completion of design
8 engineering, do you?

9 A. No, I don't mean that.

10 Q. And when you say validation of
11 estimates, you're not talking about the final
12 estimate that comes out of the detailed
13 engineering, are you?

14 A. No, it is validation of assumptions
15 Bechtel is making in giving us these preliminary
16 estimate numbers because we have serious questions
17 and doubts about assumptions they were using and
18 their man-loading preparation and overly
19 conservative.

20 That's what we mean by validation.

21 Q. Then you lay out the steps for that
22 process and they are the same steps, or
23 essentially the same steps, that were included in
24 the power point presentation that you and I
25 discussed earlier, correct?

1 A. Let me look at it and then I --

2 Yes, that is very similar. I don't know
3 word-by-word, but I think it captures the chart
4 adequately.

5 Q. Looking again at the paragraph that
6 begins with the words: In previous planning
7 discussions.

8 A. Yes.

9 Q. The last sentence in that paragraph was:
10 Armando's advice at that time was to introduce a
11 topic and collect, finalize the facts and scope
12 for their submittal at the appropriate time,
13 correct?

14 A. Yes.

15 Q. And the first word in the next paragraph
16 is: Therefore, correct?

17 A. Yes.

18 Q. So, doesn't the substance of the
19 paragraph that begins with the word therefore
20 relate to the concept of collecting and finalizing
21 the facts and scope before the submittal at the
22 appropriate time?

23 A. I did not even think about why I wrote
24 that word therefore. I did not even think about
25 it then and I cannot even see it now.

1 It just says: We need to get the scope
2 firmly defined because we need to have that for
3 our own planning purposes, for our own executive
4 presentation. And the sooner we get a good handle
5 on the scope and the associated costs, it is best
6 for the project -- next steps for the project.

7 Q. Below the bullet points this sentence
8 appears: Terry has been briefed by me.

9 A. Yes.

10 Q. Is that Terry Jones?

11 A. It is Terry Jones.

12 Q. What was his position at the time?

13 A. Terry Jones was the vice president for
14 the midwest region in charge of certain plans, but
15 he was also the vice president who was responsible
16 for Technical Review Committee.

17 If you recall, you asked me some
18 questions about what is a Technical Review
19 Committee and who headed that. So, he was the
20 independent vice president who would have seen
21 some of the scope reduction or addition items
22 coming from this committee to let him know that
23 when these become available, you are not
24 surprised, so we would like to have a quick
25 turnaround of their reviews.

1 Q. You were not aware -- or let me ask you
2 this way: Were you aware at the time that
3 Mr. Jones was slated to be the vice president of
4 uprates division?

5 A. Not on May 30th, absolutely not. In
6 fact, this was strictly for the purpose that I
7 described. That's why I briefed him. And I kept
8 him briefed on similar activities before and after
9 this.

10 Q. At the time you wrote this memorandum to
11 Mr. Nazar, did you consider the point of which
12 these challenged items with Bechtel would be
13 resolved as an appropriate time to consider
14 whether your testimony should have been updated to
15 reflect the higher estimates?

16 A. Please ask me the question again, sir.
17 When I wrote this memo, what was the
18 question then?

19 Q. Your memorandum refers both to your
20 testimony --

21 A. Uh-huh.

22 Q. -- and to the concept that it would
23 be -- that any revisions would be submitted at the
24 appropriate time.

25 A. Uh-huh.

1 Q. It also addresses the challenges to
2 Bechtel's increased estimates and steps being
3 taken to resolve that.

4 A. Yes, sir.

5 Q. When you wrote this memorandum, did you
6 regard the point at which those contentions with
7 Bechtel would be resolved as the appropriate time
8 to consider whether your testimony should be
9 updated?

10 A. Sir, are you asking me what was my
11 thought process to when I would be updating my
12 testimony based on what -- Bechtel completing
13 these action items?

14 Q. Yes.

15 A. Bechtel action items were just a small
16 part of the overall scope of the picture of the
17 project.

18 This was an important part of that, but
19 there were a number of other activities, such as
20 the engineering analysis, which were required to
21 complete the scope definition of the project, or
22 the licensing analysis, which required -- needed
23 to be completed.

24 So, all those things needed to be
25 completed, and once we have that complete picture

1 and a corresponding Bechtel estimate, that would
2 be the right time to update -- to revise the
3 estimate for total inservice cost of the project,
4 once you have all those facts in hand.

5 Q. Bear with me. I did not get your full
6 answer there. I did not understand everything you
7 told me.

8 A. Break it down.

9 Q. When would be the appropriate time to
10 reconsider?

11 A. Once we have engineering designs
12 complete, we have a firm understanding of the
13 scope, and a firm estimate from Bechtel and other
14 implementers, fully vetted, challenged, and
15 accepted by FPL management, that would be the time
16 to apprise or revise the Needs filing or -- not
17 the Needs filing, or the cost of completion of the
18 project in its entirety.

19 Q. When you say design complete, are you
20 talking about the full design engineering
21 specifications?

22 A. Yes.

23 Q. How long did you think that would take
24 at the time?

25 A. It may -- now, this is what I recall

1 from memory. I don't remember. It was in 2010 or
2 2011 time frame. It was not something -- I mean,
3 pieces of it would be completed in pieces, but
4 that picture was somewhere between 2010 and -11,
5 if I can subject to check. If I can say that.

6 I think that is roughly my memory.

7 Q. So based on your answer, do I understand
8 correctly that from your perspective there would
9 be only two data points in terms of testimony on
10 the estimates of the costs? There would be the
11 indicative bid, which is zero to fifty percent, or
12 two percent design engineering. Then there would
13 be the final full-blown design engineering process
14 completed, one hundred percent done, and that
15 would be the second time you testified as to an
16 estimate?

17 A. I don't know that because I think once a
18 year we have to look at completed work, as I
19 recall. And once a year review the picture in
20 March or May, I forget. And my time of making
21 filing to see what is the new information
22 available and revise that.

23 So, if not one hundred percent of scope,
24 if fifty, sixty percent of the scope was
25 well-understood, defined in 2010, maybe that may

1 have been the time.

2 I don't know the formats of what you're
3 asking, but I had not thought about them as the
4 only two points. There may have been
5 opportunities in between based on the completed
6 work, challenged, vetted, accepted by FPL and
7 formation of the view of what the total cost of
8 the project would be.

9 Q. So the components that would go into
10 consideration of whether to update one's testimony
11 would include additional information relating both
12 to the Bechtel work and also relating to the
13 defined scope of the project?

14 A. That is correct. I mean, in reverse
15 order. Define scope of the project and then what
16 is the corresponding Bechtel.

17 But with that you are assuming that
18 Bechtel may do all of the scope. There may be
19 other parts of it. Like, some of the scope may be
20 done inhouse. Some of the scope may be done by
21 others. And once that decision is made and the
22 picture developed, that would be the time.

23 It's not like Bechtel would be given all
24 the scope. FPL had not, as I recall at that time,
25 made a decision on Bechtel would be given all the

1 scope. Maybe parts of it could be implemented
2 more cost effectively by other means.

3 Those steps needed to take place to
4 formulate what would be the total cost of the
5 project and in May we hadn't reached that point.

6 Q. After you sent this memorandum to
7 Mr. Nazar, did the memorandum generate any
8 additional discussions about the content of the
9 memo, either with respect to the testimony, or
10 with respect to the Bechtel items that were
11 subject to challenge?

12 A. I think it's a broad question, so if you
13 can break it down.

14 So can you break it down because --
15 please ask that question a little more so I can
16 answer it.

17 So, I wrote the memo to Mr. Nazar and
18 then your question is?

19 Q. Did Mr. Nazar respond to you either in
20 writing or orally on the contents?

21 A. Verbally he responded by whenever we saw
22 each other in the next morning, next week,
23 whenever the next time. Yes, I understand. Yes,
24 I understand the steps you are taking and that's
25 the right course of action.

1 Some words to that effect.

2 **Q.** By the steps you were taking --

3 **A.** With respect to Bechtel in challenging
4 them, working towards better definition of scope,
5 getting better handle on what the forecast --
6 Bechtel forecast should be.

7 There were a number of items Bechtel had
8 not considered. Make them consider those.

9 There's a line item there in the middle
10 we did not get to. Challenging Shaw and some of
11 the other groups and to firm up what the scope
12 needs to be. Nice to have, but it says: Must
13 have scope.

14 So all those steps are the right steps
15 to reach towards -- what is that a line of, better
16 challenge and FPL management accepted estimate.

17 **Q.** Did Mr. Nazar in his response
18 communicate anything with respect to the
19 information that the PSE staff was requesting
20 presentations that showed Bechtel's higher
21 numbers?

22 **A.** No, absolutely not.

23 Because we had committed to providing
24 the staff and Commission anything and everything
25 they asked, and this was a step in that direction.

1 I was just keeping everyone involved
2 apprised of that.

3 Q. Did anyone else communicate with you
4 with respect to the memo you wrote to Mr. Nazar?

5 A. I don't think so.

6 MR. FEIL: Objection. I think the
7 question is confusing because there's no
8 time frame put in it and it could be from
9 the day it was written until some time in
10 memoriam.

11 So, it may have been -- I think that is
12 one of the reasons he was having trouble
13 understanding your question. So...

14 THE WITNESS: Yes, sir.

15 BY MR. McGLOTHLIN:

16 Q. The memo was written May 30th, 2009, at
17 any point from May 30 of 2009 to the end of
18 September, 2009, did anyone correspond or
19 communicate with you about this memorandum?

20 A. No, I don't recall anyone coming back,
21 talking to me, or writing any e-mail in response.

22 I just don't remember that.

23 Q. I'm going to provide another document to
24 the deponent.

25 This will be Exhibit Number 4.

1 (Thereupon, Exhibit Number 4 was Marked
2 for Identification and is attached
3 hereto.).

4 **BY MR. McGLOTHLIN:**

5 Q. Mr. Kundalkar, Exhibit 4 is captioned:
6 Extended Power Uprates, Executive Steering
7 Committee Meeting, St. Lucie and Turkey Point,
8 June 23rd, 2009.

9 A. I have this package. I would like to
10 flip through it to just to kind of...

11 Q. Certainly.

12 A. Yes, I have looked at it. I mean, I
13 flipped through it quickly.

14 Please go ahead.

15 Q. Do you recognize this as the power point
16 presentation that was prepared for the June, 2009
17 meeting of the Executive Steering Committee?

18 A. Yes, I do.

19 Q. Were you involved in preparing and
20 presenting it?

21 A. I was involved. I attended the meeting.
22 I was involved in the presentation of it. I was
23 not involved in preparing each and every page of
24 the line input. This came from various sources,
25 from various people.

1 Q. It came from various sources of whom you
2 were one, correct?

3 A. Yes. I was responsible for the project,
4 so they ultimately funneled in to me.

5 Q. Please look at page four.
6 Earlier --

7 A. I'm sorry. I'm on page five, so give me
8 a second.

9 Okay.

10 Q. Earlier when we were discussing the May
11 presentation, we looked at a cost and budget
12 summary, and as I understand it this is a
13 counterparted effort for the month of June,
14 correct?

15 A. Yes, sir.

16 Q. For St. Lucie you see the totals for
17 proforma, May, 2009 at six -- June 1st, 2009, all
18 are six hundred and eighty-two million dollars,
19 correct?

20 A. Yes.

21 Q. Another way of saying that in June the
22 forecast is still the same as the indicative bid,
23 correct?

24 A. The overall forecast is still the same,
25 yes.

1 Q. If you look at the scope not estimated.

2 A. Yes, I'm looking at it.

3 Q. For the proforma budget it started out
4 at [REDACTED] million dollars,
5 correct?

6 A. Yes.

7 Q. And in June it's down to [REDACTED]
8 million dollars, correct?

9 A. Yes.

10 Q. That represents the fact that the
11 increases have been assumed to be taken from this
12 allowance or --

13 A. Allowance, scope not identified
14 allowance.

15 Q. So as those items increase, the
16 allowance is reduced accordingly, correct?

17 A. That is correct.

18 Q. Would this also indicate -- would the
19 fact that this allowance was started at [REDACTED]
20 [REDACTED] million dollars and is now
21 down to [REDACTED] million dollars, would that be an
22 indication that the scope is being clarified and
23 is more detailed than originally?

24 A. It would partly indicate that. It will
25 also -- because my knowledge with that -- it also.

1 says that the work items which are potential
2 candidates for deletion have not be incorporated
3 or acted upon yet.

4 Q. Would it be true also that this Cost and
5 Budget Summary, this format that's been used in
6 earlier months, that the Cost and Budget Summary
7 itself is becoming more refined over time?

8 A. As time goes by, yes. Yes. I believe
9 it's getting a little more detailed. Information
10 is becoming available.

11 Q. Please look at page thirteen.

12 A. I'm on page thirteen.

13 Q. EPC estimates, that refers to Bechtel,
14 does it not?

15 A. Yes.

16 Q. Bechtel is the EPC contractor?

17 A. Yes.

18 Q. The third entry under estimates have
19 increased over the indicative bids reads: Scope
20 clarified, parentheses, more details, close
21 parentheses, resulting in estimates greater than
22 indicative bids.

23 Do you see that?

24 A. I see that bullet there.

25 Q. If the scope is clarified, wouldn't it

1 follow that those greater estimates would be more
2 reliable than the indicative bids, which had a
3 huge allowance for undefined scope?

4 A. Only partly true because it just does
5 not necessarily mean that the scope deletion items
6 have been incorporated.

7 Scope clarified just means extent of the
8 scope of certain items. There is more detail
9 available and it is known more than it was known
10 in the previous month.

11 But that action is not fully complete
12 and I knew by that time it was not fully complete.

13 Q. So the entire scope is not fully
14 complete?

15 A. Right.

16 Q. But a portion of the scope has become
17 clarified and is better known, correct?

18 A. Is better known.

19 Q. And so --

20 A. But still -- pardon me -- the
21 engineering is not complete and the designs are
22 still in very low percentage. Except we know that
23 Bechtel, yes, to that extent, certainly more
24 clarification on certain work activity.

25 That's my recollection of what that

1 meant.

2 Q. With your caveat that not all the design
3 work had been completed, doesn't the fact that the
4 scope had been clarified relative to earlier
5 months mean that the estimates that fall out of
6 that clarified scope are more reliable and more
7 accurate than the indicative bid?

8 A. The portions that were clarified may
9 have a little better definition, but that does not
10 mean that it's good to be taken as the same
11 knowledge as if the engineering had been
12 completed, part one.

13 And part two is that does not
14 necessarily mean that all the scope deletion
15 activities have been fully addressed or
16 incorporated.

17 At the same time, it also does not mean
18 that therefore Bechtel's numbers are acceptable
19 because there are still many questions and
20 challenges with Bechtel remaining which went on
21 for sometime.

22 Q. You've got a list of those challenged
23 items on this page, correct?

24 A. Yes.

25 Q. This is something of a checklist; is it

1 not? Because on the right-hand side you indicate
2 that the top three are now complete.

3 A. Yes, it says complete, but it was not
4 fully vetted and accepted. It was -- Bechtel had
5 provided that input as to how they would do that,
6 and we were still in the process of reviewing
7 that.

8 So, like I pointed out earlier, this was
9 the dates and how they would be done was done in
10 combination yet. So here's a checklist that is
11 work in progress to do that.

12 Some of those -- the progress is
13 described up above. There are still, for example,
14 outage division assumptions. There was a huge
15 concern related to that. Optimizing manpower,
16 which is a huge benefit that's not incorporated.
17 And finalizing of estimates with more engineering
18 knowledge or design, still not done.

19 Q. Well, I want to understand better what
20 the word complete means with respect to these
21 challenged items.

22 Sharing resources between sites. That
23 was an FPL proposal designed to mitigate some of
24 Bechtel's high estimates, correct?

25 A. Yes.

1 Q. And the step that we've identified
2 earlier was to work with Bechtel to reach an
3 agreement as to whether there would be a way to
4 share resources so as to reduce costs, right?

5 A. Yes, but that activity is also tied to
6 the fourth bullet which says outage duration
7 assumptions and optimizing manpower by eliminating
8 outage overlap. So, Bechtel had provided input as
9 to how they can share resources between sites, but
10 they are not acting on those two bullets, which
11 feed into the overall benefit for effective
12 sharing of resources.

13 Because if you have non-overlapping
14 outages and outage duration assumptions as to how
15 long Bechtel resources need to stay on a given
16 site that are not agreed upon, or not completed,
17 then you have not fully completed the exercise.

18 So we had not reached the end of the
19 resolution of Bechtel cost estimated here.

20 Q. Had you reached the point at which you
21 had saved some money compared to what Bechtel's
22 first --

23 A. Yes, they had reduced certain amounts,
24 and I think somewhere along the line there was
25 some indication of what they did.

1 I think in between May and June there
2 are three, four steps where they had shown some
3 reductions. I do recall that.

4 Q. Work scope being evaluated or redundant,
5 I imagine that means you were trying to find areas
6 in the work scope presented by Bechtel where you
7 could eliminate some things without sacrificing
8 the product, right?

9 A. I just don't remember what that bullet
10 represented or reflected. I'm having difficulty
11 recalling that. Work scope being evaluated
12 redundant...

13 MR. FEIL: If you don't know, don't
14 guess.

15 THE WITNESS: I don't remember what was
16 being communicated by that bullet, sir.

17 BY MR. McGLOTHLIN:

18 Q. What about the third one: Assumptions
19 used, work hours, overhead, etcetera.

20 What aspect of that challenged item had
21 been completed?

22 A. I believe that I recall that was
23 completed and that they were having full-strength
24 staff seven days a week, twenty-four hours a day
25 while there was no need to do that for all jobs --

1 all projects unless they were on critical path.

2 So I think there was some better common
3 ground of planning purposes associated with it.
4 That part, I recall there was some progress made.
5 I do not know all the details now on the progress,
6 though.

7 Q. Does that mean that as a result of the
8 interaction of FPL and Bechtel on this challenged
9 item there were some adjustments to work hours and
10 overhead that saved FPL some money?

11 A. I believe so, yes. Combination of all
12 those, in each one of these steps of project there
13 was some reduction in Bechtel costs forecasted
14 from what was reported to FPL.

15 Or they may not have reported it, but
16 they may have shown progress and then they were
17 waiting for other steps to complete to give us
18 what the bottom line number is.

19 Q. With respect to those that are shown to
20 be incomplete at the time of the June Steering
21 Committee meeting the expectation was, and
22 continued to be, that there would be resolution by
23 the end of June, correct?

24 A. That's what the date indicates, yes, we
25 would like to get this resolved expeditiously.

1 Q. These challenged items shown here are
2 also some of the same items that were included in
3 your memorandum to Mr. Nazar?

4 A. Can I take a look at that memo again?
5 I believe so, yes.

6 MR. McGLOTHLIN: I don't have any
7 questions on this document, so I will move
8 to the next one.

9 Let's make this a composite. Number 5
10 will be two documents comprising the
11 presentations made to the Steering Committee
12 in July of 2009, one for St. Lucie and one
13 for Turkey Point.

14 (Theraupon, Composite Exhibit Number 5
15 was Marked for Identification and is
16 attached hereto.)

17 BY MR. McGLOTHLIN:

18 Q. Take a few minutes and review those,
19 please.

20 A. These are fairly large documents so for
21 me to quickly review those is not possible. I
22 kind of quickly flipped through them and I may
23 need more time as you ask questions to refresh
24 myself.

25 Q. Certainly.

1 A. I recall these documents as the
2 July presentation. I have -- as we speak, I have
3 not looked through each page, so when we come to
4 anything specific, I would like to look at them
5 more closely.

6 Q. Fair enough.

7 A. Do you want to start with St. Lucie or
8 Turkey Point?

9 Q. St. Lucie.

10 A. Okay.

11 Q. Were you involved in the presentations
12 made to the Steering Committee in July of 2009?

13 A. Yes, I was involved.

14 Q. So you would have contributed to it and
15 have been familiar with these documents?

16 A. No, I was not involved in the
17 preparation of these documents. They were done by
18 the team that reported to me, but I have given
19 them full independence and autonomy to prepare
20 these documents. I reviewed with them the format
21 and content, but I presented -- helped present
22 this information.

23 Q. Start with page eight.

24 A. Of St. Lucie?

25 Q. St. Lucie.

1 A. Yes. I'm on page eight.

2 Q. This is a slightly different format than
3 we've looked at earlier.

4 Do I understand correctly that this cost
5 overview compares the original estimate
6 corresponding to the indicative bid with the
7 forecast that was prepared for the July, 2009
8 meeting?

9 A. Yes. The first column is the Needs
10 filing -- the Shaw, Stone scoping study and then,
11 subsequently, the Needs filing.

12 And so you have -- that's a description
13 of the first column.

14 Now please go ahead and what you are
15 going to ask me?

16 Q. The column caption: Variance, simply
17 compares the original estimate with the forecast
18 that was current as of July, correct?

19 A. I would like to go back to column two
20 because that will help to answer what is column
21 three, if that's okay with you.

22 Q. I understand column two of the current
23 forecast to refer to the forecast of the capital
24 costs prepared for the July, 2009 meeting.

25 A. That is correct. It was based on

1 Bechtel's input, Bechtel's view of what the
2 implementation costs should be. Bechtel's wish
3 list view of what that implementation cost would
4 be, and incorporating their numbers as they were,
5 not having challenged, not having vetted, not
6 having -- the vetting process not completed as we
7 saw earlier. Engineering not complete. Scope
8 items not complete.

9 So that was Bechtel's input as well as
10 number of other inputs. And they were all
11 assembled into this column to indicated if we
12 accepted everything in a snapshot what would that
13 picture look like, so that we can decide on --
14 evaluate, and decide on what the next steps would
15 be.

16 So that's important. And then we can --
17 so I would like to pause there.

18 Q. The variance column compares the column
19 one to column two and the difference?

20 A. Yes, it does. That is correct. So that
21 original Needs filing estimate and Bechtel's input
22 unverified, unvetted, unchallenged, snapshot
23 picture. If you take that as data point, what is
24 the difference between column one and column two
25 shown on the variance.

1 Q. And the variance shows under: Total,
2 that the current forecast increased beyond the
3 original estimate by about one hundred and
4 thirty-nine million dollars, correct?

5 A. Using Bechtel's unaccepted, unverified
6 numbers, the difference between the two would be
7 about one hundred and forty million, sir.

8 Q. Was this the first occasion on which the
9 Steering Committee had seen an estimate greater
10 than the proforma value?

11 A. This is the first time they had seen a
12 comprehensive compilation of this type, yes,
13 because you have seen all of their exact
14 presentations, so you have seen everything else --
15 at least presentations you have shown me, that
16 that's exactly what the Steering Committee has
17 been seeing as of that date, January, February,
18 March, April, May, June.

19 Q. Had you finished?

20 A. Yes, I have.

21 Q. What was the reaction of senior
22 management or members of the Steering Committee of
23 this presentation?

24 A. It was -- first of all, substantial
25 amount of time was spent on understanding the

1 basis of how these numbers came about and then the
2 reaction was: What are the right steps to resolve
3 and arrive at what is the reliable, acceptable,
4 vetted, final forecast for the project?

5 So, it was a long discussion and you're
6 asking me to summarize in short answer. So, their
7 reaction was a number of questions. Their
8 reaction was seeking out a number of
9 clarifications, understanding sources of input,
10 understanding assumptions, and understanding
11 opportunities for improvement scope-wise, clarity
12 of estimates-wise, explanation of studies that
13 were underway. All of those.

14 This was their reaction in understanding
15 all that material in that package.

16 Q. Was there an element of surprise that
17 the variance would be as large as it is reported
18 to be?

19 A. No. I mean, it was being discussed with
20 the Steering Committee that Bechtel indicated the
21 numbers were high, so they wanted to understand
22 how high. And this was the first time they were
23 seeing a compilation of all the items, including
24 risk items, in one place.

25 Did they look happy? I would not say

1 that. Were they surprised? I don't know to gage
2 their reaction.

3 I mean, they had many questions about
4 these numbers is probably the best way to describe
5 it.

6 Q. On the left-hand side there's an item
7 called: Scope undefined.

8 A. Yes.

9 Q. Is that identical to the earlier entry
10 that's labeled as scope not estimated?

11 A. I think that in the first column it is
12 true, Mr. McGlothlin. The second column, if you
13 recall, if you see the -- it is a risk item entry
14 there, so this was the first time we started
15 introducing the composite view of the risk items,
16 I believe, into the picture, is what I recall.

17 I would like to verify that, but that's
18 what I recall. I'm not hundred percent positive,
19 Mr. McGlothlin, so I would like to verify that,
20 but it included certain risk items as the best I
21 can recall.

22 Q. You may have personally answered my next
23 question. You will recall then in the last
24 presentation package the scope not identified had
25 been reduced to about [REDACTED] million dollars.

1 A. Yes.

2 Q. So I was going to ask you to explain how
3 here that it could be [REDACTED] million dollars and
4 then your answer is what?

5 A. I don't know everything that went into
6 between [REDACTED] -- [REDACTED] to [REDACTED] except
7 compilation of all of the information from various
8 sources the team, project control group, had
9 assembled. They came up with this number.

10 Unless I spend a little more time
11 dissecting all the source documents, I don't have
12 a ready-made answer for you, sir.

13 Q. Look at page nine of this document.

14 A. Yes.

15 Q. If you're sufficiently familiar with it,
16 or if you remember well enough, can you tell me
17 what this intended to communicate?

18 A. Give me a minute to kind of look at it
19 one more time.

20 So, again, this is a snapshot of where
21 those earlier seen forecasts stand and their
22 comparison with respect to the original Needs
23 filing and the various steps that changed -- could
24 change that forecast and what are those causes as
25 of that date based on Bechtel's unverified, not

1 challenged, not accepted by FPL estimates,
2 in-progress work.

3 So there are some additions and some
4 subtractions as I see it.

5 Q. Move to page eleven. Maybe you can
6 clear this up.

7 Page eleven, the top caption reads:
8 Current budget of six hundred fifty-six million
9 increased to seven hundred and thirty-six million,
10 paren, current forecast, but on an earlier page
11 the current forecast was shown as seven hundred
12 and ninety-five million dollars.

13 Can you explain the difference in those
14 two numbers?

15 A. Not unless I studied all of the -- first
16 of all, I didn't prepare any of these pages, like
17 I said. These were results of studying thousands
18 of pages, contracts, documents, assembling,
19 sifting information certain way, done by project
20 control and number of other people.

21 And I was not involved in that, so I
22 couldn't explain that to you on the spot unless I
23 reviewed some extensive back-up material.

24 Q. I'm not asking you to do that.

25 On the same page the statement appears:

1 The cause is primarily due to the budget being
2 based on feasibility studies slash estimates not
3 detailed engineering and project planning.

4 And take a minute and read the subparts
5 of that statement, that additional bullet points.

6 A. Yes, I have looked at those.

7 Q. Those are explanations of why the
8 original budget has been increased to the current
9 forecast, correct?

10 A. I don't quite agree with that
11 characterization. What it says is: These are the
12 reasons which are causing the forecast listed that
13 was based on Bechtel input numbers to be seven
14 hundred and thirty-six million dollars, or
15 whatever the number is.

16 Q. Let's look at them individually.

17 A. Okay.

18 Q. IAR and initial design evaluations
19 identified additional scope not addressed in the
20 feasibility study.

21 Now, does that have anything to do with
22 the Bechtel estimates of --

23 A. Absolutely. Because if there is a
24 design evolution as a result of IAR analysis, it
25 will just say: This is the thing we need to

1 design and this is the thing we will have to
2 build. So then it would be Bechtel estimate to
3 build this new thing -- engineer this new thing,
4 and then implement this new thing.

5 So there would be input from Bechtel for
6 items identified in that one line item.

7 Q. Were there any additional scope items
8 falling out of the LAR evaluation that were not
9 subject to challenge?

10 A. Please ask me that question again, sir.

11 Q. The question is whether everything in
12 all these items reported here are subject to or
13 challenges to Bechtel?

14 A. Yes.

15 Q. Were there any additional scope items
16 that resulted from the LAR evaluation that would
17 not be subject to challenge at that point?

18 A. It's a very detailed question and unless
19 I look at three, four, five, six hundred scope
20 items, I could not tell you categorically.

21 Maybe, but I don't know that.

22 Q. Let's look at material costs. Material
23 costs have increased for large components such as
24 pumps and large valves?

25 A. That is correct.

1 Q. Is that a Bechtel item?

2 A. There are two parts to that.

3 The material cost for those components
4 are independent contracts. From there there are
5 costs associated with handling, installing -- so
6 strictly material costs, Bechtel would not be
7 directly involved in that except as soon as they
8 are delivered to the site, then when Bechtel touch
9 and handling and installation, so they would be.

10 So there even would be portions for
11 storage and care of those materials before they
12 were installed and that would be part of the
13 material cost.

14 Q. Well, the costs that are being referred
15 to here: The material costs have increased?

16 A. These would be strictly the material
17 costs with the material vendors, so as I read the
18 bullet it probably does not include that, but I'm
19 not positive.

20 Q. The next one says: Capacity of the
21 plant and other support organizations to absorb
22 additional work was underestimated.

23 A. This one Bechtel would not be involved
24 because it is strictly a plant, in-house people.

25 Q. Allowance for new scope was

1 underestimated. Is that a Bechtel item?

2 A. Yes, because if there is a fifty-five --
3 forty-five or fifty percent allowance and now the
4 new scope, according to Bechtel estimates, is
5 costing much more than that and there are
6 questions about how Bechtel is estimating those
7 jobs, so there would be.

8 Q. Well, the allowance is the forty-five
9 percent, correct?

10 A. Yes.

11 Q. And that was an estimate made at the
12 time that the fast-track approach was adopted,
13 correct?

14 A. That's correct.

15 Q. Who made the estimate, FPL, or Bechtel?

16 A. No, Bechtel was not on the scene there
17 at that time. It was a joint effort of input from
18 Shaw as well as the FPL project team made that
19 judgment.

20 Q. So the allowance for new scope in terms
21 of the underestimation was not a Bechtel item,
22 correct?

23 A. No.

24 MR. FEIL: Objection, asked and
25 answered.

1 THE WITNESS: Yes, I think I explained
2 that, sir.

3 Would you ask me again a different
4 question?

5 BY MR. McGLOTHLIN:

6 Q. I did not hear an answer to that
7 question.

8 I think you will agree with me that FPL
9 made the estimate, correct?

10 A. I will explain, sir. There's an
11 allocation for new unidentified scope items.

12 For example, it says: We need one new
13 original pump, which was not originally scoped, so
14 that becomes a new scope item.

15 However, to install that new pump, now
16 Bechtel has to provide a new estimate. So
17 therefore, the influence of Bechtel's estimate on
18 this comparison to this chart that you are making,
19 forty-five percent allocations. So, yes, there is
20 a tie there.

21 Now, did we take into account Bechtel's
22 way of estimating and creating this forty-five
23 percent allocation? No, we did not.

24 And that may be -- I mean, that's the
25 extent of what I can see. I don't know anything

1 else I can answer differently, sir.

2 Q. Okay. We have gone back and forth on
3 this.

4 Do I understand correctly that you
5 agreed with me in an earlier answer that Bechtel
6 was not involved in arriving at the forty-five
7 percent?

8 A. That is correct.

9 Q. Let's leave it at that.

10 A. Okay.

11 Q. The last item is: Base scope contract
12 costs were higher than estimated.

13 What is this base scope contract costs?

14 A. There are certain kinds -- for example,
15 Seimens' costs, they are a base contract cost for
16 Seimens, as I recall. The vendor that supply
17 turbine rotors, exciter rewiring, and things like
18 that.

19 They were higher than what was allocated
20 in the original estimates.

21 Q. So these are contracts other than the
22 EPC contract with Bechtel?

23 A. Yes, they would be. Yes, other costs of
24 feedwater, for example.

25 Feedwater heaters, for example.

1 Q. Turn over beginning on page thirteen and
2 continuing for some many pages thereafter there is
3 a line-by-line workup of individual items.

4 A. Yes.

5 Q. Tell me how that task came about. Whose
6 idea was it to make that line-by-line comparison
7 of this nature?

8 A. Mr. Robo, who requested this review,
9 requested that: Let us understand how many items
10 are existing scope items, how many items are new
11 items, what is Bechtel's current view of these
12 estimates, separate them into materials, LAR,
13 implementation like the package is organized. And
14 have a discussion on these items as to the basis
15 of some of those estimates.

16 And that's how this line-by-line review
17 came about.

18 Q. For the record, who is Mr. Robo?

19 A. Mr. Robo is the chief operating
20 officer -- or at that time was the chief operating
21 officer of FPL Group, I think it was until -- it
22 may have been NextEra Energy, I don't know the
23 time frame.

24 I don't recall the time frame. And he
25 was also the president of NextEra Energy.

1 Q. Was the directive to perform this
2 line-by-line analysis related to the magnitude of
3 the increase shown in the Bechtel estimate that
4 was reported in the July time frame?

5 A. Well -- Ask me the question again and I
6 will elaborate on the answer. I lost you.

7 Please go ahead and ask the question.

8 Q. It was related to an earlier question.
9 I asked you what was the reaction of senior
10 management to the information that the variance
11 between June and July was one hundred and
12 thirty-nine million dollars for St. Lucie alone.

13 As one component of that, I'm now asking
14 you whether the directive that the management
15 undertake this line-by-line comparison was a
16 response to the magnitude of the increase that was
17 reported at that time?

18 A. No, it was more related to the Bechtel
19 negotiation had not been completed to our
20 satisfaction. So even though Bechtel had shown
21 reduction in their cost forecasts to some extent,
22 it was not fully where we thought it needed to be.

23 So to understand how that affects
24 individual work line items, this line-by-line
25 breakdown was requested. How much of that is a

1 material component? How much of that is an
2 implementation component? Bechtel component? How
3 much of that is licensing activity?

4 So, to get a clearer picture of what
5 this total cost forecast would look like.

6 Q. When was that directive communicated to
7 you?

8 A. It has to be June 23rd meeting, so
9 within a day or two, or part of the discussion was
10 June 23rd meeting when we communicated that
11 Bechtel had not progressed in giving us the price
12 that we think were acceptable cost estimate would
13 be acceptable and then a subsequent meeting with
14 Mr. Robo to get clarification of in what shape or
15 form do you think this discussion would be
16 meaningful for the Executive Steering Committee.

17 So it was in those two different
18 meetings the format of what the package should
19 look like was discussed and was shared with
20 Mr. Robo.

21 We collectively discussed that and we
22 said if this is presented in this form, it will be
23 useful to the Executive Steering Committee.

24 Q. Is this line-by-line comparison FPL work
25 product or was Bechtel involved in the preparation

1 of it?

2 A. I do not know that, but ultimate
3 responsibility for putting this together was FPL
4 team, but large amount of input as it relates to
5 engineering implementation came from Bechtel. And
6 then it was folded into these difference estimates
7 and broken down into different line items.

8 It had input from various sources.
9 There were many other inputs as well.

10 Q. What was your involvement, if any, in
11 the preparation of the line-by-line?

12 A. Minimal, except to provide oversight
13 that the work was progressing and it is in the
14 format and shape and people are independent to
15 bring up all the issues and then collate it in a
16 meaningful way and the package is complete with
17 respect to the discussion we had with Mr. Robo and
18 what the Executive Steering Committee should and
19 would look at and would want to look at.

20 Q. This line-by-line analysis identifies
21 and quantifies both additions to scope and
22 reductions to scope, does it not?

23 A. It identifies additions to scope. It
24 identifies non-deletions to scope, and then it
25 does not explicitly spell out what other deletions

1 there could be, but they are either part of the
2 discussion, or they have been identified in
3 subsequent presentations, as I recall.

4 Q. With respect to these reductions of
5 scope that were identified in the process of
6 preparing the line-by-line analysis, those
7 reductions were quantified and incorporated in the
8 overall estimate, correct?

9 A. They were incorporated into the estimate
10 based on how much does Bechtel think we can reduce
11 the cost when we delete a particular line item.
12 It does not necessarily mean we agree with that
13 deletion amount, but this is what we think -- this
14 is what Bechtel thinks would cost you less because
15 you are doing half of the work.

16 Do you see what I'm saying?

17 Did you understand my answer, sir?

18 Q. I believe I got the gist.

19 A. I just want to make sure I give you a
20 complete answer.

21 Q. Look at page twenty-three, sir.

22 MR. FEIL: Joe, are we going to be at
23 an appropriate stopping point because we've
24 been going a little while for another hour
25 and-a-half?

1 MR. McGLOTHLIN: We can do that now if
2 you like.

3 (Thereupon, a brief break was taken.)

4 BY MR. McGLOTHLIN:

5 Q. We're back on the record.

6 Mr. Kundalkar, please move to page
7 twenty-three of this document, the St. Lucie
8 document.

9 A. Yes, I'm on page twenty-three.

10 Q. Do you see the statement that says:
11 Original project organization contemplated
12 self-performed model?

13 Do you see that?

14 A. Yes, I do.

15 Q. Was that original assumption reflected
16 in the proforma estimate?

17 A. Yes, it was.

18 Q. And that's no longer part of the plan,
19 correct?

20 A. That is correct.

21 Q. The self-performed model was replaced by
22 the use of an EPC contractor?

23 A. That is correct.

24 Q. Is that more expensive than the
25 self-perform scenario?

1 A. It's a complex question, but there are
2 more --

3 Q. Thank you.

4 A. -- there are more benefits to using this
5 part of a -- this type of complex project, an EPC
6 contractor. So at the face value, the cost for
7 the project may appear to cost higher. However,
8 the outage efficiency, and the execution of the
9 project, and the safe-plan operation after that,
10 so, big-picture-wise, it is a good decision.

11 Q. Well, it could be a good decision that
12 results in a higher price tag than the
13 self-performed scenario; am I correct?

14 A. It would be a higher price tag than the
15 self-performed scenario. It could be. I would
16 say it could be. Not necessarily it would be.

17 Q. Please look at page twenty-eight.

18 A. I'm on page twenty-eight.

19 Q. Do I understand correctly that this bar
20 graph depicts the progress of Bechtel's estimates
21 and FPL's working with Bechtel to modify those
22 estimates over a period of time?

23 A. Yes, it does. It reflects the snapshot
24 of where we were as of that date with respect to
25 our discussions and negotiations with Bechtel.

1 Q. Looking at the entries for the
2 horizontal access, was one hundred eighteen
3 million dollars the original Bechtel estimate for
4 the EPC contract?

5 A. It was original scoping study, yes,
6 estimate in the Needs filing. It may have been
7 close to what the Bechtel indicative bid was, yes,
8 sir.

9 Q. The second entry says: Scope
10 clarification which increased from [REDACTED]
11 [REDACTED] million dollars to [REDACTED]
12 [REDACTED] million dollars, correct?

13 A. Yes, sir.

14 Q. Which is why, at least on my copy, that
15 additional [REDACTED] million dollars shows up in
16 red, because it's an increase, correct?

17 A. I lost your words there, sir. Please
18 say that again.

19 Q. You will see that the increment of
20 [REDACTED] million dollars is shown on the bar graph
21 in red.

22 A. Well, they are shown in red. Even the
23 deductions further down are shown in red. It is
24 just to point out the steps. That's all.

25 As you can see, the ups and downs are in

1 the same color.

2 Q. I see. Well, in any event the scope
3 clarification resulted in an increase of [REDACTED]
4 million dollars to the base?

5 A. That is correct.

6 Q. There's a third caption: Added scope,
7 [REDACTED] million dollars.

8 Is that a function of Bechtel, or FPL,
9 or both?

10 A. It was entirely function of Bechtel
11 because this is Bechtel proposed forecast we are
12 talking about. It is for new scope or even
13 existing scope identified. Bechtel coming back
14 and saying: Well, we told you so in the
15 indicative bid stage, this much, but now with
16 things a lot more difficult, a lot more
17 complicated, therefore it will be a higher cost.
18 Similar to what your house contractor usually does
19 when they give you a starting price and then
20 maybe, oh, it's a lot more difficult than what we
21 thought it was.

22 Q. The next one says: Five-dash-twelve. I
23 imagine that's May 12th, Bechtel presentation, [REDACTED]
24 [REDACTED] million dollars.

25 Does that correspond to a particular

1 presentation that Bechtel submitted to FPL?

2 A. I don't remember that date, but if it
3 says so, I'm sure there was a meeting around that
4 time with FPL management.

5 If it says Bechtel presentation, I'm
6 sure there was one, but I don't remember the date.
7 I do remember meeting with them, yes.

8 Q. Whether or not that's the precise date,
9 it appears to me that this is the Bechtel action
10 that led to the mitigating steps that we've been
11 discussing earlier in your deposition; am I right?

12 A. Yes, sir. That is correct.

13 Q. And one of those was the decision to
14 call on Bechtel to prepare best case, worst case,
15 and P50, correct?

16 A. That was one step, amongst many, yes,
17 sir.

18 Q. You will see the next item on the
19 horizontal axis says: P50 reductions, [REDACTED]
20 [REDACTED] million dollars.

21 Do you see that?

22 A. Yes, I do.

23 Q. Does that mean that after Bechtel
24 complied with FPL's request for a P50, that that
25 had the effect of reducing the estimate from [REDACTED]

1 [REDACTED] million dollars to [REDACTED]

2 [REDACTED]?

3 A. No. What it means is as a result of
4 them completing their portion of the exercise,
5 they said: We can only reduce it by [REDACTED] million.
6 Does not mean it was acceptable to FPL, that that
7 [REDACTED] million dollar reduction was appropriate.

8 Q. But this reflects Bechtel's view of what
9 the P50 applied to?

10 A. Yes, sir.

11 Q. 6/22 or June 22nd, F-N-M adjustment.

12 What does F-N-M mean?

13 A. Field nonmanual is what F-N-M is. Field
14 nonmanual is Bechtel oversize -- Bechtel oversize
15 field engineers, supervisors, inspectors. And our
16 view of -- that we had asked them for detailed
17 breakdown and our view of their man-loading of
18 that function was fact, simple words, overly
19 excessive, not required. And the way they
20 explained that, and we challenged them, that is
21 they said the team that we have brought in comes
22 from our steam generator replacement function
23 team.

24 So, this team of people came from a
25 group called steam generator replacement group.

1 Steam generator replacement, as you know, is a
2 component inside a containment. It is in a very
3 difficult complex area. So the work required
4 there is excessively complicated. You have to
5 dress up, take precautions, things like that. And
6 therefore the amount of manpower to work such as
7 that is much higher. And they said: Well, maybe
8 yes, maybe we used that model while most of the
9 work here would be open -- an open deck of the
10 turbine building, like you can work in street
11 clothes. So that was the discussion about that,
12 therefore, we can make some adjustments.

13 That does not mean we accepted their
14 extent of adjustments, but that is the reduction
15 in that function.

16 Q. This movement, I guess you can call it,
17 on the part of Bechtel, had the effect of reducing
18 the Bechtel estimate from [REDACTED]
19 [REDACTED] million to [REDACTED] million
20 dollars?

21 A. Yeah, if that's the right subtraction.
22 It looks like it is, yes.

23 Q. On the same date there's an entry, same
24 June 22nd date, there's an entry called: Scope
25 reduction.

1 A. Uh-huh.

2 Q. Was that performed by Bechtel, or FPL,
3 or both?

4 A. No, it was strictly Bechtel. So we had
5 given them updated scope items. For example, what
6 I remember is instead of number of feedwater
7 heater replacement, it had reduced by some number.
8 And so Bechtel now, instead of four feedwater
9 heaters, they just have to do fewer. So how much
10 reduction would you have, and similar work items
11 assembled and packaged, or how much does that add
12 up?

13 One reason probably is there are two
14 bars is so that we have clear picture of how much
15 of it is scope reduction versus how much of it is
16 field non-manual adjustment.

17 So, they have the same day, but two
18 separate bars for clarity.

19 Q. Then there's a July 10th refinement that
20 moved that [REDACTED] million
21 back to [REDACTED].

22 A. Yeah, they came back and said: Oh, we
23 think it's too much reduction. We need to
24 increase it by another [REDACTED] million.

25 So this was not acceptable to us, but

1 that's their view.

2 Q. So as a result of the challenge and
3 resolution process that occurred after the May
4 12th Bechtel presentation, the Bechtel estimate
5 moved from [REDACTED] million
6 dollars to [REDACTED] million
7 dollars?

8 A. Yes, there was a [REDACTED] dollar
9 reduction, as you can see, just by challenging
10 their assumptions, not even getting into
11 individual scope items.

12 Q. Look at page thirty-eight, please.

13 A. Yes, sir.

14 I see LAR schedule. Is that what that
15 is? Yes.

16 Q. That's not the right reference. I will
17 withdraw that question.

18 A. Okay.

19 Q. The correct reference is page
20 thirty-six.

21 Mr. Kundalkar, please turn to page
22 thirty-six.

23 A. Okay. I'm on page thirty-six.

24 Q. This is related to our earlier
25 discussion, but do you see entries here for

1 undefined scope and formal analysis, high risk
2 weight of exposure, and total weight of exposure?

3 A. Yes.

4 Q. I assume that the [REDACTED]
5 [REDACTED] and the total includes the high risk
6 weight exposure, correct?

7 The [REDACTED] includes the [REDACTED]
8 [REDACTED]?

9 A. I would not know that level of details,
10 sir, but I think those words are the way that is
11 described.

12 Q. The question is: Do these three items
13 together represent contingency?

14 A. No, they do not, sir.

15 Q. Please explain.

16 A. Okay.

17 So, as I recall, these items are -- see,
18 you have to refer to the earlier three or four
19 pages because this is a summary page, result of
20 the risk and mitigation table that is -- that
21 makes up the previous three tables.

22 Q. Yes.

23 A. As you see, this mitigation table is as
24 a whole series of items identified, and as we
25 discussed earlier, initial place holder cost

1 estimate probability or something like that
2 occurring, and then a weighted average, and then a
3 sum total of that, I believe, is this page,
4 thirty-six.

5 So I will pause there and I will let you
6 ask the next question.

7 Q. The question is: If this does not
8 represent contingency, what does it represent, and
9 how does contingency play into it?

10 A. Right. So for each one of these items,
11 as I discussed earlier, unless you complete the
12 analysis or evaluation of that activity, or at
13 least reach a reasonable step and high enough
14 confidence, the numbers here are very conceptual,
15 high estimates, and not a candidate for
16 immediately taking [REDACTED]
17 million dollars and now saying: We need another
18 [REDACTED] million dollars worth
19 of contingency.

20 Because what I recall is if you look at
21 the next month's presentation, this number may
22 have come down to [REDACTED], [REDACTED] million
23 dollars. That's what I recall seeing the next
24 month's presentation, which I saw this last week.

25 So, it's because, as you see -- please

1 go to page thirty-two. And after the first two
2 line items is you see the origination date of some
3 of these risk items are all 7/19.

4 Do you see that, sir, 7/19 in the
5 left-hand column?

6 Q. Uh-huh.

7 A. If you see the weighted risk number, add
8 all those five million, five million, five
9 million, six million, round numbers, and it says
10 conceptual because they are conceptual, so -- and
11 if you flip to the next page, the same thing,
12 7/19.

13 So this was project control staff's
14 effort to just put everything that is not fully
15 resolved on the table and assign a place holder
16 value to that, including if you look at line
17 number twenty-five.

18 Would you go to line number twenty-five
19 there, sir?

20 It says: Bechtel Construction.

21 Q. What page?

22 A. On page thirty-three.

23 Q. I'm there.

24 A. So, do you see that, that line item that
25 says [REDACTED] million? So above and beyond Bechtel

1 providing us these high cost forecast estimates,
2 here they were telling us project control said
3 that we need to include another [REDACTED] million
4 dollars for things additional that were required
5 without defining what it is and it is a conceptual
6 estimate.

7 So, it is a composite view of that group
8 providing input, adding up to [REDACTED]
9 [REDACTED] million dollars. And then when it is
10 challenged or vetted, I'm sure the next month's
11 similar table has a much smaller number because
12 the staff has had time to challenge, analyze,
13 evaluate, and this is how the risk matrix is
14 managed.

15 But at least it puts the issue on the
16 table saying: We better look at this and analyze
17 this further.

18 It does not necessarily mean you take
19 [REDACTED] million dollars and plug
20 that into -- before you complete the analysis, you
21 should not put that as a contingency or
22 immediately on some other table.

23 Q. Look at page fifty.

24 Take a moment to review that.

25 A. There is a lot of data there and I

1 remember this page being part of the package. I'm
2 not knowing every number, but I will do my best --
3 my best to answer your question.

4 So, please go ahead, sir.

5 Q. My questions are more general. It's
6 captioned as: Feasibility analysis for AP
7 project, and displays the estimated cost of the
8 uprate project for the Needs docket, the May, 2008
9 cost recovery, the May, 2009 cost recovery, and
10 then, as I understand it, the last two columns
11 reflect the estimates that are taken from an
12 earlier cost budget summary, correct?

13 A. I agree with everything about the first
14 three columns, except the last two columns are
15 forecasts that we saw earlier based on Bechtel
16 input.

17 That's what they are, sir.

18 Q. Okay.

19 Can you tell me who directed that this
20 analysis be undertaken?

21 A. I requested that, that we need to do
22 some sensitivity analysis for the benefit of
23 senior executive management's review, that if you
24 accept this snapshot picture on-the-spot number,
25 what does this mean in terms of overall benefit to

1 the project? Because I know so far we had been
2 only focusing on the forecast cost estimates, but
3 there is a very important element here on the
4 first line, because by this time the project was
5 also forecasting that the output benefit to the
6 customers would be four hundred and eighty-one
7 megawatts -- you can see that in the right-hand
8 column, sir -- as opposed to four hundred or so
9 megawatts.

10 So what is the composite sensitivity
11 analysis result of that picture? And twenty
12 percent higher output with some increased costs,
13 what does it mean for the benefit of the
14 customers?

15 So, we wanted to have that clear
16 discussion with the executive management. That is
17 what this page summarizes as I recall. And if you
18 look at the bottom line it is labeled, C-P-V-R-R
19 in millions of dollars.

20 That's what it does. Cumulative to
21 present value of the revenue required, I believe
22 it's C-P-V-R-R.

23 So this was not feasibility analysis in
24 the entirety as the label says. The last two
25 columns are more sensitivity detail, like I said,

1 risk analysis.

2 Q. And the variables that changed from the
3 million dollars were the capital costs and the
4 megawatt output, correct?

5 A. Those are the two major variables. And
6 also I don't know if the gas price forecast
7 variables had changed. At least they aren't
8 displayed here, but that's the third variable.

9 Because in comparing these outcomes, you
10 also compare -- if we do not do this, and if we
11 buy this from alternate source of energy, how much
12 price will the customers will have to pay?

13 So there is a third variable, which the
14 two important variables are capital costs, as well
15 as the output. We seem to have been focussed on
16 only the capital costs, at least in these
17 questions. I just want to highlight that the
18 output is equally important.

19 Because if we had stayed with the same
20 original numbers but have twenty percent less
21 output, then it's not a good project just because
22 the cost numbers were met.

23 I just wanted to make that point, sir.

24 Q. Okay.

25 At the time this analysis was performed

1 using the estimates reported in the earlier
2 page --

3 A. You mean the Bechtel forecast numbers,
4 sir?

5 Q. As you described them, yes.

6 A. Yes, sir.

7 Q. Did you believe at that time that the
8 uprate project could be completed for the price of
9 the indicative bid?

10 A. Yes, I did. If not, very close to it.
11 And, you know, I did not know the balance of
12 higher megawatts and price, how that would play
13 out. But, yes, I did because of a number of scope
14 deletion items. For example, one approach that we
15 looked at -- yes, I did. Very close to it. Yes,
16 sir.

17 Q. And we're referring there to the six
18 hundred, fifty-seven million dollars in the second
19 column?

20 A. Yes. After we go through the exercise,
21 yes, absolutely.

22 Q. Page fifty-one and continuing, I
23 believe, on to fifty-two. There's a section
24 called: Lessons learned.

25 A. Yes, sir.

1 Q. Were you involved in the articulation of
2 the items that are listed there under Lessons
3 Learned?

4 A. No, I was not, but I agree with those
5 lessons learned. They were formulated by the
6 project team to document when we do fast-track
7 jobs, these are some of the items that have
8 affected us and we should take advantage of this,
9 God forbid, if you ever take another fast-track
10 job.

11 You do that at the end of, in the middle
12 of, any major activity involving the nuclear power
13 industry, sir.

14 Q. There's a bullet point that's devoted to
15 fast-track approach on page fifty-two: Fast track
16 modification impacts and risks.

17 Elaborate for me, if you will, on each
18 of those three bullet points. The first one is:
19 Looked at the project only from a high-level risk.

20 A. Can I take a minute to just read it?

21 Q. Sure.

22 A. Okay.

23 So, the first bullet describes that the
24 team's assessment in assigning a forty-five to
25 fifty percent -- by the way, I think it is more

1 close to fifty percent, but somewhere in their
2 allocation for undefined scope and contingency,
3 was looked at from high level risk, that more
4 extensive system-by-system margin analysis had not
5 been done to see making changes to one system how
6 it will affect an interacting system in a power
7 plant, and another interacting system in the power
8 plant.

9 And a power plant is made up of
10 literally hundreds of systems, so it just
11 indicates that when you look at it from high level
12 risk, and I think it is also tied to the second
13 bullet, desirable approaches, look at little more
14 detail assessment of risk so they can take into
15 account interaction and the composite -- composite
16 operation of these hundreds of systems while
17 defining risk.

18 Not look at high exposure, high risk
19 reactor steam generator -- high risk items.

20 And fast-track job, that is one of the
21 risks you have. You don't have the time to
22 complete the engineering analysis, detailed
23 analysis system-by-system for hundreds of systems,
24 but it says: Hey, you need to be a little more
25 careful when you take such a job in the future.

1 Q. The second one says: Should have done a
2 more detailed risk assessment when establishing
3 the budget and the budget being that derived from
4 indicative bid, correct?

5 A. Needs filing, yes. Based on scoping
6 estimate, yes, sir.

7 Q. Does that risk assessment relate to the
8 forty-five percent contingency that we discussed
9 earlier?

10 A. Ultimately that's what it amounts to
11 because if you have risk, it's usually associated
12 with costs or you will have a different allocation
13 to the -- for the mitigation of that risk.

14 Q. There are a couple under the next bullet
15 point: Cost reporting and early warning.

16 The third one --

17 A. Please give me a chance to read all of
18 them and then I will come back to the third one,
19 sir.

20 I read the third bullet, sir, but I
21 don't know exactly what team was trying to convey
22 there. I do not want to guess. I'm reading the
23 words, probably, as you are.

24 Q. But in general, I believe you said you
25 agreed with the lessons learned listed under that

1 section --

2 A. Yes, sir, I do.

3 Q. -- on these two pages?

4 Between the time of the July, 2009
5 committee meeting and the time you testified in
6 September, did you have any discussions with
7 others within the company with respect to whether
8 to revise the cost estimate you included in the
9 May testimony?

10 A. Yes, I did, sir.

11 Q. With whom did you discuss that?

12 A. I discussed it with a number of people.
13 First of all, it was discussed in the July 25th
14 meeting. Then it was discussed with my
15 supervisor, Mano Nazar, on certain occasions.

16 It was discussed with our regulatory
17 staff, our legal staff associated with this
18 project on the case.

19 That's my recollection.

20 Give me a moment to see I'm not
21 forgetting anyone here.

22 In the Exec. Steering Committee I met,
23 we discussed this with everybody right from the
24 entire senior executive team.

25 Q. Specifically whether to revise the May,

1 2009 prefiled testimony to reflect a different
2 cost estimate?

3 A. What we discussed was, and I asked the
4 question that we have this preliminary unvetted,
5 unverified Bechtel wish list estimate, what is it
6 that we need to do with respect to the report
7 submittal we have with this particular Needs
8 filing feasibility analysis?

9 And there was subsequent discussion and
10 the Executive Steering Committee came to the
11 conclusion, and summarized, that we must expedite
12 engineering, get the scope defined. Based on that
13 scope, challenge Bechtel more to get the projected
14 cost forecasts down.

15 In addition to that, evaluate the
16 benefit of this megawatt output to ensure that we
17 would get this benefit in output with increased
18 costs, or is there a cost benefit evaluation we
19 need to do?

20 Thirdly, we must go out and get
21 independent input cost estimation to verify if
22 we -- so that would be another leverage to
23 negotiate with Bechtel because when we have done
24 that on another power plant, I was personally
25 involved in that, it was eye opening to see that

1 once we do this scope definition and in-house
2 estimate, Bechtel numbers almost twice as high.
3 And with those facts in hand we can really bring
4 those numbers down to something reasonable.

5 So what are the three things I said?
6 Complete engineering, completely define scope, get
7 independent estimates, and, if required, evaluate
8 the use of an alternate EPC contractor to see that
9 would give us a better picture. That they would
10 be -- that the challenge would be acceptable to
11 us.

12 So, complete those actions, and once we
13 have that verified, vetted, FPL management
14 accepted estimate, then only, revise the filings
15 with the Commission, sir. So that was discussed.

16 Subsequent discussions that I think you
17 refer to are essentially related to that
18 discussion in the Committee.

19 Q. In response to discovery requests, the
20 name of Mr. Thomashefski came up. I'm probably
21 mispronouncing that name.

22 A. His name is Dan Thomashefski. That's my
23 best -- yes, that is how he says it:
24 Thomashefski.

25 Q. Mr. Thomashefski was involved in working

1 with you to prepare for the September hearing; was
2 he not?

3 A. He was, amongst many others. He was,
4 yes.

5 Q. Did you and he have a conversation on
6 the subject of whether to revise your cost
7 estimate?

8 A. I had that conversation with a number of
9 people. I'm sure I had that with Dan Thomashefski
10 as well.

11 Q. As I understand what you're telling me
12 today, it was your view that the testimony should
13 not be revised?

14 A. It was the company's position that we
15 should not revise the cost estimate and the
16 feasibility study until we have thoroughly
17 completed the actual plan. And that was the
18 expectation of the Exec. Steering Committee also,
19 we need to complete that, and then only a vetted
20 estimate would be used for update of the
21 feasibility study in the testimony.

22 Q. That was the company's position. Was it
23 your view as well?

24 A. It was my view as well, yes, sir.

25 Q. So when you testified and chose to not

1 revise the prefiled testimony, that was with the
2 knowledge of senior management?

3 A. It was. I could not make that decision
4 just on my own, sir. This was a company decision.

5 I also believed in their decision. I
6 firmly believe in the action plan -- actions that
7 were laid out. I believe that they needed to be
8 completed before you could revise that testimony
9 because also company's position and that's what I
10 shared in that testimony, sir.

11 MR. McGLOTHLIN: I have one more
12 document.

13 (Thereupon, Exhibit Number 6 was Marked
14 for Identification and is attached
15 hereto.)

16 BY MR. McGLOTHLIN:

17 Q. Number 6 is captioned: Extended Power
18 Uprates, Executive Steering Committee, St. Lucie
19 and Turkey Point, September 9th, 2009.

20 Sir, I will represent to you that this
21 document was provided to us in response to a
22 discovery request, and the request was for the
23 presentations made to the Executive Steering
24 Committee.

25 A. Yes, sir.

1 Q. This is the one prepared for the meeting
2 September 9th, 2009.

3 Now, at what point did you change
4 jobs -- job titles?

5 A. It was changed in the beginning of
6 August, sir.

7 Q. Were you involved in any way in the
8 preparation for the September Executive Steering
9 Committee?

10 A. I was absolutely not involved in any
11 aspect of it, other than the work with the
12 Commission.

13 Q. So you would not have reviewed or --

14 A. I did not even know such a document
15 existed. I did not see it until maybe two or
16 three days ago. I did not attend this meeting, so
17 I have no knowledge of what other details.

18 I have seen it since, so I can relate to
19 what the information reads.

20 Q. You probably answered this question
21 already, but look at page nine.

22 A. Can I just flip through it, sir?

23 It is very difficult just to go to a
24 random page in a document that you are not
25 familiar with. You lose context with what is

1 being said here.

2 Q. Take the time you need, sir.

3 A. I'm on page nine.

4 Q. You will see, and this is for Turkey
5 Point, I think, isn't it?

6 Yes. It was both.

7 A. I think on the left-hand side it says
8 PSL.

9 Q. St. Lucie. It shows both. I had to
10 take a minute to orient myself on it.

11 Do you see that with respect to the cost
12 estimates that correspond in format with the ones
13 you are familiar with?

14 A. Uh-huh.

15 Q. For St. Lucie, the total estimate
16 increased from July of '09 from seven hundred and
17 ninety-five million to eight hundred and
18 thirty-one million dollars.

19 A. I see that numbers have changed, but I
20 don't know the basis for it, sir. I see the
21 numbers.

22 Q. I'm not asking you to explain the basis.
23 Just --

24 A. Yes.

25 Q. Please look at the information displayed

1 there.

2 A. Okay.

3 Q. For Turkey Point the corresponding cost
4 estimate increased from nine hundred and nine
5 million dollars in July to a billion nineteen
6 million dollars in August.

7 Do you see that?

8 A. Yes, sir.

9 Q. Were you aware of those August estimates
10 at the time you testified to the commission?

11 A. Absolutely not. I did not even know
12 such a document was being prepared or existed.

13 MR. McGLOTHLIN: Let me take a couple
14 of minutes to review my notes. I may be
15 ready to wrap up.

16 (Thereupon, a brief break was taken.)

17 BY MR. McGLOTHLIN:

18 Q. Mr. Kundalkar, with whom did you speak
19 in preparing for this deposition?

20 A. I spoke with my attorneys.

21 Q. Did you speak with anybody from FPL?

22 A. I have not had any direct contact with
23 FPL regarding this deposition.

24 MR. McGLOTHLIN: I have no further
25 questions.

1 I appreciate your time.

2 THE WITNESS: Thank you.

3 MR. FEIL: Is it still the case that
4 you have no questions?

5 VIA TELEPHONE: That's correct.

6 MR. FEIL: Vicki, are you ready to go?

7 MS. KAUFMAN: I'm ready.

8 MR. FEIL: Hold on just a second.

9 Raj, do you want a few minutes to shift
10 in place?

11 THE WITNESS: Yes.

12 MR. FEIL: Can we just take a few
13 minutes, Vicki, before your questions start,
14 please.

15 (Thereupon, a brief break was taken.)

16 CROSS-EXAMINATION

17 BY MS. KAUFMAN:

18 Q. Mr. Kundalkar, my name is Vicki Kaufman
19 and I am a representative of the Florida
20 Industrial Power Union Group, who's an intervenor
21 in this case, and I don't have nearly as many
22 questions as Mr. McGlothlin did so maybe that will
23 be good news.

24 A. Good afternoon, Ms. Kaufman.

25 Q. I want to get a little background first,

1 though, about you, if I could.

2 It's my understanding that you joined
3 Florida Power and Light in 1989; is that right?

4 A. Yes, ma'am.

5 Q. Then in 2009 you were the vice president
6 for nuclear power uprates; is that right?

7 A. I became -- I was always the vice
8 president of nuclear power uprates since 2007 from
9 its initial inception.

10 Q. When was the initial inception of that
11 position?

12 A. Approximately 2007. I don't think that
13 position was labeled as such. I was called vice
14 president of nuclear technical services, and as
15 part of my responsibilities also prepared initial
16 analysis, scoping studies, Needs filings, things
17 like that.

18 It was in 2007, ma'am.

19 Q. So then at some point the title changed
20 to vice president, nuclear power uprates, but the
21 responsibilities were the same?

22 A. No. I think subsequent to that, since
23 this project was growing, some of my
24 responsibilities were handed over to somebody
25 else. Like when I was vice president of nuclear

1 technical services, I was responsible for
2 engineering, nuclear fuels, large projects, and
3 things like uprates and large capital projects.

4 Somewhere along the line my engineering
5 responsibilities were shifted to some -- another
6 VP. So, at that time I was only responsible for
7 nuclear power uprates, but also responsible for
8 major projects and nuclear fuels.

9 Q. That happened sometime in 2007?

10 A. No, ma'am. I think it happened
11 sometime -- subject to check -- it had to be
12 sometime in early 2008, ma'am.

13 I don't have exact dates or the
14 chronology in front of me.

15 Q. So let's say early 2008, and you
16 continued in that position until you left the
17 company?

18 A. I stayed in that position until August
19 of 2009. Yes, that is correct, as VP of nuclear
20 power uprates.

21 Q. So is it correct that you left FPL in
22 August, 2009?

23 A. No, I left FPL in middle of February in
24 2010.

25 Q. February, 2010?

1 A. Yes.

2 Q. What was the reason for your leaving?

3 A. I made the decision to retire at a
4 certain age and obligations to my family. And I
5 had been working in the industry for over forty
6 years, so I think it was time for me to retire.

7 Q. I can understand that.

8 Did anyone at FPL suggest to you that it
9 was time for you to retire?

10 A. No.

11 Q. So that was your independent decision
12 alone?

13 A. Yes, ma'am.

14 Q. Since you left FPL in February, 2010,
15 have you been in touch with any FPL personnel?

16 A. No, not in official capacity, but we
17 live in a small town. I know these people for
18 last twenty years, so I see them in social
19 occasions, birthdays, weddings, graduations,
20 supermarket, playgrounds.

21 So, I have seen them in that capacity,
22 but never in official capacity.

23 Q. Since you left FPL in February, 2010,
24 whether it was in an official capacity, or a
25 social gathering, have you had an occasion to

1 discuss any aspects of this case with anyone from
2 FPL?

3 A. Ma'am, you broke down there a couple of
4 words.

5 Can you ask that question again?

6 Q. Sure. I know it's difficult on the
7 phone.

8 Since you left FPL in February, 2010,
9 whether it was at a social gathering, or
10 otherwise, have you had occasion to discuss this
11 case with anyone at FPL?

12 A. I have not discussed this case with
13 FPL -- anybody at FPL personally.

14 Q. You talked to Mr. McGlothlin, and I
15 apologize, I don't remember what exhibit number it
16 is, but you talked to him about the July 25, 2009
17 presentation to the Executive Steering Committee.

18 Do you recall that?

19 A. Yes, ma'am.

20 Q. Do you recall -- am I correct that that
21 meeting was held on a Saturday?

22 A. Yes, it was.

23 Q. Is that usual for those meetings to be
24 held on a Saturday?

25 A. No, but this meeting required review of

1 a large amount of data, and our schedules are very
2 difficult to manage, and there are a number of
3 people who needed to coordinate their schedules,
4 so it was easy to do that on a Saturday.

5 So Mr. Robo suggested if you pick a
6 Saturday, it would be best from
7 schedule-management point of view. Plus, it will
8 be time uninterrupted by phone calls and other
9 emergent items.

10 Q. Was Mr. Robo the gentleman that had
11 requested the meeting?

12 A. Yes, ma'am. It was also our monthly
13 scheduled meeting, so it wasn't like he requested
14 a special meeting.

15 He requested every monthly meeting. He
16 chaired that meeting every month, so this was
17 July's meeting, again chaired by Mr. Robo.

18 Q. So if I understand what you're saying,
19 this was not a special meeting. It was just your
20 monthly meeting, but it happened to be on a
21 Saturday?

22 A. It was our monthly meeting, except the
23 scope of the discussion items much larger, so the
24 package thickness was much bigger than our monthly
25 meeting.

1 Q. At the time of the July 25th, 2009
2 meeting, Mr. Robo was chief operating officer of
3 FPL Group; is that right?

4 A. Ma'am, I don't know when FPL Group
5 became NextEra, so please do not rely on my
6 answer. I should not -- he was chief operating
7 officer and the president of the company, as far
8 as I know.

9 At that time I don't know if he had made
10 a switch from FPL Group to NextEra or not. My
11 guess is we had, but I don't want to just guess.

12 That's my recollection, but I would
13 rather someone else in FPL answer that, ma'am.

14 Q. Was Mr. Olivera there?

15 A. Absolutely, yes.

16 Q. Who else attended that meeting?

17 A. It was attended by the Exec. Steering
18 Committee members and a few other people, so I'm
19 going -- I understand that information was
20 provided in response to one of the questions
21 somebody had asked as well.

22 So, Mr. Robo, Mr. Olivera, Mr. Mano
23 Nazar, Art Stall, myself, three or four directors,
24 or managers from the uprate team.

25 There were people from Terry Jones since

1 he was going to take over the responsibility, and
2 a couple of people who worked for, or would have
3 worked, for Terry Jones.

4 And there were others in the room. I
5 just don't recall all of the fifteen, eighteen,
6 twenty names, ma'am. But that gives you the
7 general idea.

8 Q. Thank you.

9 I think you said in an answer when
10 Mr. McGlothlin was questioning you saying that
11 perhaps it was at this meeting, or perhaps it was
12 at the following meeting, that there were
13 discussions among the participants as to revising
14 the testimony that you had filed in May; is that
15 right?

16 A. I said in the July 25th meeting I had
17 asked a question about this preliminary
18 information from Bechtel forecast: How should it
19 be handled with respect to the Needs filing, or
20 the feasible analysis, yes.

21 Q. I also understood you to say that the
22 participants in the meeting were all in accord
23 with the view that the testimony need not be
24 changed; is that correct?

25 A. The discussion was when would we have a

1 fully vetted, final estimate with respect to
2 revising the feasibility analysis, which is part
3 of the filing with the Commission.

4 Q. Did anybody in that meeting suggest that
5 it would be appropriate to update the Commission,
6 or to update your testimony that you filed the
7 beginning of May?

8 A. There was no explicit discussion, other
9 than always expectation that if there are
10 questions asked about anything in progress.

11 For example, ma'am, we had been
12 submitting these Exec. Steering Committee
13 presentations to the staff at their request which
14 described ongoing progress of all the things we
15 discussed here this afternoon. So, we are
16 committed to providing complete and accurate
17 answers if any questions were asked.

18 So there wasn't any question about what
19 it should say, or should not say, but we need to
20 revise the cost estimate with all these action
21 items, then it will be ready for update on the
22 feasibility analysis, which is to be filed with
23 the Commission.

24 Q. I might have misunderstood the question
25 and the answer that I was referring to.

1 But after the July 25th meeting, I
2 thought you said that there were discussions about
3 whether or not your testimony from May should be
4 revised; is that right, or no?

5 A. No, I don't think I said that, ma'am.

6 There were a number of discussions in
7 preparation of the testimony, and I think I was
8 asked who all I may have had those discussions
9 with, and I think I answered by providing whatever
10 answer I gave.

11 Q. Just so I'm clear, whether the
12 discussions about your May testimony occurred at
13 the July 25th meeting or otherwise, no one at FPL
14 suggested to you that you should revise your
15 testimony; is that accurate?

16 A. Can you ask me that question again,
17 ma'am.

18 Q. I will try.

19 In regard to your May testimony and
20 whether it was discussed at the July 25th, 2009
21 meeting or elsewhere, am I correct that no one in
22 FPL advised you that your testimony should be
23 updated?

24 A. That is correct. It was company's
25 position that we need to get a firm, clear

1 forecast for completion of the project, and then
2 we would make that filing.

3 Q. Now, before you took the stand at the
4 September, 2009 Nuclear Cost Recovery hearing,
5 would it be correct that you did some preparation
6 for your appearance?

7 A. Yes, ma'am.

8 Q. Who did you meet with in regard to that?

9 A. A number of people who were experts in
10 the different areas related to project, legal
11 staff, regulatory staff.

12 That's probably a good general
13 description, ma'am.

14 Q. When you were preparing for your
15 appearance before the Commission, did the issue of
16 revising your testimony come up in any of these
17 discussions?

18 A. I don't recall that, ma'am.

19 I mean, it was very clear that we needed
20 to complete actions to have an updated cost
21 estimate and then we would be revising -- if need
22 to then, we would be revising the feasibility
23 analysis in the Needs filing.

24 Q. So again, I'm not clear.

25 When you were preparing for your

1 September appearance at the Florida Public Service
2 Commission, was it or was it not discussed with
3 anyone whether or not you should update your
4 testimony when you took the stand?

5 A. I don't recall anything about -- the
6 discussion was if there are any questions asked
7 related to progress of work, we -- obviously I'm
8 committed to and we would always provide complete
9 answers. When you say update testimony, I don't
10 know what you mean by that.

11 As far as revising the cost to complete
12 the project is concerned, we needed to complete an
13 action plan based on Executive Steering
14 Committee's direction before we could update the
15 filing involving feasibility analysis and cost to
16 complete the job.

17 Q. So, if the Commission had asked you
18 about some of the estimates that were discussed at
19 the July 25th meeting, you would have answered
20 those questions; is that right?

21 A. Absolutely. Any questions. You refer
22 to the July meeting, but May, April, or whatever
23 packages that we had provided, if they had asked
24 me what is the progress of your discussion with
25 Bechtel with respect to scope, yes, I have

1 answered those.

2 I was committed to answering those, yes.

3 Q. So you were prepared to answer
4 questions, but you did not advise the Commission
5 that there were some indications, let's say, that
6 cost was going to increase; is that what you are
7 saying?

8 A. What I'm saying is: We had provided all
9 the information the Commission and Commission
10 staff had asked for, including Executive
11 presentations. And those clearly documented the
12 progress of our work and evolution with Bechtel in
13 terms of negotiation of costs.

14 So, if I had -- so in my mind, we had
15 provided all the information that was available.
16 And if I had been asked questions to explain any
17 of that detail, yes, I would have answered those
18 questions.

19 So, as far as I was concerned, the staff
20 was satisfied since they did not ask any
21 questions.

22 Q. So you took the fact that the staff
23 didn't ask you any questions, that they had
24 reviewed and were satisfied with all these
25 internal presentations?

1 A. Can you clarify that question? I don't
2 understand what that means.

3 I don't know -- ma'am, can you --

4 Q. What I'm getting at is I thought that
5 you had just said that you had provided copies of
6 these presentations to the Executive Steering
7 Committee, to the staff, I'm assuming through
8 discovery, you were prepared to answer questions
9 about those presentations if the staff had asked
10 you about them, but the staff didn't ask you; is
11 that correct?

12 A. Yes. Ma'am, I think we had provided
13 presentations up to certain date of questions, so
14 I don't know what would have been the last
15 presentation, if it was May or June so -- but all
16 the questions related to the presentations, if any
17 of them had come up, I would have clearly
18 responded to those completely and fully.

19 Q. Do you know if you had provided the
20 July 25th, 2009 presentation?

21 A. No, because it was unvetted, not
22 challenged, not accepted by Bechtel. But if
23 information of the question had been asked where
24 are you with respect to Bechtel negotiation, I
25 would have provided the status.

1 Q. Okay. So now I understand.

2 So the staff didn't even have the
3 July 25th, 2009 presentation at the time you took
4 the stand in September?

5 A. I believe -- I'm not sure, ma'am. So I
6 think there was a cutoff date, but I don't know
7 what that cutoff date was.

8 Q. Are you familiar with what's been called
9 the Concentric Report?

10 A. Yes, I am familiar with the Concentric
11 Report.

12 Q. Did you interview for that report?

13 A. Yes, I was.

14 Q. How many times?

15 A. Once.

16 Q. Have you reviewed the report?

17 A. I reviewed it since then, not until it
18 was published, and sometime after that.

19 Q. So you have had a chance to read it
20 though, correct?

21 A. Yes, I read it.

22 Q. Did the -- did the, let's say,
23 controversy over the May, 2009 testimony that
24 we're engaged in now, and whether or not it should
25 have been changed or not changed, did that have

1 anything to do with you leaving FPL's employ?

2 A. Ma'am, I don't know of any May 29
3 testimony. Can you --

4 Q. May 2nd. Your May 2nd, 2009 testimony.

5 MR. FEIL: Are you referring to the
6 prefiled testimony?

7 MS. KAUFMAN: Yes, and your
8 appearance -- and your live testimony at the
9 hearing.

10 THE WITNESS: Absolutely not, ma'am. I
11 retired because I had done enough years of
12 service for the Florida customers, as well
13 as others.

14 I had family obligations and it was
15 time for me to retire.

16 MS. KAUFMAN: That's all I have.

17 Thank you.

18 THE WITNESS: Thank you.

19 CROSS-EXAMINATION

20 BY MR. ROSS:

21 Q. Good afternoon, Mr. Kundalkar.

22 A. Good afternoon, Mr. Ross.

23 Q. You, in answering Ms. Kaufman's
24 questions, you said that it was an expectation
25 that if asked questions at the hearing, you would

1 provide complete answers.

2 Do you remember that?

3 A. Absolutely.

4 Q. And was that a company expectation of
5 you?

6 A. Yes. It was my personal commitment,
7 obligation, and company expectation as well.

8 Q. And would you agree that that
9 expectation also extended to providing accurate
10 and truthful answers?

11 A. Yes, Mr. Ross.

12 Q. And would you agree that during your
13 testimony at the Public Service Commission on
14 September 8th, 2009, you did provide truthful,
15 complete, and accurate answers to the questions
16 you were asked?

17 A. Yes, I did.

18 Q. You explained earlier that the Executive
19 Steering Committee meeting listed a number of
20 items that would have to be completed before they
21 would consider the information to be suitable for
22 presentation to the regulators, correct?

23 A. Yes.

24 Q. So let me ask you about each of those.
25 One of the first things you mentioned

1 was that the engineering and the scope needed to
2 be expedited.

3 Do you remember saying that?

4 A. Yes.

5 Q. And that Bechtel needed to be challenged
6 about its particular estimates?

7 A. That is correct.

8 Q. As of September 8, 2009, do you know if
9 those actions, about expediting, and completing
10 engineering, and scope and challenging Bechtel,
11 had those been completed?

12 A. No, they were not.

13 Q. You also mentioned that there was a
14 potential for additional output, megawatt output,
15 resulting from the EPU project, correct?

16 A. That is correct.

17 Q. As of September 8, 2009, had the
18 analysis of the potential for additional megawatt
19 output been completed?

20 A. Are you referring to technical analysis
21 to verify if additional output was feasible?

22 Q. Yes.

23 A. No. No, it was not completed.

24 Q. You also mentioned that the Executive
25 Steering Committee wanted an independent cost

1 estimate.

2 Do you remember saying that?

3 A. Yes, verification of cost estimate.

4 One way of doing that is either
5 independent estimator, or a new EPC contractor, or
6 any other means.

7 Q. Would you agree that as of September 8,
8 2009, the action of obtaining an independent cost
9 estimate had not been completed?

10 A. Yes, absolutely. It was not completed.
11 I don't think it was even started.

12 Q. You also mentioned that there was the
13 possibility of evaluating an alternate engineering
14 procurement and construction contractor to
15 complete the work; is that correct?

16 A. That is correct.

17 Q. Would you agree that as of September 8,
18 2009, that action of evaluating the potential of
19 an alternative EPC contractor, an alternative to
20 Bechtel, that had not been completed?

21 A. That is correct. That was not
22 completed.

23 MR. ROSS: That is all I have.

24 Thank you.

25 THE WITNESS: Thank you, Mr. Ross.

1 MR. FEIL: Hello, folks on the phone.
2 We're going to take a quick break to see
3 whether or not I have any redirect.
4 Offhand, I may not have very much. So if
5 you wouldn't mind just waiting for five
6 minutes, and then we will let you know when
7 we are back on.

8 (Thereupon, a brief break was taken.)

9 MR. FEIL: We don't have any questions
10 to ask Mr. Kundalkar.

11 We intend on reading and signing, but
12 I'm not clear. Mitch, is that going to come
13 after FPL reviews the confidentiality?

14 MR. ROSS: Do you want to cover the
15 confidentiality?

16 MS. CANO: Sure. Yes. Let's do that.

17 As we have with previous depositions,
18 we consider the entire transcript at this
19 point in time to be confidential.

20 You can send the transcript to FPL. We
21 will review it for particular
22 confidentiality claims. We will also
23 provide a copy to those who have signed a
24 confidentiality agreement with FPL and who
25 has said they want one.

1 At the same time, it can also be sent,
2 obviously, to Mr. Kundalkar's attorneys. He
3 may review it as well.

4 MR. FEIL: Anybody else on the phone
5 have anything else to cover?

6 MS. KAUFMAN: Not me.

7 MR. FEIL: That's it.

8
9 (Thereupon, the deposition concluded at
10 4:55 o'clock, p.m.).

CERTIFICATE OF OATH

STATE OF FLORIDA)

: SS

COUNTY OF PALM BEACH)

I, Rebecca L. Zinn, the undersigned
authority, certify that RAJIV S. KUNDALKAR
personally appeared before me and was duly sworn.

WITNESS my hand and official seal this
29th day of June, 2011.

Rebecca L. Zinn

Commission No.: EE97603

Notary Public - State of Florida

My Commission Expires: 6/25/15

REPORTER'S DEPOSITION CERTIFICATE

STATE OF FLORIDA)

; SS

COUNTY OF PALM BEACH)

I, REBECCA L. ZINN, a Shorthand Reporter, certify that I was authorized to, and did stenographically report, the deposition of RAJIV S. KUNDALKAR; that a review of the transcript was requested; and that the transcript is a true and correct transcription of the testimony given by the witness.

I FURTHER CERTIFY that, on the 5th day of July, 2011, I notified RAJIV S. KUNDALKAR c/o GUNSTER LAW FIRM that his deposition was ready for reading and signing by the witness.

I further certify that I am not a relative, employee, attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

Dated this 5th day of July, 2011.

REBECCA L. ZINN,
Shorthand Reporter

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8 MR. RAJIV S. KUNDALKAR
9 C/O MATTHEW FEIL, ESQUIRE
10 GUNSTER LAW FIRM
11 215 South Monroe, Suite 601
12 Tallahassee, Florida 32301

13 RE: NUCLEAR COST RECOVERY CLAUSE

14 This is a courtesy letter to inform you
15 that the deposition given by you on the 29th day
16 of June, 2011, in the above-titled case, has been
17 transcribed and is ready for your reading and
18 signing.

19
20 If you will call my office any day,
21 Monday through Friday, between the hours of 9:00
22 a.m. and 4:30 p.m. for an appointment, a copy of
23 the deposition will be available for you to read
24 and sign.
25

1 If you do not exercise your privilege to
2 read and sign your deposition in our office within
3 two weeks, the deposition will be forwarded to
4 JOSEPH A. MCGLOTHLIN, Esquire.

5
6 Thank you for your prompt attention.

7
8 Very truly yours,

9
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11 DBA OFFICIAL REPORTING SERVICES, LLC
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16 BY: REBECCA L. ZINN,
17 Shorthand Reporter

18 Date: July 5, 2011
19
20
21
22
23
24
25

CORRECTION SHEET

NAME: RAJIV S. KUNDALKAR

IN RE: NUCLEAR COST RECOVERY CLAUSE

The following corrections, additions, or deletions were noted on the transcript of the testimony, which I gave in the above-captioned matter, held on June 29, 2011:

PAGE(S)	LINE(S)	SHOULD READ
---------	---------	-------------

SIGNATURE:

DATE:

WITNESS CERTIFICATION

I, RAJIV S. KUNDALKAR, do hereby certify
 that I have read the foregoing transcript of my
 deposition given on the 29th day of June, 2011;
 that, together with any additions or corrections
~~made herein,~~ it is true and correct.

attached
 He.



RAJIV S. KUNDALKAR

I do hereby certify that the deposition of
 RAJIV S. KUNDALKAR was submitted to the witness for
 reading and signing; that after he had stated to the
 undersigned Notary Public that he had read and
 examined the deposition, he signed the same in the
 presence of the undersigned authority on the 14th
 day of July, 2011.

Gail Davis Kemly

Notary Public

State of Florida at Large

My Commission expires:



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110009ei 1:4	152:8,17 153:8,18	4678204 1:25 158:3	
111 2:4	2010 72:1,4,25	159:12	
11591 5:7	137:24,25 138:14	5	
118 2:16	138:23 139:8	53:6,20 87:9,14	
12 1:23 158:2	2011 1:15 4:12 72:2	159:18	
159:11	156:10 157:12,21	500 2:19	
12th 110:23 115:4	158:16 159:18	515 2:10	
131 3:21	160:5 161:5 162:7	55 1:17 155:10	
135 3:7	2012 26:9 27:10,15	5th 157:11,21	
15 156:17	27:17	6	
150 3:8	21 3:18	63:21 112:11	
19 118:3,4,12	215 2:7,19 158:9	131:13,17 156:17	
1989 136:3	22 112:11		
	22nd 112:11 113:24		
	23rd 77:8 104:8,10		

CORRECTION SHEET

NAME: RAJIV S. KUNDALKAR

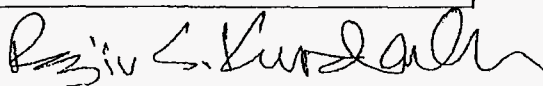
IN RE: NUCLEAR COST RECOVERY CLAUSE

The following corrections, additions, or deletions were noted on the transcript of the testimony, which I gave in the above-captioned matter, held on June 29, 2011:

PAGE (S)	LINE (S)	SHOULD READ
9	17	Change "Graham" to "Gram"
15	3	Change "engineer" to "engineering"
26	17	Change "discouraged" to "disvoered"
28	11	Change "PSE" to "PSC"
36	8	Change "new" to "no"
37	18	Change "benefit" to "benefits"
39	6	Change "property" to "probability"
39	8	Change "want" to "worst"
39	11	Change "what's" to "versus"
39	12	Change "perfectly" to "perfect"
43	9	Change "party" to "group"
46	9	Change "point oh-oh-oh-oh-one" to ".00001"
51	16	Change "fund" to "funding"
51	17	Insert "to" before "recognize"

PAGE (S)	LINE (S)	SHOULD READ
53	8	Change "relating" to "resulting"
53	22	After "item" before the period, add ", then decrease"
56	18	Change "PSE" to "PSC"
57	5, 18	Change "PSE" to "PSC"
59	11	After "are" insert ", with"
59	12	After "studies," insert "."
59	13	Delete "and"
59	23	Change "PSE" to "PSC"
60	16	Change "PSE" to "PSC"
62	2, 24	Change "PSE" to "PSC"
68	14	Change "plans" to "plants"
72	20	Change "my" to "at the"
73	16	After "Bechtel" add "cost estimate."
74	15	Change "a little" to "once"
75	16	Change "challenge" to "challenged"
75	19	Change "PSE" to "PSC"
83	14	Change "division" to "duration"
90	11	Change "indicated" to "indicate"
92	7	Add "to ask" before "a"
93	1	Change "gage" to "guage" and after "know" insert "how"
101	15, 16	Change "Seimens" to "Siemens"

PAGE (S)	LINE (S)	SHOULD READ
105	24	Delete "non"
108	9	Change "safe-plan" to "safe plant"
108	14	Change "would" to "could"
112	14	Change both references of "oversize" to "oversight"
113	5	After "dress up" insert "for radiation protection purposes"
122	13	Before "which" insert "of"
129	2	Insert "were" after "almost"
129	20, 22, 24, 25	Change "Thomashefski" to "Tomaszewski"
130	9	Change "Thomashefski" to "Tomaszewski"
138	22	Please see notation below.
146	25	Insert "would" before "have"
		Note to page 138, line 22: Upon reflection, I should clarify that in 2010, I received direct contact from FPL: (a) in April 2010, to arrange a phone interview with Mr. Reed and in July 2010 to arrange a phone interview with PSC audit staff and (b) in August 2010 to advise me of a forthcoming subpoena in the 2010 NCR case and the need for me to obtain independent counsel.

SIGNATURE: 

DATE: 7/14/2011

DEPOSITION EXHIBIT NO. 3

FPL 000103
NCR-11

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Extended Power Upgrades Executive Steering Committee Update Saint Lucie & Turkey Point

May, 2009

ICDR 1.8b-3 EPU

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Agenda

- Executive Summary
- Costs & Budget Summary
- Project Dashboard
- Plans & Targets
- Regulatory – LAR
- Bechtel Integration
- Heat Balance
- Nuclear Cost Recovery
- Scope Validation
- PTN ISFSI Location
- Risk Exposures & Mitigation
- KPIs
- Supplemental Information

ICDR 1.6b-3 EPU

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Executive Summary

PSL/PTN Executive Summary

	Issues	Impact / Plan
1	Nuclear Cost Recovery	<ul style="list-style-type: none"> - Over 200 Interrogatories and data requests responded to on time - FPSC Audit of Project Controls Completed - Sat - Final Testimony Completed - 5/1/09 <p>Page 20</p>
2	PTN ISFSI	<ul style="list-style-type: none"> -FDEP Approved Site Certification - Miami-Dade zoning restriction – resolution still open - Need to agree upon scope and start construction by July 1, 2009 <p>Page 22</p>
3	LAR Final Plans	<p>PSL1 EPU Submittal: September 2009 PSL2 EPU Submittal: January 2010 PTN AST Submittal: June 2009 PTN EPU Submittal: June 2010</p> <p>Page 12</p>
4	Scope	<p>Performing Scope Validation for Separate & Apart</p> <p>Page 21</p>
5	Bechtel Staffing	<p>Bechtel preliminary estimate greater than indicative bid; refining estimates and developing Level 1 (Best Case, Worst Case, and P50)</p> <p>Page 14</p>

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Cost and Budget Summary

Saint Lucie

Cost Category	Proforma	4/1/2009	5/1/2009	Source of Cost Estimate
	Budget \$MM	Forecast \$MM	Forecast \$MM	
Engineering	\$100	\$108	\$108	100% Contracts and Staff
Materials	\$269	\$257	\$257	77% Contracts
Implementation	\$106	\$230	\$230	88% Contracts, Vendor Estimate
Subtotal	\$475	\$595	\$595	85% Contracts
Scope not estimated	\$182	\$75 *	\$69	Ref Risk Matrix
Total	\$657	\$670	\$664	
T&D Estimate	\$25	\$12	\$18	FPL Estimate
Total	\$682	\$682 *	\$682	
				* corrected

Notes:

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Cost and Budget Summary

EPU Budget Details – St. Lucie

	4/1/2009	5/1/2009	
100%			
Engineering	\$MM	\$MM	
Engineering & Staff			Awarded - T&M - FPL and Contractors
NSSS Analysis for LAR			Awarded - T&M - Westinghouse
BOP Analysis for LAR			Awarded - T&M - SWEC
Modification Engineering	108.3	108.3	Awarded - T&M - Bechtel (E&C Scope)
77%			
Materials			
Turbine & Generator Components			Awarded - FP - Siemens
Turbine Gen Sub Systems			FPL estimate
S/G Mods			N/A
Main Transformers			Awarded - FP - Siemens
FW Heaters			Awarded - FP - TEI
Condensate Pumps & Motors			FPL estimate (FPL long lead material)
FW Pumps & Motors			Awarded - FP - Flowserve
MSR, HT Exchangers			Awarded - FP - TEI
Misc., Cntrl Rm, LEFM, Circ Wtr pp			RFP bid in review (Awarded LEFM)
Misc. Materials	257.0	257.0	Awarded - Bechtel
88%			
Implementation			
Turbine & Generators			Final negotiations in progress - Siemens
S/G Mods			N/A
Main Transformers			Awarded - T&M - Bechtel (E&C Scope)
FW Heaters			Awarded - T&M - Bechtel (E&C Scope)
Condensate Pumps & Motors			Awarded - T&M - Bechtel (E&C Scope)
FW Pumps & Motors			Awarded - T&M - Bechtel (E&C Scope)
MSR, Condenser, Valves			Awarded - T&M - Bechtel (E&C Scope)
Misc. BOP Instr, LEFM, Cntrl Rm, C			Awarded - T&M - Bechtel (E&C Scope)
Outage Ext.	229.6	229.6	FPL estimate
85%			

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Cost and Budget Summary

Turkey Point

Cost Category	Proforma	4/1/2009	5/1/2009	Source of Cost Estimate
	Budget \$MM	Forecast \$MM	Forecast \$MM	
Engineering	\$99	\$115	\$115	100% Contracts and Staff
Materials	\$257	\$243	\$243	75% Contracts
Implementation	\$190	\$339	\$339	71% Contracts
Subtotal	\$546	\$696	\$696	77% Contracts
Scope not estimated	\$204	\$54	\$50	Ref Risk Matrix
Total	\$750	\$750	\$746	
T&D Estimate	\$20	\$20	\$24	FPL Estimate
Total	\$770	\$770	\$770	

Notes:

ICDR 1.6b-3 EPU

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Cost and Budget Summary

EPU Budget Details – Turkey Point

100%	4/1/2009	5/1/2009	
	\$ MM	\$ MM	
Engineering			
Engineering & Staff			Awarded - T&M - FPL and Contractors
NSSS Analysis for LAR			Awarded - T&M - Westinghouse
BOP Analysis for LAR			Awarded - T&M - SWEC
Modification Engineering			Awarded - T&M - Bechtel
	114.6	114.6	
75%			
Materials			
Turbine Generator & Components			Awarded - FP - Siemens
S/G Mods			FPL estimate
Misc. Prizr Lvl, Rx Hd, Cntrl Rm			FPL estimate
Main Transformers			Awarded - Siemens
FW Heaters			Awarded - FP - TEI
Condensate Pumps & Motors			Bid Evaluation In Progress
FW Pump & Motors			Bid Evaluation In Progress
MSR, Condenser			Awarded - FP - TEI
Valves			FPL estimate
TBCW and Cont Cooling HTX (4)			FPL estimate
Misc. Materials			Awarded - Bechtel
	242.7	242.8	
71%			
Implementation			
Turbine Generator & Components			Final negotiations in progress - Siemens
S/G Mods			FPL estimate
Misc. Prizr Lvl, Rx Hd, Cntrl Rm			FPL estimate
Main Transformers			Final negotiations in progress - T&D Dept.
FW Heaters			Awarded - T&M - Bechtel
Condensate Pumps & Motors			Awarded - T&M - Bechtel
FW Pump & Motors			Awarded - T&M - Bechtel
MSR, Condenser, Valves			Awarded - T&M - Bechtel
Outage Extension			FPL estimate
77% CDR 1.05-3 EPU	338.7	338.7	001164



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Project Dashboard- PSL

	LAR Submittals	Mod Packages (9 month milestone)	Preps & Plans (includes long lead Material delivery)	Execution
Schedule	Staggered submittals will allow better resource allocation for FPL, W, SHAW, and Plant (PSL-2 12 months float)	11 of 12 mods with negative float beyond station milestones Recovery Plan being Developed	Work Order Planning behind due to Mod Engineering approvals for Spring 2010	No Negative Float U-1 Spring 2010 Proforma - 55 days
Contracts	Major Contracts issued for LAR support	Contracts issued for Mod Engineering	Contract issued to Bechtel	Contract issued to Bechtel
Staffing & Vendor Support	W and Shaw resources less challenged with revised submittal plan Bi-weekly report provided by WEC PM; will continue to monitor	Quality issues with Bechtel provided Design Packages	Bechtel total staffing and associated ramp rate greater than proposal review in progress	Implementation team on site and planning milestones met
Other Issues or Challenges	8 Potential mods resulting from LAR analysis - Added 1 due to Unit 2 Steam bypass capacity	1. Rod Control Phase 2 -4 will be evaluated post spring Outage 2. Validating scope for Separate & Apart and process Improvements	Core team identified; staffing after Outage	CP: Generator Rewind (Outage duration -66 days) 7.7 days best case savings identified Generator Hot Spots could extend Outage (5- 7 days)
Costs ICDR 1.6b-3 EPU	2009 Budget for Engineering & Staff: \$ 54.5 MM 2009 YTD Budget for Eng. & Staff: \$ 21.1 MM 2009 YTD Actual for Eng. & Staff: \$ 17.4 MM		2009 Budget for Mtls & Implementation: \$88.6 MM 2009 YTD Budget Mtls & Implementation: \$17.7 MM 2009 YTD Actual for Mtls & Implementation: \$07.5 MM 001165	

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Project Dashboard- PTN

	LAR Submittals	Mod Packages (9 Month Milestone)	Preps & Plans (includes long lead Material delivery)	Execution
Schedule	AST Station review NRC will accept EPU LAR after AST LAR Approval	No negative Float to Station Milestone	No Negative float	No Negative Float U-3 Fall 2010 Proforma - 55 days
Contracts	Major Contracts issued for LAR support	Contracts issued for Mod Engineering	Contract issued to Bechtel	Contract issued to Bechtel
Staffing & Vendor Support	W and Shaw resources still challenged; some relief from EPU submittal schedule change Monthly report provided by Shaw PM; will continue to monitor	Need FPL Design Engineering Manager Other staffing levels under review	Bechtel total staffing and associated ramp rate greater than proposal review in progress	Implementation team on site and planning milestones met
Other Issues or Challenges	4 Potential mods resulting from LAR analysis	Options review of BOP Cond/FW plans	Site Interface Model Draft Complete. Review with Station Leadership post RFO. Potential Site Capacity Challenge due to: EPU, RTE, Policy 14, ISFSI	CP: Condenser & FW Heaters (Outage duration ~70 days)
Costs	2009 Budget for Engineering & Staff: \$ 56.5 MM 2009 YTD Budget for Eng. & Staff: \$ 19.3 MM 2009 YTD Actual for Eng. & Staff: \$ 14.4 MM		2009 Budget for Mtls & Implementation: \$ 79.2 MM 2009 YTD Budget for Mtls & Imp: \$ 40.9 MM 2009 YTD Actual for Mtls & Imp: \$ 07.7 MM	

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Plans and Targets

Saint Lucie

	PROFORMA		FORECAST	
	U-1	U-2	U-1	U-2
LAR Submittal	9/01/09	9/01/09	9/30/09	1/31/10
1 st Outage				
Duration				
2 nd Outage				
Duration				
In Service Date	October 2011	April 2012	December 2011	June 2012
MWE	103	103	129 ^a	136 ^b

Notes

All Outage durations to be reviewed & approved by CNO upon completion of scope definition

¹ Outage durations driven by Generator rewind currently in the approved Outage schedule

² Outage duration driven by Alloy 600 cold leg nozzle repair

³ Outage duration driven by HP & LP Turbine and MSR Replacements

⁴ Target goal for Six Sigma Team rewind outage durations

ICDR 1.6b-3 EPU: MWe based on Siemens heat balance (contract target) – designs not final

Longer duration Outages have been included in the business model

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Plans and Targets

Turkey Point

	PROFORMA		FORECAST	
	U-3	U-4	U-3	U-4
LAR Submittal	9/01/09	9/01/09	6/30/10 ³	6/30/10 ³
1 st Outage				
Duration				
2 nd Outage				
Duration				
In Service Date	April 2012	October 2012	May 2012	December 2012
MWE	104	104	118 ⁴	118 ⁴

1
2
3
4
5

Notes

All Outage durations to be reviewed & approved by CNO upon completion of Scope definition

¹ Outage durations driven by Generator rewind currently in the approved Outage schedule

² Outage duration driven by HP Turbine and MSR replacements

³ Target goal for Six Sigma Team rewind outage durations

⁴ MWe based on Siemens heat balance (contract target) -- designs not final

ICDR 1.6b-3 EPU ⁵ AST LAR must be approved prior to submittal of EPU LAR

Longer duration Outages have been included in the business model

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EPU LAR – PSL

Technical Challenges

- **MSSV Lifting during Normal Plant Trips**
 - Options for Unit 1 include increased Steam Bypass to Condenser (SBCS) capacity and valve speed
 - Unit 2 challenging due to low operating margin
 - Tcold reduction not recommended due to adverse impact on generation
 - Increased Steam bypass to condenser capacity and valve speed, add relief valves downstream of MSIVs, and add turbine trip time delay
- **Unit 1 and 2 CCW Piping**
 - Selected portions of piping exceed stress analysis temperatures at EPU conditions, analyses underway to minimize impact
- **Unit 1 PRA Evaluation**
 - Issue involves current PORV sizing and ability to accommodate once-through cooling
 - Alternate options under evaluation
- **Unit 1 LBLOCA – maximum Containment Spray flow**
 - ICDR 1.0b-8 E AREVA working LBLOCA runs – challenging schedule to complete



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EPU LAR - PTN

- **Containment Analysis**

- Acceptable containment peak pressure/temperature results
- Current Component Cooling Water System temperature limits will be exceeded
 - Evaluating Modification Options
 - Evaluating Hot Leg Injection flow path for long term cooling and preclude boric acid precipitation

- **Steam Line Break Core Analysis**

- Initial results did not meet acceptance criteria
- Acceptable results achieved by adding lead/lag module to SAIS low steam pressure input
- Also reduces limiting peak containment pressure for SLB

- **DNB Parameters (OT Δ T, OP Δ T Trips)**

- Initial PZR. Pressure margin to trip too close to normal operating pressure considering instrument uncertainties

ICDR 1.65 8/10/00 Replacing PZR. Pressure gauges with digital to gain operating margin

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Bechtel Integration

EPC Estimates

- **Estimates have increased over the indicative bids**
 - FNM and Manual Labor hours higher
 - FPL validating process and accuracy
 - Home Office and JW support costs appear to be redundant
 - Will minimize/eliminate Bechtel JW
 - Larger scope than in indicative bids (both new scope and trends)

Challenge Items

- Sharing resources between sites
- Work scope
- Assumptions used – work hours, overheads, etc.
- Outage duration assumptions
- Optimize manpower by eliminating Outage overlap

ICDR 1.6b-3 EPU

Plan for Resolution

5/27/09

5/29/09

6/05/09

6/26/09

6/26/09

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Bechtel Integration

Bechtel EPC Estimates

- **Estimates are based on preliminary design**
 - More detail in scope as modification process proceeds
 - Some undefined scope is now identified
 - Some items as a result of on-going LAR & Engineering Analyses
- **In the process of refining estimates (i.e. from Shaw preliminary scoping estimates to level 1 estimates)**
- **The improved estimate process includes developing Best Case, Worst Case and P-50 view points**
 - Target date for completion 6/30/09

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Bechtel Integration

Bechtel EPC Estimates

- **Bechtel and Sites performing Best Case, Worst Case and P/50 Project cost reviews**
 - P/50 – is the most likely case with a 50/50 probability of executing the project plan and scope. This results in the most probable (50/50) project costs and schedule
 - Best Case – Results in the lowest total project cost, if the implementation went better than planned (scope simplified, beat schedule, no emergent items, no rework, no quality issues)
 - Worst case – results in the highest total project cost, if implementation went worse than planned (scope increases, schedule slips, emergent items, rework, quality issue). Assign cost and probability of occurrence to specific high risk mods.

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Bechtel Integration

Example Criteria

	P-50	Best	Worst
Management	Mgmt Service Staff 10/site	Mgmt Service Staff 8/site	Mgmt Service Staff 25/site
	20% turnover in personnel	10% turnover in personnel	50% turnover in personnel
	work hours 5-8's with occasional OT	work hours 5-8's with occasional OT	work hours 8-10's
	JW staff at 9 people	JW staff at 3 people	JW staff at 9 people
	ODC and OHO limits	ODC and OHO limits	ODC and OHO limits
Construction	Project work 6-10's, 2 shifts during Outage, no double time	Project work 6-10's, 2 shifts during Outage, no double time	CP on 7-12's, Double time OT on 7th day. Assign cost and probability of occurrence to specific CP and near CP high risk mods
	FNM at full staff 30 days prior to Outage	FNM at full staff 2 weeks prior to Outage	FNM at full staff 4 weeks prior to Outage
	Craft at full staff 1 week prior to Outage	Craft at full staff 1 week prior to Outage	Craft at full staff 1 week prior to Outage
	Foreman/GF ratio - identify for each project	Foreman/GF ratio - identify for each project	Foreman/GF ratio - identify for each project
	Outage Schedule per plan	Outage Schedule - 10% Improvement per station plan, per Outage (and corresponding Job hour saving)	Outage Schedule - 20% push to Outage per station plan, per Outage
Engineering	Most station milestones are met	Most station milestones are met	Most station milestones are met
	Training / in processing - 5 days (40 hrs)	Training / in processing - 3 days (24 hrs)	Training / in processing - 6 days (40 hrs)
	Project Scope is the work list as approved by FPL in April	Define savings in resources (e.g., can the Elec Lead do Elec and I&C)	Using T-12 approach resulting in huge ramp-up of engineering staff to perform work
	Optimize Frederick/HO scope split	Levelized and optimized T-9 with some mods moved to other Outages.	Risk items occur - define most probable
	Most milestones met (9Mo criteria)	Some milestones to T-6 Most Engineering in H.O. as appropriate	All Engineering at site All milestones met (12 mo criteria)
Materials and Subs	Award all 3 sites to same subcontractor	Just in time material deliveries save warehouse costs and multiple handling	3 separate subcontracts and 3 sites
	Bulk buys as much as possible	Minimal stock material remaining	Welders - use "golden arm" subcontractors PLUS 10% weld repair rework
	Bechtel/FPL optimize purchasing effort	Ensure BOM is not factored by Engineering and again by Field Engr.	More Subcontractors and less Direct Perform Craft
	Welders - use "golden arm" subcontractors for critical welds	Use welders from "hall" for all welding (no contract welders)	001174 Significant Stand-alone purchases Risk items occur - define probable risk

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Bechtel Integration

Project Overlap

- EPC Scope overlaps FPL in some areas
- Reviewing the following functional areas to eliminate overlap
 - Project Management
 - Project Support
 - Project Engineering
- Will have better view when June 30th Bechtel data is available

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Heat Balance

Potential MWe Gain

- Preliminary design heat balance indicate more MWe likely
- Will be performing additional testing to maximize MWe output
- Final design numbers will not be available until after testing and secondary pump and heater options are finalized (see page 21)

St. Lucie:

Unit	Needs Filling	Siemens Contract (MWe)	Winter Planning Max (MWe)	Summer Planning Min (MWe)
Unit 1	103	[REDACTED]	137	102
Unit 2	103	[REDACTED]	151	123
[REDACTED]				

A

Turkey Point:

Unit	Needs Filling	Siemens Contract (MWe)	Winter Planning Max (MWe)	Summer Planning Min (MWe)
Unit 3	104	[REDACTED]	111	121
Unit 4	104	[REDACTED]	111	121
[REDACTED]				

ICDR 1563 EB

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Regulatory – Cost Recovery

Nuclear Cost Recovery

FPSC Internal Controls Audit begins	1/22/09 (a)
2008 True-up and testimony filing	3/2/09 (a)
Discovery begins	3/3/09 (a)
2009-10 Projections and Testimony filed	5/1/09 (a)
Intervener Testimony	7/14/09 (e)
Staff Testimony	7/28/09 (e)
Rebuttal Testimony	8/21/09 (e)
Discovery Completed	8/28/09
Hearings	8/31/09, 9/2/09-9/4/09
Staff Recommendations	10/02/09 (e)
Issue Order	11/2/09 (e)

- Over 200 Interrogatories and Data Requests responded to on time
- Testimony - complete
- FPSC audit of Project Controls - complete

Notes:

(a)=Estimated date.
ICDR 1.8b-3 EPU

Focus – SSJ's, Competitive bidding, "Separate and Apart"

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Scope Validation

Evaluating Project Margins and Scope

- Initiated a validation of identified modification margins
 - Condensate / Feedwater Pumps
 - Feedwater Heater Scope
 - Exciters
- Evaluating Margins & LAR inputs
 - Safety Analysis
 - Trip Transient
 - Design and Operating Margins
- Technical Challenge Board to review results and plan going forward

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PTN ISFSI

Confirmation/ Approval for ISFSI Location

- Recommendation is for EPU Craft facility inside PA and relocate ISFSI Pad outside PA
 - Revisiting Facility needs
- FDEP Approved Amendment Request to the Site Certification for ISFSI Location outside PA. Agencies and third parties have about 30 days to appeal.
- Plan to Resolve Zoning Issue for ISFSI Location is in Process
 - Plan is to confirm zoning approval through County Building Department permitting process
 - Requirement and related process for revision of the Conceptual Site plan is still under discussion with the County
 - Uncertainly exists on ISFSI zoning approval for location outside PA. Any construction of EPU facility on initial ISFSI location should await better understanding of zoning status
- Based on time needed for Engineering and Construction, need to start EPU Craft Facility by July 1 and ISFSI construction is August 3, 2009

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Project Risks – PSL

Item	Orig Date	Risk Event Description	H/M/L	Impact Level	Type	Maximum Possible Exposure (\$000s)	Typical Estimate (\$000s)	Cost	Weighted Risk Exposure (\$000s)	Impact Description	Mitigation Action
1	9/8/08	Implementation and Schedule execution may cost more than Proforma		Significant	Cost					Contingency will be needed to expended for any shortfalls not predicted by Proforma Note: Dechert indicates Engineering costs will be higher than proposal	Working with Bochtel. Developed action plan to determine the accurate number of Bochtel staff needed (final action 5/15)
2	4/3/09	Elimination of MSSVs lifting on a Plant Trip will require a significant modification to the Steam Dump system - or - reduction of T-cold		Significant	Design					U-1 Significant cost to modify the steam dump system or a reduction in MWs if T-cold is lowered	U-1: Plan to increase capacity of Steam dump and Bypass System, Reviewed and accepted by Plant Health Committee U-2: Perform K-T analysis and provide recommendations to Senior Management ready for internal challenge with Chloé (due 5/8)
3	4/30/09	U-1 PRA for Total Loss of Feedwater Indicates PORVs are undersized for uprate condition		Significant	Schedule Cost					Cost and schedule could be impacted if PORVs need to be replaced	Working on alternative solutions Will likely require more than PORV replacement Risk Mitigation Plan in development
4	1/23/08	Available Containment Pressure Margin reduced due to the discovery of Legacy LOCA analysis error	M	Significant	Design					Impact is not yet fully analyzed. Current available margin has been reduced from 7 PSI to 4 PSI	Preliminary reanalysis for U-2 is acceptable U-1 will require a mini-purge system Plant Health Committee has reviewed Will process scope change
5	12/18/08	Preliminary evaluations indicate that the current design flow for U1 hot leg injection may be less than adequate to support the uprated condition without a modification	M	Marginal	Schedule Cost					May require an additional modification. The scope/cost of mod is not yet determined	Will require system modification processing Scope Change
6	5/29/08	WEC & SHAW vendor staffing level may not be sufficient to support project	M	Significant	Schedule					Could cause delays with LAR schedule and/or cost additional manhrs	Agreement on re-baselining reached; no impact to end date for Shaw and WEC
7	7/30/08	Rewind at P8 and PSL overlap	M	Significant	Schedule					Specialty Technicians and equipment are required at the same time at P8 and PSL. Could delay rewind at PSL and affect PSL Critical	Siemens requires 31 days from start of P8NP outage and the start of PSL outage; currently 38 days exist in the schedule (Difference of 5 days) See Mitigation Plan for details
8	Prior to 2/1/08	License Amendment Request NRC Review could be delayed due to errors and omissions - NRC Acceptance - NRC Technical Review - ACRS Review - SBLOCA Confirmatory Analysis	M	Critical	Regulatory/Schedule					Depending on the extent of the delay, could result in additional cost and extension of the project length	1. Prepare LAR consistent with R3-001, NRR Review Standard for Extended Power Upgrades. - Develop EPPI for format and level of detail 2. Use Clinton EPU submittal as a guide for format and level of detail 3. Sequencer reviews and challenge boards at certain interim LAR milestones - Self Assessment after 1st LAR Section 4. Multi-party peer reviews using industry and regulatory experts 5. Advance meetings with NRC after re-submission 6. VFP Nuclear Power Uprate met with NRR management 7/24/08 7. Monthly meetings with NRR 8. CMO met with NRC EDO on 3/21/09 to discuss review schedule 9. FPL to establish a presence in Washington to coordinate questions and RAs

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Project Risks – PSL

	Origin Date	Risk Event Description	H/M/L	Impact Level	Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob. Level	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
9	1/20/09	New NRC mandated Maintenance rule working hours will further limit allowed working hours	M	Marginal	Cost					Potentially extend outage Durations and/or increase costs	EPU management working with Licensing to ensure an acceptable procedure which will minimize the impact to EPU
10	10/14/08	There is potential that Legacy Analysis or License basis issues may be uncovered during re-analysis for EPU LAR	M	Significant	Programmatic					Two such items have already been identified; PB FW temp and PTN CTMT analysis which are being tracked by a separate line item. The impact is difficult to quantify until discovery	Developed and issued EPPI-046; new instruction that defines risk identification and mitigation utilizing WM-AA-1000. Thus far, the process has been effective
11	5/12/09	Given the planned construction of new nuclear plants in FL, obtaining adequate skilled labor to support EPU at PTN and PSL may be problematic (Note: This was the same #1 risk identified by each of the perspective EPC vendors)	M	Significant	Schedule/ Cost					A lack of adequate skill craft could impact the outage schedules and related costs	Will continue to monitor Have instituted a 60 day strike policy for these individual contractors that leave the site/project voluntarily Instituted monthly meetings with BAs
12	6/3/2008	Transition to Nuclear Asset Management Systems (NAMS)	M	Marginal	Programmatic					May cause delays with review and approval of Engineering Documents	Per Fleet wide Change Management Plan Hold meeting with NAMS coordinator and Site PMs Transition to NAMS currently scheduled for Dec 09
13	2/13/08	Vendor Staffing Level may not be sufficient to support the Project	M	Significant	Project Mgmt					Schedule and Outage Milestones could be impacted	Continue to monitor actual staffing levels against established staff ramp up Plan Conducting quarterly meeting with Major Vendor and CND starting in April

1 2 3 4

Weighted High Risk items total ~ [REDACTED] |
ICDR 1.6b-3 EPU

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Project Risks – PTN

	Order Date	Risk Event Description	INITIAL	Impact Level	Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob Level	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
1	8/1/03	Implementation and Schedule execution may cost more than Proforma		Significant	Cost					Contingency will be needed to expended for any shortfalls not predicted by Proforma. Risk: Budget Indicates Engineering costs will be higher than proposed	Assessing scope and staff estimator. See Mitigation Plan for Details
2	4/23/09	Turbine Gantry Crane travel speed, available laydown space, etc. Crane may be Less than Adequate to efficiently support the EPU outages		Critical	Schedule					Ability to efficiently remove and replace equipment needed for power uprate within the proposed Outage time frame	Obtain qualified OEM to evaluate the overall condition of the crane and provide recommendations. Review recommendations and implement repairs as necessary to improve crane reliability and condition. See Risk Mitigation Plan for details
3	10/19/05	Error discovered in the Containment Integrity Design Basis Analysis		Critical	Programmatic					The Error (non conservative) may significantly reduce the Containment Pressure Margin needed for the Extended Power Uprate conditions	Reversible results with heat sink model. Further CCW mode may be necessary. Performing KTA Analysis to determine scope and significance of modifications to be determined by 5/1/09 See Risk Mitigation Plan for Details
4	Prior to 2/1/01	Project Staff Level not sufficient		Significant	Project Mgmt.					Project not able to establish and maintain an adequate level of in-house and augmented staff personnel. Staffing level not sufficient to manage project efficiently.	Reduced to High due to recent realignments at Key Engineering Management See Mitigation Plan for details
5	2/4/07	Site Capacity: Given the total quantity of work planned (including work from other projects), the overall work imposed on the station for such items as PORC reviews, procedures, training, WVO Reviews, etc, may be beyond the capacity for the station to support	M	Significant	Cost/Schedule					Potential to extend the Outage and/or slip a cycle for the in-service date	Being reviewed per Bethuel Investigation and Outage Scope Plan
6	5/2/2008	NRR Instruction (LIC-109) requires the AST LAR to be submitted and approved prior to submitting the EPU LAR	M	Critical	Regulatory					Assuming it takes 12 months for approval of the AGT and 14 Months for EPU LAR, there is only 4 months left in the LAR schedules. If the EPU LAR is not received by December 2010, then would be unable to perform power Fuel Receipt (RFP Criticality)	Apply necessary project focus to ensure the AST LAR is submitted no later than June 09 Pre-application Meeting with NRC held on 4/24/09 LAR to be submitted for Station Review by 5/12; All reviewers personally notified
7	10/14/08	There is potential that Legacy Analysis or License basis issues may be uncovered during re-analysis for EPU LAR	M	Significant	Programmatic					Three such items have already been identified: PS PW temp, PTN QTM7 analysis and PTN ECF dose The impact is difficult to quantify until discovery	EPPI-345 new instruction that defines risk identification and mitigation utilizing WM-AA-1000.
8	ICDR 1.6 2/2/09	New NRC mandated 40-hour rule working hours will further limit allowed working hours	M	Marginal	Cost					Potentially extend outage duration and/or increase costs	EPU management working with Bethuel to ensure an acceptable procedure which will minimize the impact to EPU 001482

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Project Risks – PTN

ID	Open Date	Risk Item Description	NRC	Impact Level	Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob Level	Weighted Risk Exposure (\$000)	Nuclear Classification	Management Action
9	5/23/08	WEC and SHAW vendor staffing level may not be sufficient to support project	M	Significant	Schedule					Could cause delays with LAR schedule under cost additional review	Westinghouse provided Recovery Plan Mitigation actions being implemented WEC continue to monitor the effectiveness of actions Agreement on re-baselining reached; no impact to end date for Shaw and WEC
10	4/22/08	FPL PRA support is not adequate to complete all activities within the schedule.	M	Marginal	Schedule					There are a large number of activities which need to be performed as well as PSL and PTN PRA activities are being performed concurrently with all tasks being scheduled however, PRA group has applied resources to accomplish this and several tasks have no resources assigned at all.	Determine if any activities can be accomplished in parallel Supplement staff through EPU if necessary
11	8/21/2008	Transition to Nuclear Asset Management Systems (NAMS)	M	Marginal	Programmatic					May cause delays with review and approval of work planning.	Per Fleetwide Change Management Plan Held meeting with NAMS coordinator and Site PMs
12	2/12/08	License Amendment Request NRC Review could be delayed due to errors and omissions - NRC Acceptance - NRC Technical Review - ACRS Review - SBDOCA Confirmatory Analysis	M	Critical	Regulatory Schedule					Depending on the extent of the delay, could result in additional cost and extension of the project length Engineering Resources are needed to support LAR	1. Prepare LAR consistent with RS-001, NRC Review Standard for Extended Power Upgrades. • Develop EPP1 for format and level of detail 2. Use GINA EPU submittal as a guide for format and level of detail 3. Solicitor review and exchange boards at certain interim LAR milestones • Self Assessment after 1st LAR submittal 4. Multi-party peer reviews using industry and regulatory experts 5. Advance meetings with NRC prior to submittal 6. VP Nuclear Power Upgrade met with NRC management 7/21/08 7. Monthly meetings with NRC 8. GNO met with EDO on 3/23 to discuss schedule 9. Plan to establish a presence in Washington to coordinate NRC questions and responses to RAIs Current schedule adequate to meet current needs
13	4/2/08	Based on the amount of work planned, the work may not be sufficiently integrated to prevent interference with implementation	M	Marginal	Schedule					Potential to extend the Outage duration	Schedule Progress to be reviewed by Boehl and Project team after Scope, Outage Duration and Closure condition are better defined
14	5/21/08	Control Room ventilation Intake Modifications are likely based on the analysis for the AST LAR	M	Marginal	Schedule Cost					Now Scope Identified for AST LAR; cost Impact Project Scope and Cost	Define scope, Issue BGTN and include on project scope

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Weighted High Risk items total 1

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Performance Indicators

Performance Indicators - PSL

Cost					Page
RP-2	RP-1	CRp			
W	W	W	1	Cost Status	6
W	W	W	2	Budget / Variance Status	
W	W	W	3	Estimate Status	
W	W	W	4	Invoice Issues	

Schedule U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Station Outage Milestone Status	10
W	W	W	2	Project Pre-Outage Critical Path U1R23	
W	W	W	3	LAR Milestone Status	
W	W	W	4	LAR Critical path	
W	W	W	5	Major Deliverables Histogram	

Eng. Deliverables U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	PCM Status	26
W	W	W	2	PCM Burndown Chart	
W	W	W	3	Engineering Walkdowns	
W	W	W	4	Drawing Status	
W	W	W	5	Vendor Manual Status	

Project Management U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Performance (EV) Status	39
W	W	W	2	Task Plans	
W	W	W	3	Overtime Tracking	

Engineered Material U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Bld Spec / RFP Cmpl	45
W	W	W	2	Award PO Cmpl	
W	W	W	3	Fabrication / Deliver	

Installation Planning U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Work Order Planning	64
W	W	W	2	Site Preps	
W	W	W	3	Work Order Complete Burndown Chart	
W	W	W	4	Manpower Planning	
W	W	W	5	Constructability Walkdowns	

Metric to be Available 05-15-09

Schedule U1R23 - Spring 2010				
RP-2	RP-1	CRp		
W	W	W	1	Station Outage Milestone Status
W	W	W	2	Project Pre-Outage Critical Path
W	W	W	3	LAR Milestone Status
W	W	W	4	LAR Critical path
W	W	W	5	Major Deliverables Histogram

Eng. Deliverables U1R23 - Spring 2010				
RP-2	RP-1	CRp		
W	W	W	1	PCM Status
W	W	W	2	PCM Burndown Chart
W	W	W	3	Engineering Walkdowns
W	W	W	4	Drawing Status
W	W	W	5	Vendor Manual Status

Project Management U1R23 - Spring 2010				
RP-2	RP-1	CRp		
W	W	W	1	Performance (EV) Status
W	W	W	2	Task Plans
W	W	W	3	Overtime Tracking

Engineered Material U1R23 - Spring 2010				
RP-2	RP-1	CRp		
W	W	W	1	Bld Spec / RFP Cmpl
W	W	W	2	Award PO Cmpl
W	W	W	3	Fabrication / Deliver

Installation Planning U1R23 - Spring 2010				
RP-2	RP-1	CRp		
W	W	W	1	Work Order Planning
W	W	W	2	Site Preps
W	W	W	3	Work Order Complete Burndown Chart
W	W	W	4	Manpower Planning
W	W	W	5	Constructability Walkdowns

Legend		
Green	Total Float is (+) & Baseline Variance is (+)	
White	Total Float is (+) & Baseline Variance is (-). BL Date is > Data Date	
Yellow	Total Float is (+) & Baseline Variance is (-). BL Date is < Data Date	
Red	Total Float is (-) & Baseline Variance is (-). BL Date is < Data Date	

Schedule U2R19 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	Station Outage Milestone Status
W	W	W	2	Project Pre-Outage Critical Path
W	W	W	3	LAR Milestone Status
W	W	W	4	LAR Critical path
W	W	W	5	Major Deliverables Histogram

Eng. Deliverables U2R19 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	PCM Status
W	W	W	2	PCM Burndown Chart
W	W	W	3	Engineering Walkdowns
W	W	W	4	Drawing Status
W	W	W	5	Vendor Manual Status

Project Management U2R19 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	Performance (EV) Status
W	W	W	2	Task Plans

Engineered Material U2R19 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	Bld Spec / RFP Cmpl
W	W	W	2	Award PO
W	W	W	3	Fabrication / Deliver

Installation Planning U2R19 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	Work Order Planning
W	W	W	2	Site Preps
W	W	W	3	Work Order Complete Burndown Chart
W	W	W	4	Manpower Planning
W	W	W	5	Constructability Walkdowns

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Performance Indicators

Performance Indicators - PTN

Cost					Page
RP-2	RP-1	CRp			
W	W	W	1	Cost Status	7
W	W	W	2	Budget / Variance Status	
W	W	W	3	Estimate Status	
W	W	W	4	Invoice Issues	

Schedule U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Station Outage Milestone Status	12
W	W	W	2	Project Pre-Outage Critical Path	
W	W	W	3	LAR Milestone Status	
W	W	W	4	LAR Critical path	

Eng. Deliverables U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	PCM Status	24
W	W	W	2	PCM Burndown Chart	
W	W	W	3	Engineering Walkdowns	
W	W	W	4	Drawing Status	

Project Management U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Performance (EV) Status	43
W	W	W	2	Task Plans	
W	W	W	3	Overtime Tracking	

Engineered Material U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Bld Spec / RFP	49
W	W	W	2	Award PO	
W	W	W	3	Fabrication / Deliver	

Installation Planning U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Work Order Planning	74
W	W	W	2	Site Preps	
W	W	W	3	Work Order Complete Burndown Chart	
W	W	W	4	Manpower Planning	

Metrics to be Available 05-15-09

Schedule U3R25 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	Station Outage Milestone Status
W	W	W	2	Project Pre-Outage Critical Path
W	W	W	3	LAR Milestone Status
W	W	W	4	LAR Critical path
W	W	W	5	Major Deliverables Histogram

Eng. Deliverables U3R25 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	PCM Status
W	W	W	2	PCM Burndown Chart
W	W	W	3	Engineering Walkdowns
W	W	W	4	Drawing Status
W	W	W	5	Vendor Manual Status

Project Management U3R25 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	Performance (EV) Status
W	W	W	2	Task Plans
W	W	W	3	Overtime Tracking

Engineered Material U3R25 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	Bld Spec / RFP
W	W	W	2	Award PO
W	W	W	3	Fabrication / Deliver

Installation Planning U3R25 - Fall 2010				
RP-2	RP-1	CRp		
W	W	W	1	Work Order Planning
W	W	W	2	Site Preps
W	W	W	3	Work Order Complete Burndown Chart
W	W	W	4	Manpower Planning
W	W	W	5	Constructability Walkdowns

Legend		
Green	Total Float is (+) & Baseline Variance is (+)	
White	Total Float is (+) & Baseline Variance is (-), BL Date is > Data Date	
Yellow	Total Float is (+) & Baseline Variance is (-), BL Date is < Data Date	
Red	Total Float is (-) & Baseline Variance is (-), BL Date is < Data Date	

Schedule U4R26 - Spring 2011				
RP-2	RP-1	CRp		
W	W	W	1	Station Outage Milestone Status
W	W	W	2	Project Pre-Outage Critical Path
W	W	W	3	LAR Milestone Status
W	W	W	4	LAR Critical path
W	W	W	5	Major Deliverables Histogram

Eng. Deliverables U4R26 - Spring 2011				
RP-2	RP-1	CRp		
W	W	W	1	PCM Status
W	W	W	2	PCM Burndown Chart
W	W	W	3	Engineering Walkdowns
W	W	W	4	Drawing Status
W	W	W	5	Vendor Manual Status

Project Management U4R26 - Spring 2011				
RP-2	RP-1	CRp		
W	W	W	1	Performance (EV) Status
W	W	W	2	Task Plans
W	W	W	3	Overtime Tracking

Engineered Material U4R26 - Spring 2011				
RP-2	RP-1	CRp		
W	W	W	1	Bld Spec / RFP
W	W	W	2	Award PO
W	W	W	3	Fabrication / Deliver

Installation Planning U4R26 - Spring 2011				
RP-2	RP-1	CRp		
W	W	W	1	Work Order Planning
W	W	W	2	Site Preps
W	W	W	3	Work Order Complete Burndown Chart
W	W	W	4	Manpower Planning
W	W	W	5	Constructability Walkdowns

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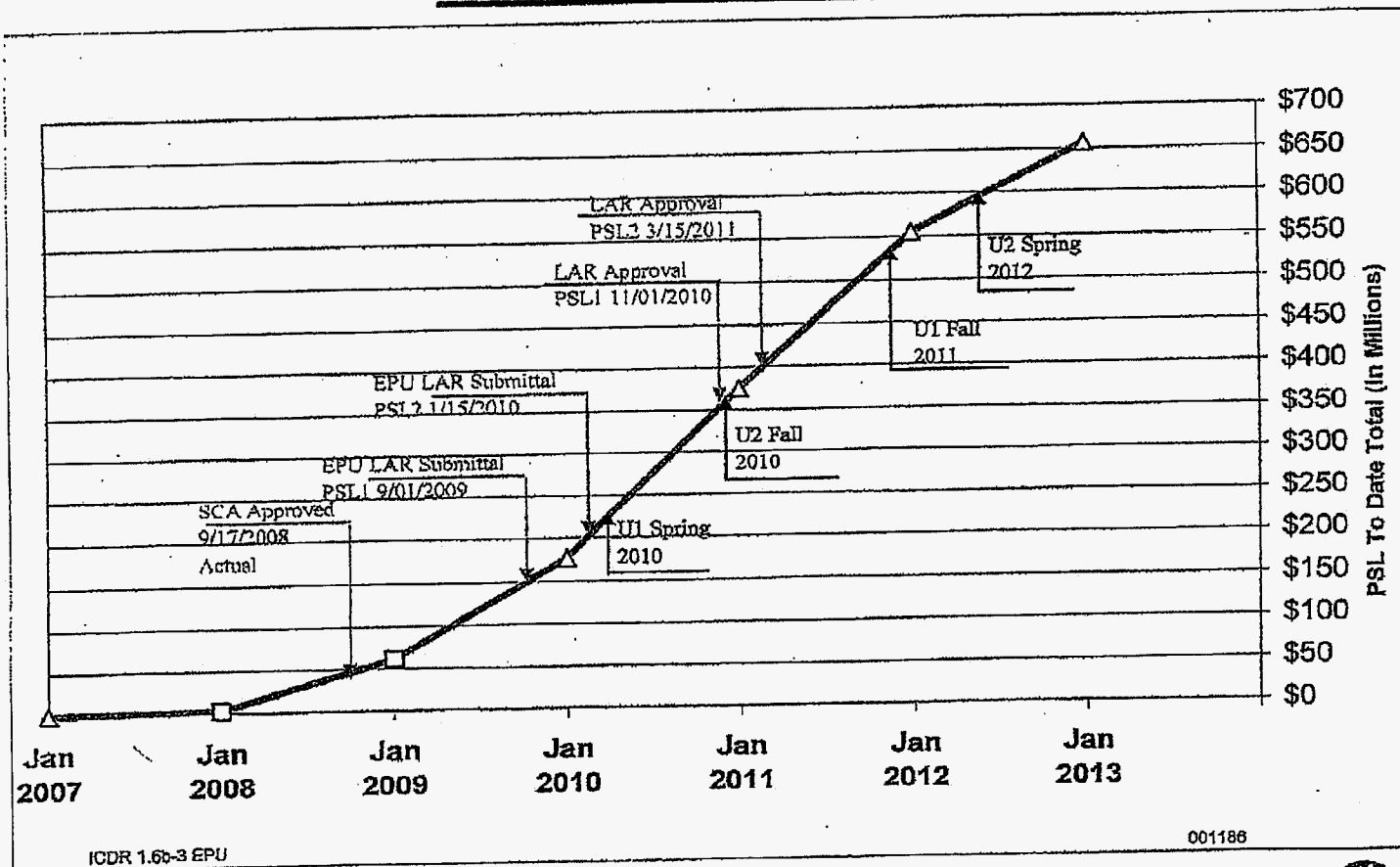
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Supplemental

Saint Lucie Cash Flow



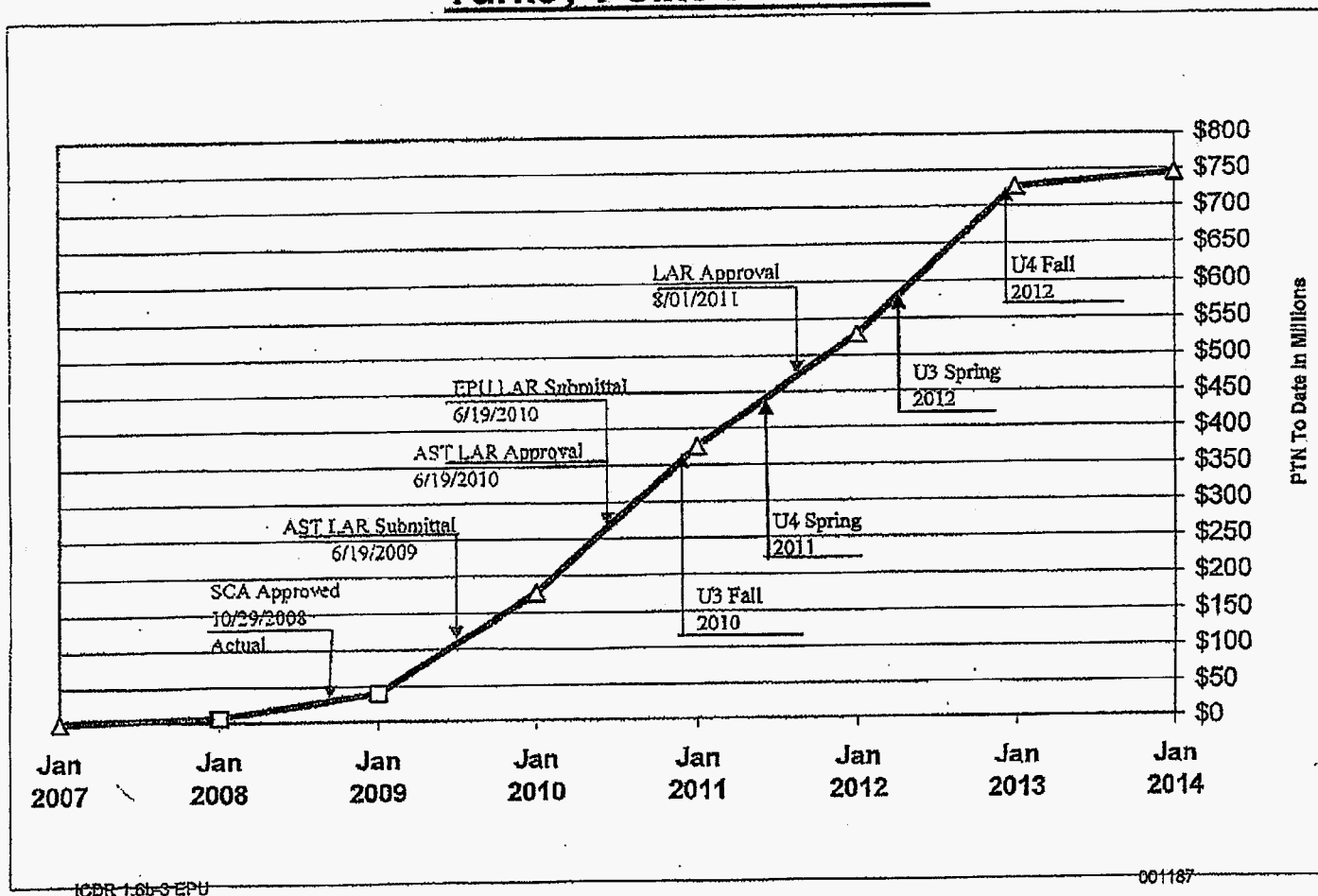
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Supplemental

Turkey Point Cash Flow



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DEPOSITION EXHIBIT NO. 4



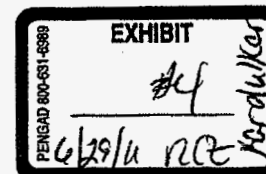
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Extended Power Upgrades Executive Steering Committee Meeting Saint Lucie & Turkey Point

June 23, 2009

ICDR 1.6b-3 EPU

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001460

Agenda

- Executive Summary
- Cost and Budget Summary
- Project Dashboard
- Plans & Targets
- EPC Estimates
- Scope Validation
- Heat Balance Results
- EPU – LAR
- PTN ISFSI Location
- Nuclear Cost Recovery
- Risk Exposures & Mitigation
- KPIs
- Supplemental Information

Executive Summary**PSL/PTN Executive Summary**

	Issues	Impact / Plan
1	Nuclear Cost Recovery	<ul style="list-style-type: none"> - Over 200 Interrogatories and data requests responded to on time - FPSC Audit of Project Controls Completed - Sat - Final Testimony Completed - 5/1/09
2	PTN ISFSI	<ul style="list-style-type: none"> - FDEP Approved Site Certification - Miami-Dade zoning restriction – resolution still open - Need to agree upon scope and start construction by July 1, 2009
3	LAR Final Plans	PSL1 EPU Submittal: September 2009 PSL2 EPU Submittal: January 2010 PTN AST Submittal: June 2009 PTN EPU Submittal: June 2010
4	Scope	<ul style="list-style-type: none"> - Analyzing options on the secondary systems - Mods are coming out of the LAR design analysis
5	Bechtel Staffing	Bechtel preliminary estimate greater than indicative bid; refining estimates and developing Level 1 (Best Case, Worst Case, and P50)

Cost and Budget Summary

St. Lucie

Cost Category	Proforma Budget \$MM	5/1/2009 Forecast \$MM	6/1/2009 Forecast \$MM	Source of Cost Estimate
Engineering	\$100	\$108	\$133	100% Contracts and Staff
Materials	\$269	\$257	\$253	89% Contracts, FPL Estimates
Implementation	\$106	\$230	\$273	74% Contracts, Vendor Estimate
Subtotal	\$475	\$595	\$659	85% Contracts
Scope not estimated	\$182	\$78	\$14	
Total	\$657	\$673	\$673	
T&D Estimate	\$25	\$9	\$9	FPL Estimate
Total	\$682	\$682	\$682	

Notes:

1. LAR NSSS Analysis - Additional Areva \$9M, Westinghouse \$4.8M additional analysis
2. Added line for Other Engineering contracts that support LAR/NRC \$9M
3. TG System decrease in cost - \$11.7M
4. Main Transformers cost increase - \$7.7M
5. Added line for Plant Support cost - \$43M



Cost and Budget Summary

St. Lucie

100%	5/1/2009	6/1/2009	
Engineering	\$MM	\$MM	
Engineering & PM Staff			Awarded - T&M - FPL and Contractors
NSSS Analysis for LAR			Awarded - T&M - Westinghouse / Areva
BOP Analysis for LAR			Awarded - T&M - SWEC
Modification Engineering			Awarded - T&M - Bechtel (E&C Scope)
Other Eng. Contracts LAR / NRC			Awarded / Estimate
	108.3	133.1	
89%			
Materials			
Turbine & Generator Components			Awarded - FP - Siemens
Turbine Gen Sub Systems			FPL estimate
S/G Mods			N/A
Main Transformers			Awarded /
FW Heaters			Awarded - FP - TEI
Condensate Pumps & Motors			FPL estimate (FPL long lead material)
FW Pumps & Motors			Awarded - FP - Flowserve
MSR, HT Exchangers			Awarded - FP - TEI
Misc., Cntrl Rm, LEFM, Circ Wtr pp			RFPs / bids in review (Awarded LEFM)
Misc. Materials			Awarded - Bechtel
	257.0	253.0	
74%			
Implementation			
Turbine & Generators			Negotiated by Outage - Siemens
S/G Mods			N/A
Main Transformers			Awarded - T&M - Bechtel (E&C Scope)
FW Heaters			Awarded - T&M - Bechtel (E&C Scope)
Condensate Pumps & Motors			Awarded - T&M - Bechtel (E&C Scope)
FW Pumps & Motors			Awarded - T&M - Bechtel (E&C Scope)
MSR, Condenser, Valves			Awarded - T&M - Bechtel (E&C Scope)
Misc. BOP Instr, LEFM, Cntrl Rm, Circ Wtr			Awarded - T&M - Bechtel (E&C Scope)
Outage Ext			FPL estimate
Plant Support Costs			FPL estimate
85%	229.6	273.3	
PSL Total	594.9	659.4	

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Cost and Budget Summary

Turkey Point

	Budget \$MM	Forecast \$MM	Forecast \$MM	
Engineering	\$99	\$115	\$129	100% Contracts and Staff
Materials	\$257	\$243	\$227	87% Contracts
Implementation	\$190	\$339	\$374	76% Contracts
Subtotal	\$546	\$696	\$730	83% Contracts
Scope not estimated	\$204	\$62	\$28	
Total	\$750	\$758	\$758	
T&D Estimate	\$20	\$12	\$12	FPL Estimate (no overhead taken)
Total	\$770	\$770	\$770	

Notes:

1. Increase in NSSS LAR cost \$5.4M
2. Increase in BOP LAR Cost \$2.5M
3. TG Contract Value not shown correctly increase of \$8.4M
4. Delete RX Head from Scope - decrease \$22.4M
5. Condenser Work Increase \$7M
6. TG Installation Costs alliance charges \$18M
7. Revised S/G Mods increased estimate \$5.5M
8. Added line for Plant support costs \$33M

ICDR 1.6b-3 EPU

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Cost and Budget Summary

Turkey Point

100%	5/1/2009	6/1/2009	
Engineering	\$ MM	\$ MM	
Engineering & PM Staff			Awarded - T&M - FPL and Contractors
NSSS Analysis for LAR			Awarded - T&M - Westinghouse/Areva
BOP Analysis for LAR			Awarded - T&M - SWECC
Modification Engineering			Awarded - T&M - Bechtel
Other Eng. Contracts LAR / NRC			Awarded - Multiple
	114.6	128.5	
87%			
Materials			
Turbine Generator & Components			Awarded - FP - Siemens
S/G Mods/LEFM			FPL estimate based on PBN History /Cameron
Misc. Przz Lvl, Rx Hd, Cntrl Rm			Not Required
Main Transformers			Awarded - Siemens
FW Heaters			Awarded - FP - TEI
Condensate Pumps & Motors			Bid Evaluation in Progress
FW Pump & Motors			Bid Evaluation in Progress
MSR, Condenser			Awarded - FP - TEI
Valves			FPL estimate
TBCW and Cont Cooling HTX (4)			FPL estimate
Misc. Materials			Awarded - Bechtel
	242.8	227.4	
75%			
Implementation			
Turbine Generator & Components			Negotiated by outage - Siemens
S/G Mods			FPL estimate based on PB historical data
Misc. Przz Lvl, Rx Hd, Cntrl Rm			Not Required
Main Transformers			Final negotiations in progress - T&D Dept.
FW Heaters			Awarded - T&M - Bechtel
Condensate Pumps & Motors			Awarded - T&M - Bechtel
FW Pump & Motors			Awarded - T&M - Bechtel
MSR, Condenser, Valves			Awarded - T&M - Bechtel
Outage Extension			FPL estimate
Plant Support Cost			
	338.7	373.7	
ICDR 8163 EPU			001466
Proprietary and Confidential	696.1	729.6	



FPL

Project Dashboard- PSL

	LAR Submittals	Mod Packages (9 month milestone)	Preps & Plans (includes long lead Material delivery)	Execution
Schedule	Staggered submittals will allow better resource allocation for FPL, W, SHAW, and Plant (PSL-2 12 months float)	11 of 12 mods with negative float beyond station milestone Recovery Plan developed to meet T-6 milestone	Procedure Milestone behind due to Mod Engineering approvals for Spring 2010	U-1 Spring 2010 Proforma - 55 days Actual - 66 days (Generator rewind)
Contracts	Major Contracts issued for LAR support	Contracts issued for Mod Engineering	Contract issued to Bechtel	Contract issued to Bechtel
Staffing & Vendor Support	W and Shaw resources less challenged with revised submittal plan Bi-weekly report provided by WEC PM; will continue to monitor	Monitoring quality of Bechtel provided Design Packages	Bechtel total staffing and associated ramp rate greater than indicative bid	Implementation team on site and planning milestones met
Other Issues or Challenges	8 Potential mods resulting from LAR analysis - Added 1 due to Unit 2 Steam bypass capacity	1. Rod Control Phase 2 -4 will be evaluated post spring Outage	Core team identified; staffing after Outage	Generator Hot Spots could extend Outage (5- 7 days)
Costs	2009 Budget for Engineering & Staff: \$ 54.5 MM 2009 YTD Budget for Eng. & Staff: \$ 26.7 MM 2009 YTD Actual for Eng. & Staff: \$ 23.1 MM		2009 Budget for Mtls & Implementation: \$88.6 MM 2009 YTD Budget Mtls & Implementation: \$20.1 MM 2009 YTD Actual for Mtls & Implementation: \$22.4MM	

ICDR 1.6b-3 EPU

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Project Dashboard- PTN

	LAR Submittals	Mod Packages (9 Month Milestone)	Preps & Plans (includes long lead Material delivery)	Execution
Schedule	AST Station review on track NRC will accept EPU LAR after AST LAR Approval	No negative Float to Station Milestone	No Negative float	No Negative Float U-3 Fall 2010 Proforma - 55 days Actual - 70 days (FW Heaters & Condenser)
Contracts	Major Contracts issued for LAR support	Contracts issued for Mod Engineering	Contract issued to Bechtel	Contract issued to Bechtel
Staffing & Vendor Support	W and Shaw resources still challenged; some relief from EPU submittal schedule change Monthly report provided by Shaw PM; will continue to monitor	Identified FPL Design Engineering Manager Other staffing levels under review	Bechtel total staffing and associated ramp rate greater than indicative bid	Implementation team on site and planning milestones met
Other Issues or Challenges	4 Potential mods resulting from LAR analysis	Options review of BOP Cond/FW plans	Site Interface Model Draft Complete. Review with Station Leadership post RFO. Potential Site Capacity Challenge due to: EPU, RTE, Policy 14, ISFSI	FW Heaters and Secondary Pump options
Costs	2009 Budget for Engineering & Staff: \$ 56.5 MM 2009 YTD Budget for Eng. & Staff: \$ 25.1 MM 2009 YTD Actual for Eng. & Staff: \$ 21.4 MM		2009 Budget for Mtls & Implementation: \$ 79.2 MM 2009 YTD Budget for Mtls & Imp: \$ 53.4 MM 2009 YTD Actual for Mtls & Imp: \$ 20.7 MM	

ICDR 1.6b-3 EPU

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Plans and Targets

Saint Lucie

	PROFORMA		FORECAST	
	U-1	U-2	U-1	U-2
LAR Submittal	9/01/09	9/01/09	9/01/09	1/31/10
1 st Outage Duration	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2 nd Outage Duration	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
In Service Date	October 2011	April 2012	December 2011	June 2012
MWE	103	103	129 ⁵	136 ⁵

1
2
3
4
5
6

Notes

All Outage durations to be reviewed & approved by CNO upon completion of scope definition

¹ Outage durations driven by Generator rewind currently in the approved Outage schedule

³ Outage duration driven by HP & LP Turbine and MSR Replacements

⁴ Target goal for Six Sigma Team rewind outage durations

⁵ MWe based on Siemens heat balance (contract target)

ICDR 1.6b-3 EPU Longer duration Outages have been included in the business model



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Plans and Targets

Turkey Point

	PROFORMA		FORECAST	
	U-3	U-4	U-3	U-4
LAR Submittal	9/01/09	9/01/09	6/01/10 ⁵	6/01/10 ⁵
1 st Outage				
Duration				
2 nd Outage				
Duration				
In Service Date	April 2012	October 2012	May 2012	December 2012
MWE	104	104	118 ⁴	118 ⁴

Notes

All Outage durations to be reviewed & approved by CNO upon completion of Scope definition

¹ Outage durations driven by Generator rewind currently in the approved Outage schedule

² Outage duration driven by HP Turbine and MSR replacements

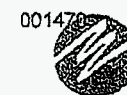
³ Target goal for Six Sigma Team rewind outage durations

⁴ MWe based on Siemens heat balance (contract target)

⁵ AST LAR must be approved prior to submittal of EPU LAR

ICDR 1.6b-3 EPU

Longer duration Outages have been included in the business model



EPC Estimates**Bechtel EPC Estimates**

- **Estimates are based on preliminary design**
 - More detail in scope as modification process proceeds
 - Some undefined scope is now identified
 - Some items as a result of on-going LAR & Engineering Analyses
(e.g. PSL mini-purge, hot leg injection, Turbine Bypass control sys; PTN – CCW, MSSV setpoints, Pressurizer Safety Valve setpoints, CR ventilation intake)
- **In the process of developing estimates (i.e. from Shaw preliminary scoping estimates to level 2 estimates)**
 - Estimates exceed indicative pricing provided in Bechtel proposal
- **The estimate process includes developing Best Case, Worst Case and P50 view points to validate level 2 estimates**
 - Target date for completion 6/30/09

EPC Estimates

EPC Estimates

- **Estimates have increased over the indicative bids**
 - FNM and Manual Labor hours higher
 - FPL validating process and accuracy
 - Management Services, Home Office and JW support costs appear to be redundant
 - Will optimize Bechtel MS, HO and JW
 - Scope clarified (more details) resulting in estimates greater than in indicative bids (both new scope and trends)

Challenge Items

- Sharing resources between sites
- Work scope being evaluated (for redundant)
- Assumptions used – work hours, overheads, etc.
- Outage duration assumptions
- Optimize manpower by eliminating Outage overlap
- Finalize Estimates

Plan for Resolution

Complete

Complete

Complete

6/26/09

6/26/09

6/30/09

ICDR 1.6b-3 EPU

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001472



FPL

EPC Estimates

Project Forecast

- **Bechtel and Sites performing P50, Best Case and Worst Case Project Cost reviews to validate input into target price**
 - P50 – is the most likely case with a 50/50 probability of executing the project plan and scope. This results in the most probable (50/50) project costs and schedule
 - Best Case – Results in the lowest total project cost, if the implementation went better than planned (scope simplified, beat schedule, no emergent items, no rework, no quality issues)
 - Worst case – results in the highest total project cost, if implementation went worse than planned (scope increases, schedule slips, emergent items, rework, quality issue). Assign cost and probability of occurrence to specific high risk mods.

EPC Estimates

P50 / Best Case/ Worst Case Criteria

	P-50	Best	Worst
Management	Mgmt Service Staff 10/site	Mgmt Service Staff 8/site	Mgmt Service Staff 25/site
	20% turnover in personnel	10% turnover in personnel	50% turnover in personnel
	work hours 5-8's with occasional OT	work hours 5-8's with occasional OT	work hours 6-10's
	JW staff at 9 people	JW staff at 3 people	JW staff at 9 people
	ODC and OHO (Max limit)	ODC and OHO limits (Max limit)	ODC and OHO limits (Max limit)
Construction	Project work 6-10's (except CP), 2 shifts during Outage, no double time	Project work 6-10's (except CP), 2 shifts during Outage, no double time	CP on 7-12's, Double time OT on 7th day. Assign cost and probability of occurrence to specific CP and near CP high risk mods
	FNM at full staff 4 weeks prior to Outage	FNM at full staff 2 weeks prior to Outage	FNM at full staff 4 weeks prior to Outage
	Craft at full staff 1 week prior to Outage	Craft at full staff 1 week prior to Outage	Craft at full staff 1 week prior to Outage
	Outage Schedule per plan	Outage Schedule - 10% improvement per station plan, per Outage (and corresponding Job hour saving)	Outage Schedule - 20% push to Outage per station plan, per Outage
	Most station milestones are met	Most station milestones are met	Most station milestones are met
Engineering	Training / in processing - 5 days (40 hrs)	Training / in processing - 3 days (24 hrs)	Training / in processing - 5 days (40 hrs)
	Project Scope is the work list as approved by FPL in April	Define savings in resources (e.g., can the Elec Lead do Elec and I&C)	Using T-12 approach resulting in huge ramp-up of engineering staff to perform work
	Optimize Frederick/HO scope split	Most Engineering in H.O. as appropriate	All Engineering at site
	Most milestones met (9Mo criteria)	Levelized and optimized T-9 with some mods moved to other Outages. Some milestones to T-6	All milestones met (12 mo criteria)
Materials and Subs	Award all 3 sites to same subcontractor	Just in time material deliveries save warehouse costs and multiple handling	3 separate subcontracts and 3 sites
	Bulk buys as much as possible	Minimal stock material remaining	Welders - use "golden arm" subcontractors PLUS 10% weld repair rework
	Bechtel/FPL optimize purchasing effort	Ensure BOM is not factored by Engineering and again by Field Engr.	More Subcontractors and less Direct Perform Craft
	Welders - use "golden arm" subcontractors for critical welds	Use welders from "hall" for all welding (no contract welders)	Significant Stand-alone purchases

Scope Validation

Evaluating Project Margins and Scope

- Initiated a validation of identified modification margins
 - Condensate / Feedwater Pumps
 - Feedwater Heater Scope
 - Exciters
 - Steam Bypass System
- Evaluating Margins & LAR inputs
 - Safety Analysis required modifications
 - Trip Transient Margin
 - Design and Operating Margins
- Technical Challenge Board review of results in progress

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001475



FPL

Heat Balance

Potential MWe Gain

- Preliminary design heat balance indicate more MWe likely
- Will be performing additional testing to maximize MWe output
- Final design numbers will not be available until after testing and secondary pump and heater options are finalized

St. Lucie:

Unit	Needs Filling	Siemens Contract (MWe)
Unit 1	103	[REDACTED]
Unit 2	103	[REDACTED]
[REDACTED]		1

A

Turkey Point:

Unit	Needs Filling	Siemens Contract (MWe)
Unit 3	104	[REDACTED]
Unit 4	104	[REDACTED]
[REDACTED]		2

A

ICDR 1.6b-3 EPU



EPU LAR – PSL

Technical Challenges

- **MSSV Lifting during Normal Plant Trips**
 - Options for Unit 1 include increased Steam Bypass to Condenser (SBCS) capacity and valve speed
 - Unit 2 challenging due to low operating margin
 - Tcold reduction not recommended due to adverse impact on generation
 - Increased Steam bypass to condenser capacity and valve speed, add relief valves downstream of MSIVs, and add turbine trip time delay
- **Unit 1 and 2 CCW Piping**
 - Selected portions of piping exceed stress analysis temperatures at EPU conditions, analyses underway to minimize impact
- **Unit 1 PRA Evaluation**
 - Issue involves current PORV sizing and ability to accommodate once-through cooling
 - Alternate options under evaluation
- **Unit 1 LBLOCA – maximum Containment Spray flow**
 - AREVA working LBLOCA runs – challenging schedule to complete

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EPU LAR - PTN

- **Containment Analysis**

- Acceptable containment peak pressure/temperature results
- Current Component Cooling Water System temperature limits will be exceeded
 - Evaluating Modification Options
 - Evaluating Hot Leg Injection flow path for long term cooling and preclude boric acid precipitation

- **Steam Line Break Core Analysis**

- Initial results did not meet acceptance criteria
- Acceptable results achieved by adding lead/lag module to SIAS low steam pressure input
- Also reduces limiting peak containment pressure for SLB

- **DNB Parameters (OT Δ T, OP Δ T Trips)**

- Initial Pressurizer pressure margin to trip too close to normal operating pressure considering instrument uncertainties
- Replacing Pressurizer pressure gauges with digital to gain operating margin

ICDR 1.603

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FPL

PTN ISFSI

Confirmation/ Approval for ISFSI Location

- Recommendation is for EPU Craft facility inside PA and relocate ISFSI Pad outside PA
 - Refining Facility needs
- FDEP Approved Amendment Request to the Site Certification for ISFSI Location outside PA. Agencies and third parties have about 30 days to appeal.
- Plan to Resolve Zoning Issue for ISFSI Location is in Process
 - Plan is to confirm zoning approval through County Building Department permitting process. Permit application was submitted, review in process.
 - Requirement and related process for revision of the Conceptual Site plan is still under discussion with the County. FPL/County meetings continue.
 - Uncertainty exists on ISFSI zoning approval for location outside PA. Any construction of EPU facility on initial ISFSI location should await better understanding of zoning status
- Based on time needed for Engineering and Construction, need to start ISFSI construction is August 3, 2009

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Regulatory – Cost Recovery

Nuclear Cost Recovery

FPSC Internal Controls Audit begins	1/22/09 (a)
2008 True-up and testimony filing	3/2/09 (a)
Discovery begins	3/3/09 (a)
2009-10 Projections and Testimony filed	5/1/09 (a)
Intervener Testimony	7/14/09
Staff Testimony	7/28/09
Rebuttal Testimony	8/10/09
Discovery Completed	8/28/09
Hearings	9/8/09-9/11/09
Staff Recommendations	10/02/09
Issue Order	11/2/09 (e)

- Over 200 Interrogatories and Data Requests responded to on time
- Testimony - complete
- FPSC audit of Project Controls - complete

Notes:

(e)=Estimated date.

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Project Risks – PSL

	Origin Date	Risk Event Description	H/M/L	Impact Level	Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob Level	Weighted Risk Exposure (\$000)	Impact Description
1	9/8/08	Implementation and Schedule execution may cost more than Proforma		Significant	Cost					Contingency will be needed to expended for any shortfalls not predicted by Proforma Note: Bechtel indicates Engineering costs will be higher than proposal
2	4/3/09	Elimination of MSSVs lifting on a Plant Trip will require a significant modification to the Steam Dump system - or - reduction of T-cold		Significant	Design					U-1 Significant cost to modify the steam dump system or a reduction in MWe if Tcold is lowered
3	4/30/09	U-1 PRA for Total Loss of Feedwater indicates PORVs are undersized for uprate condition		Significant	Schedule Cost					Cost and schedule could be impacted if PORVs need to be replaced
4	1/29/08	Available Containment Pressure Margin reduced due to the discovery of Legacy LOCA analysis error	M	Significant	Design					Impact is not yet fully analyzed. Current available margin has been reduced from 7 PSI to 4 PSI
5	12/18/08	Preliminary evaluations indicate that the current design flow for U1 hot leg injection may be less than adequate to support the uprated condition without a modification	M	Marginal	Schedule/ Cost					May require an additional modification. The scope/cost of mod is not yet determined

1 2 3 4

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Project Risks – PSL

	Origin Date	Risk Event Description	H/M/L	Impact Level	Risk Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob. Level	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
6	Prior to 2/1/08	License Amendment Request NRC Review could be delayed due to errors and omissions - NRC Acceptance - NRC Technical Review - ACRS Review - SBLOCA Confirmatory Analysis	M	Critical	Regulatory/Schedule					Depending on the extent of the delay, could result in additional cost and extension of the project length	<ol style="list-style-type: none"> 1. Prepare LAR consistent with RS-001, NRR Review Standard for Extended Power Uprates. - Develop EPP1 for format and level of detail 2. Use Ginno EPU submittal as a guide for format and level of detail 3. Sequester reviews and challenge boards at certain interim LAR milestones - Self Assessment after 1st LAR Section 4. Must-party peer reviews using industry and regulatory experts 5. Advance meetings with NRC prior to submittal 6. VP Nuclear Power Uprate met with NRR management 7/21/08 7. Monthly meetings with NRR 8. CND met with NRC EDO on 3/23/08 to discuss review schedules 8. FPL to establish a presence in Washington to coordinate questions and RAs
7	7/30/08	Rewind at PB and PSL overlap	M	Significant	Schedule					Specialty Technicians and equipment are required at the same time at PB and PSL. Could delay rewind at PSL and affect PSL Critical	<p>Slamans requires 31 days from start of PB&P outage and the start of PSL outage; currently 36 days exist in the schedule (Difference of 5 days)</p> <p>See Mitigation Plan for details</p>
8	9/29/08	WEC & SHAW vendor staffing level may not be sufficient to support project	M	Significant	Schedule					Could cause delays with LAR schedule and/or cost additional monies	Agreement on re-baselining reached; no impact to end date for Shaw and WEC
9	1/8/09	New NRC mandated Maintenance rule working hours will further limit allowed working hours	M	Marginal	Cost					Potentially extend outage durations and/or increase costs	EPU management working with Licensing to ensure an acceptable procedure which will minimize the impact to EPU
10	10/14/08	There is potential that Legacy Analysis or License basis issues may be uncovered during re-analysis for EPU LAR	M	Significant	Programmatic					Two such items have already been identified; PB FW temp and PTN CTMT analysis which are being tracked by a separate line item. The impact is difficult to quantify until discovery	<p>Developed and issued EPP1-345; new instruction that defines risk identification and mitigation utilizing WMA-AA-1000.</p> <p>Thus far, the process has been effective</p>
12	8/3/2008	Transition to Nuclear Asset Management Systems (NAMS)	M	Marginal	Programmatic					May cause delays with review and approval of Engineering Documents	Per Fleet wide Change Management Plan Hold meeting with NAMS coordinator and Site PMs Transition to NAMS currently scheduled for Dec 08

1 2 3 4

Weighted High Risk items total ~ 1

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Project Risks – PTN

	Origin Date	Risk Event Description	L/M/A	Impact Level	Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob. Level	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
1	9/8/08	Implementation and Schedule execution may cost more than Proforma		Significant	Cost					Contingency will be needed to expended for any shortfalls not predicted by Proforma Note: Bachtel Indicates Engineering costs will be higher than proposal	Assessing scope and staff estimates See Mitigation Plan for Details
2	4/23/08	Turbine Gantry Crane travel speed, available laydown space, etc. Crane may be Less than Adequate to efficiently support the EPU outages		Critical	Schedule					Inability to efficiently remove and replace equipment needed for power uprate within the proposed Outage time frame	Obtain qualified OEM to evaluate the overall condition of the Crane and provide recommendations Review recommendations and implement repairs as necessary to improve crane reliability and condition See Risk Mitigation Plan for details
3	10/10/08	Error discovered in the Containment Integrity Design Basis Analysis		Critical	Programmatic					The Error (non conservative) may significantly reduce the Containment Pressure Margin needed for the Extended Power Uprate conditions	Favorable results with heat sink model, Further CCW mods may be necessary. Performing KT Analysis to determine scope and significance of modification See Risk Mitigation Plans for Details
4	Prior to 2/1/08	Project Staff Level not sufficient		Significant	Project Mgmt					Project not able to establish and maintain an adequate level of in-house and augmented staff personnel. Staffing level not sufficient to manage project efficiently.	Raised to High due to recent resignations of Key Engineering Management See Mitigation Plan for details
5	2/4/09	Site Capacity: Given the total quantity of work planned (including work from other projects), the overall work imposed on the station for such items as PORC reviews, procedures, training, WO Reviews, etc. may be beyond the capacity for the station to support	M	Significant	Cost/ Schedule					Potential to extend the Outage and/or slip a cycle for the in-service date	Being reviewed per Bachtel localization and Outage Scope Plan
6	6/2/2008	NRR Instruction (LIC-109) requires the AST LAR to be submitted and approved prior to submitting the EPU LAR	M	Critical	Regulatory					Assuming it takes 12 months for approval of the AST and 14 Months for EPU LAR, there is only 4 months float in the LAR schedules. If the EPU LAR is not received by December 2010, then would be unable to perform new Fuel Receipt (SFP Criticality)	Apply necessary project focus to ensure the AST LAR is submitted no later than June 09 Pre-application Meeting with NRC held on 4/24/09 LAR to be submitted June 09

1 2 3 4

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Project Risks – PTN

	Origin Date	Risk Event Description	Impact	Impact Level	Type	Modest - Cost - Exposure (\$000)	Types of Estimate	Prob Level	Weighted Risk - Exposure (\$000)	Impact Description	Mitigation Action	Status & Comments
7	10/14/08	There is potential that Legacy Analysis or License basis issues may be uncovered during re-analysis for EPU LAR	M	Significant	Programmatic					Three such items have already been identified: PB, PM, and PTN CTMT analysis and PTN ECF data. The impact is difficult to quantify until discovery.	EPP1-245 new instruction that outlines risk identification and mitigation utilizing WAs-AA-1000.	
8	1/8/09	Now NRC mandated Maintenance rule working hours will further limit allowed working hours	M	Marginal	Cost					Potentially extend outage durations and/or increase costs	EPU management working with Licensing to ensure an acceptable procedure which will minimize the impact to EPU	5/14/09: M. Puccio and G. Sarofian working with Shannon Burke to ensure an acceptable procedure which will minimize the impact to EPU
9	5/20/08	WEC and SHAW vendor staffing level may not be sufficient to support project	M	Significant	Schedule					Could cause delays with LAR schedule and/or cost additional monies	Westinghouse provided Recovery Plan mitigation actions being implemented. WEC continue to monitor the effectiveness of actions. Agreement on re-baselining reached; no impact to end date for Shaw and WEC	4/18/09: Shaw falling behind; WEC Recovering. Should consider declassifying to M based on re-baselining and progress. 5/14/09: Conville agreed to reduce to M with Liz Abbott's concurrence
10	4/23/09	FPL PRA support is not adequate to complete all activities within the schedule.	M	Marginal	Schedule					There are a large number of activities which need to be performed as well as PSC and PTN PRA activities are being performed concurrently with all tasks being scheduled in series. PRA group has limited resources to accomplish this and several tasks have no resources assigned at all.	Determine if any activities can be accomplished in parallel. Supplement staff through EPU if necessary	
11	6/3/2008	Transition to Nuclear Asset Management Systems (NAMS)	M	Marginal	Programmatic					May cause delays with review and approval of work planning.	Per Fleet wide Change Management Plan. Hold meeting with NAMS coordinator and Site PMs.	2/3/09: Significant problems encountered during implementation of SBC. Awaiting outcomes of lessons learned and the extent that will be implemented going forward; Planned implementation for PTN - January 2010
12	2/12/09	License Amendment Request NRC Review could be delayed due to errors and omissions - NRC Acceptance - NRC Technical Review - ACRS Review - SBLOCA Confirmatory Analysis	M	Critical	Regulatory/Schedule					Depending on the extent of the delay, could result in additional cost and extension of the project length. Engineering Resources are needed to support LAR	1. Prepare LAR consistent with RS-001, NRC Review Standard for Extended Power Uprates. - Develop EPP1 for format and level of detail 2. Use Glenn EPU submittal as a guide for format and level of detail 3. Sequence review and challenge boards at certain interim LAR milestones - Self Assessment after 1st LAR Section 4. Multi-party peer reviews using industry and regulatory experts 5. Advance meetings with NRC prior to submittal 6. VP Nuclear Power Update met with NRC management 7/21/08 7. Monthly meetings with NRC 8. CNO met with EDO on 3/23 to discuss schedule 9. Plan to establish a presence in Washington to coordinate NRC questions and responses to RAIs Current schedule adequate to meet current needs	VP met with NRC Management on 7/21/08 12/13/08: Need to set-up routine monthly meetings with NRC 2/24/09: L. Abbott plans to start meetings after P3 submittal (CTA-415/09) 4/20/09: Drop by meeting held with NRC staff on 4/24. Only costs being held with PM. Weekly calls established with PM and branch chief. Continuing to monitor.
13	4/8/08	Based on the amount of work planned, the work may not be sufficiently integrated to prevent interference with implementation	M	Marginal	Schedule					Potential to extend the Outage duration	Schedule Fragments to be reviewed by District and Project team after Scope, Outage Duration and Crane condition are better defined	Schedule Fragments being reviewed by District and Project team 6/2/09: Re-assessed from Low to Medium due to preliminary nameplates and holdings and the Turbine Case Availability

ICDR 1.68-3 EPU
Weighted High Risk items total ~ 1

00148



FPL

Performance Indicators

Performance Indicators - PSL

Cost					Page
RP-2	RP-1	CRp			
W	W	W	1	Cost Status	6
W	W	W	2	Budget / Variance Status	
W	W	W	3	Estimate Status	
W	W	W	4	Invoice Issues	

Schedule U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Station Outage Milestone Status	10
W	W	W	2	Project Pre-Outage Critical Path U1R23	
W	W	W	3	LAR Milestone Status	
W	W	W	4	LAR Critical path	
W	W	W	5	Major Deliverables Histogram	

Eng. Deliverables U1R23 - Spring 2010					Page
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W	W	W	1	PCM Status	27
W	W	W	2	PCM Burndown Chart	
W	W	W	3	Engineering Walkdowns	
W	W	W	4	Drawing Status	
W	W	W	5	Vendor Manual Status	

Project Management U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Performance (EV) Status	40
W	W	W	2	Task Plans	
W	W	W	3	Overtime Tracking	

Engineered Material U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Bid Spec / RFP Cmpltd	43
W	W	W	2	Award PO Cmpltd	
W	W	W	3	Fabrication / Deliver	

Installation Planning U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Work Order Planning	62
W	W	W	2	Site Preps	
W	W	W	3	Work Order Complete Burndown Chart	
W	W	W	4	Manpower Planning	
W	W	W	5	Constructability Walkdowns	

Schedule U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Station Outage Milestone Status	
W	W	W	2	Project Pre-Outage Critical Path	
W	W	W	3	LAR Milestone Status	
W	W	W	4	LAR Critical path	
W	W	W	5	Major Deliverables Histogram	

Eng. Deliverables U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	PCM Status	
W	W	W	2	PCM Burndown Chart	
W	W	W	3	Engineering Walkdowns	
W	W	W	4	Drawing Status	
W	W	W	5	Vendor Manual Status	

Project Management U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Performance (EV) Status	
W	W	W	2	Task Plans	
W	W	W	3	Overtime Tracking	

Engineered Material U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Bid Spec / RFP Cmpltd	
W	W	W	2	Award PO Cmpltd	
W	W	W	3	Fabrication / Deliver	

Installation Planning U1R23 - Spring 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Work Order Planning	
W	W	W	2	Site Preps	
W	W	W	3	Work Order Complete Burndown Chart	
W	W	W	4	Manpower Planning	
W	W	W	5	Constructability Walkdowns	

Schedule U2R19 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Station Outage Milestone Status	
W	W	W	2	Project Pre-Outage Critical Path	
W	W	W	3	LAR Milestone Status	
W	W	W	4	LAR Critical path	
W	W	W	5	Major Deliverables Histogram	

Eng. Deliverables U2R19 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	PCM Status	
W	W	W	2	PCM Burndown Chart	
W	W	W	3	Engineering Walkdowns	
W	W	W	4	Drawing Status	
W	W	W	5	Vendor Manual Status	

Project Management U2R19 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Performance (EV) Status	
W	W	W	2	Task Plans	
W	W	W	3	Overtime Tracking	

Engineered Material U2R19 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Bid Spec / RFP Cmpltd	
W	W	W	2	Award PO Cmpltd	
W	W	W	3	Fabrication / Deliver	

Installation Planning U2R19 - Fall 2010					Page
RP-2	RP-1	CRp			
W	W	W	1	Work Order Planning	
W	W	W	2	Site Preps	
W	W	W	3	Work Order Complete Burndown Chart	
W	W	W	4	Manpower Planning	
W	W	W	5	Constructability Walkdowns	

Legend		
Green	Total Float is (+) & Baseline Variance is (+)	
White	Total Float is (+) & Baseline Variance is (-), BL Date is > Data Date	
Yellow	Total Float is (+) & Baseline Variance is (-), BL Date is < Data Date	
Red	Total Float is (-) & Baseline Variance is (-), BL Date is < Data Date	

Date: 6/12/09

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Performance Indicators

Performance Indicators - PTN

Cost					Page
RP-2	RP-1	CRp			
W			1	Cost Status	7
			2	Budget / Variance Status	
			3	Estimate Status	
			4	Invoice Issues	

Schedule U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	Station Outage Milestone Status	12
			2	Project Pre-Outage Critical Path	
			3	LAR Milestone Status	
			4	LAR Critical path	
			5	Major Deliverables Histogram	

Eng. Deliverables U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	PCM Status	24
			2	PCM Burndown Chart	
			3	Engineering Walkdowns	
			4	Drawing Status	
			5	Vendor Manual Status	

Project Management U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	Performance (EV) Status	42
			2	Task Plans	
			3	Overtime Tracking	

Engineered Material U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	Bid Spec / RFP	45
			2	Award PO	
			3	Fabrication / Deliver	

Installation Planning U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	Work Order Planning	70
			2	Site Props	
			3	Work Order Complete Burndown Chart	
			4	Manpower Planning	
			5	Constructability Walkdowns	

Metric to be Available 05-15-09

Schedule U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	Station Outage Milestone Status	
			2	Project Pre-Outage Critical Path	
			3	LAR Milestone Status	
			4	LAR Critical path	
			5	Major Deliverables Histogram	

Eng. Deliverables U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	PCM Status	
			2	PCM Burndown Chart	
			3	Engineering Walkdowns	
			4	Drawing Status	
			5	Vendor Manual Status	

Project Management U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	Performance (EV) Status	
			2	Task Plans	
			3	Overtime Tracking	

Engineered Material U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	Bid Spec / RFP	
			2	Award PO	
			3	Fabrication / Deliver	

Installation Planning U3R25 - Fall 2010					Page
RP-2	RP-1	CRp			
			1	Work Order Planning	
			2	Site Props	
			3	Work Order Complete Burndown Chart	
			4	Manpower Planning	
			5	Constructability Walkdowns	

Schedule U4R26 - Spring 2011					Page
RP-2	RP-1	CRp			
			1	Station Outage Milestone Status	
			2	Project Pre-Outage Critical Path	
			3	LAR Milestone Status	
			4	LAR Critical path	
			5	Major Deliverables Histogram	

Eng. Deliverables U4R26 - Spring 2011					Page
RP-2	RP-1	CRp			
			1	PCM Status	
			2	PCM Burndown Chart	
			3	Engineering Walkdowns	
			4	Drawing Status	
			5	Vendor Manual Status	

Project Management U4R26 - Spring 2011					Page
RP-2	RP-1	CRp			
			1	Performance (EV) Status	
			2	Task Plans	
			3	Overtime Tracking	

Engineered Material U4R26 - Spring 2011					Page
RP-2	RP-1	CRp			
			1	Bid Spec / RFP	
			2	Award PO	
			3	Fabrication / Deliver	

Installation Planning U4R26 - Spring 2011					Page
RP-2	RP-1	CRp			
			1	Work Order Planning	
			2	Site Props	
			3	Work Order Complete Burndown Chart	
			4	Manpower Planning	
			5	Constructability Walkdowns	

Legend		
Green	Total Float is (+) & Baseline Variance is (+)	
White	Total Float is (+) & Baseline Variance is (-). BL Date is > Data Date	
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Red	Total Float is (-) & Baseline Variance is (-). BL Date is < Data Date	

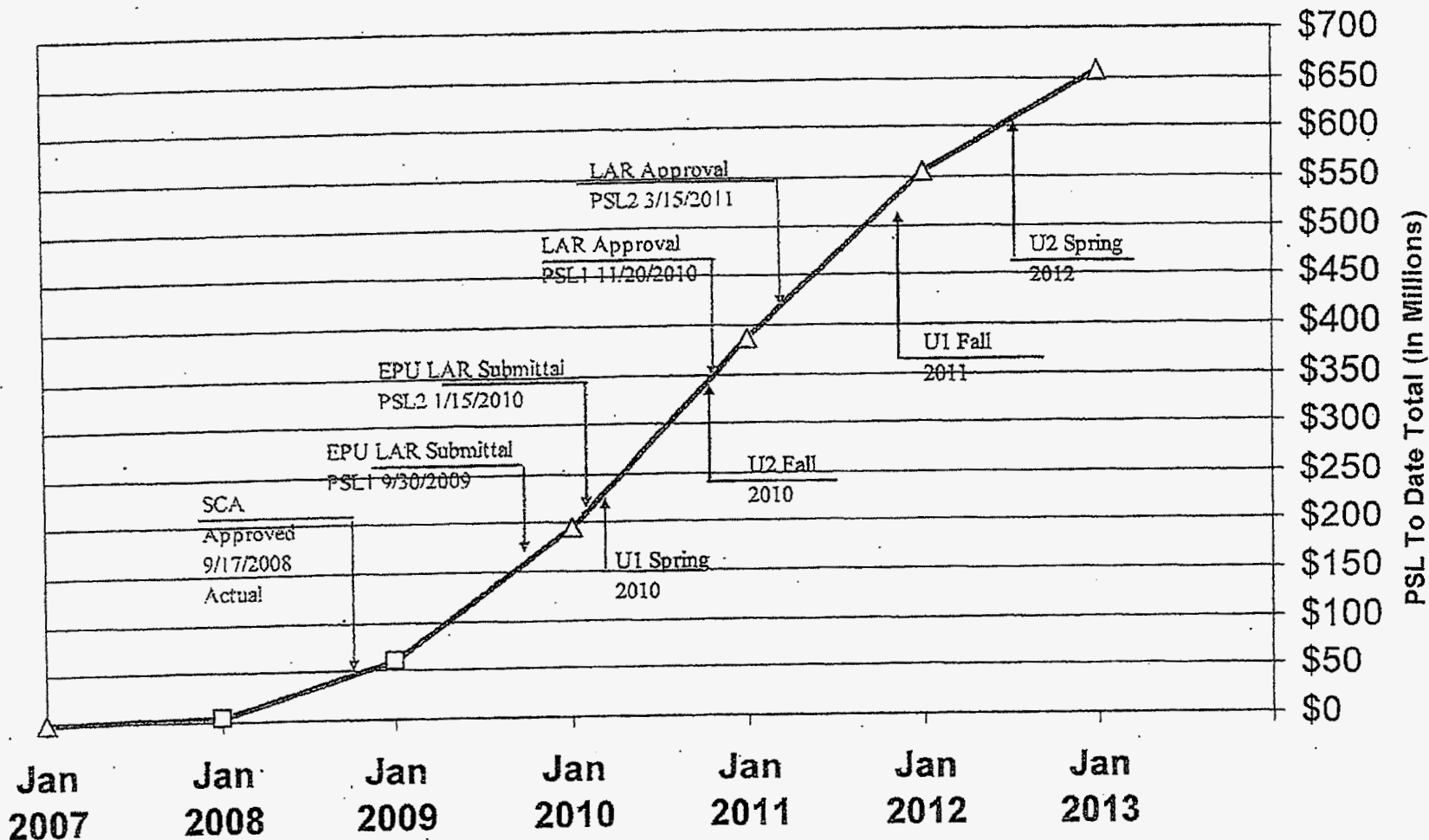
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Supplemental

Saint Lucie Cash Flow



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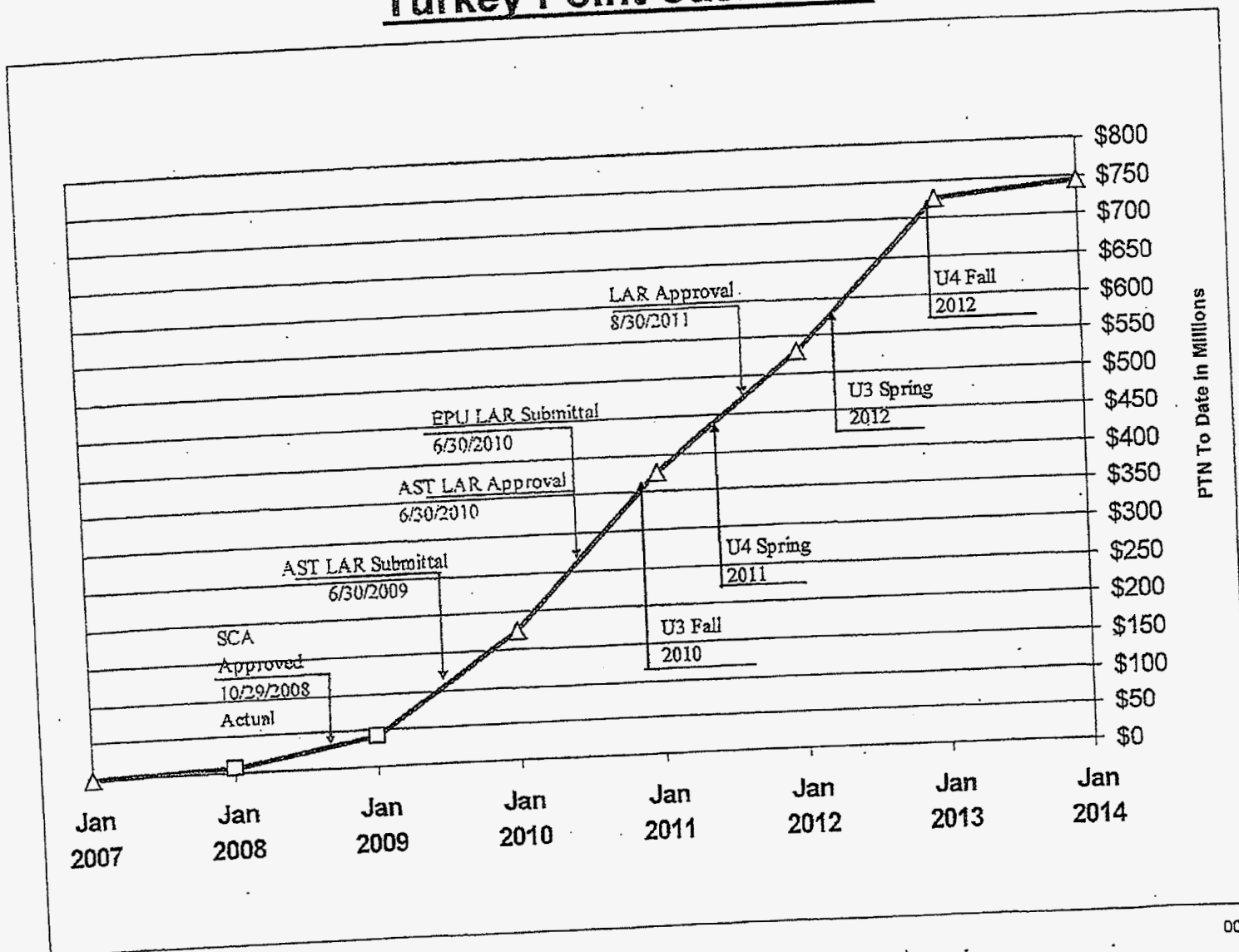
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Supplemental

Turkey Point Cash Flow



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DEPOSITION EXHIBIT NO. 5

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DRAFT

Extended Power Upgrades Project Update Turkey Point

July 25, 2009

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Draft – Proprietary & Confidential Business Information

Agenda

- Overview
- Area Summary & Line by Line
- Implementation
- Risk and Mitigation
- NRC Schedule
- Lessons learned

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I. Overview

Current Plans and Targets

	PROFORMA		FORECAST	
	U-3	U-4	U-3	U-4
LAR Submittal	9/01/09	9/01/09	6/30/10 ⁵	6/30/10 ⁵
1 st Outage Duration	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2 nd Outage Duration	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
In Service Date	April 2012	October 2012	May 2012	December 2012
MWE	104	104	118 ⁴	118 ⁴

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Notes

All Outage durations to be reviewed & approved by CNO upon completion of Scope definition

¹ Outage durations driven by Generator rewind currently in the approved Outage schedule

² Outage duration driven by HP Turbine and MSR replacements

³ Target goal for Six Sigma Team rewind outage durations

⁴ MWe based on Siemens heat balance (contract target)

⁵ AST LAR must be approved prior to submittal of EPU LAR

ICDR 1.6b-3 EPU Longer duration Outages have been included in the business model

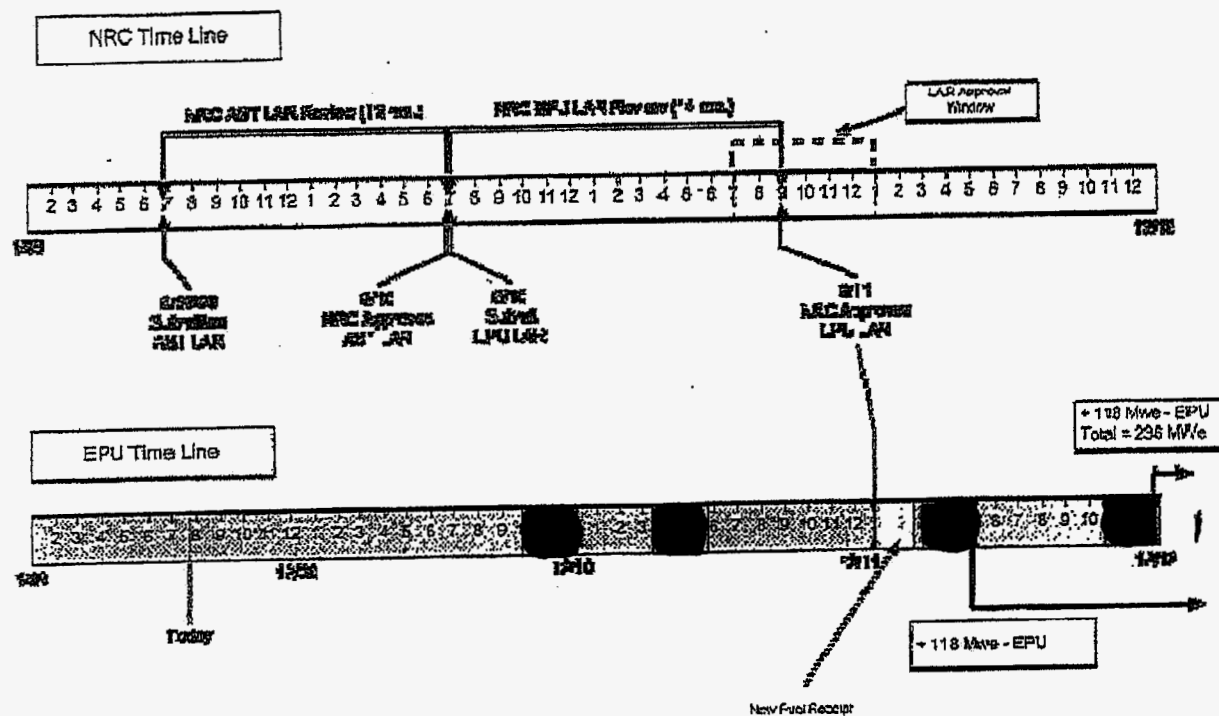
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Overview

Turkey Point Timeline

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I. Overview

Cost Overview

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440,207
 55,970

	ORIGINAL ESTIMATE	CURRENT ESTIMATE	ESTIMATE DIFFERENCE	ACTUAL/ ACCRUALS	AMOUNT TO GO
LAR	\$28,672,000	\$62,648,935	-\$33,976,935	\$23,089,922	\$39,559,013
ENGINEERING	\$18,466,810	\$67,812,028	-\$49,345,218	\$11,243,078	\$56,568,950
MATERIALS	\$201,036,700	\$237,579,947	-\$36,543,247	\$33,681,165	\$203,898,782
IMPLEMENTATION	\$192,033,500	\$438,589,705	-\$246,556,205	\$20,348,406	\$418,241,299
SCOPE UNDEFINED	\$245,889,870	\$77,155,389	\$168,734,481	\$0	\$77,155,389
ESCALATION	\$63,082,230	\$25,955,221	\$37,127,009	\$0	\$25,955,221
TOTAL	\$749,181,110	\$909,741,225	-\$160,560,115	\$88,362,571	\$821,378,654

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 1704

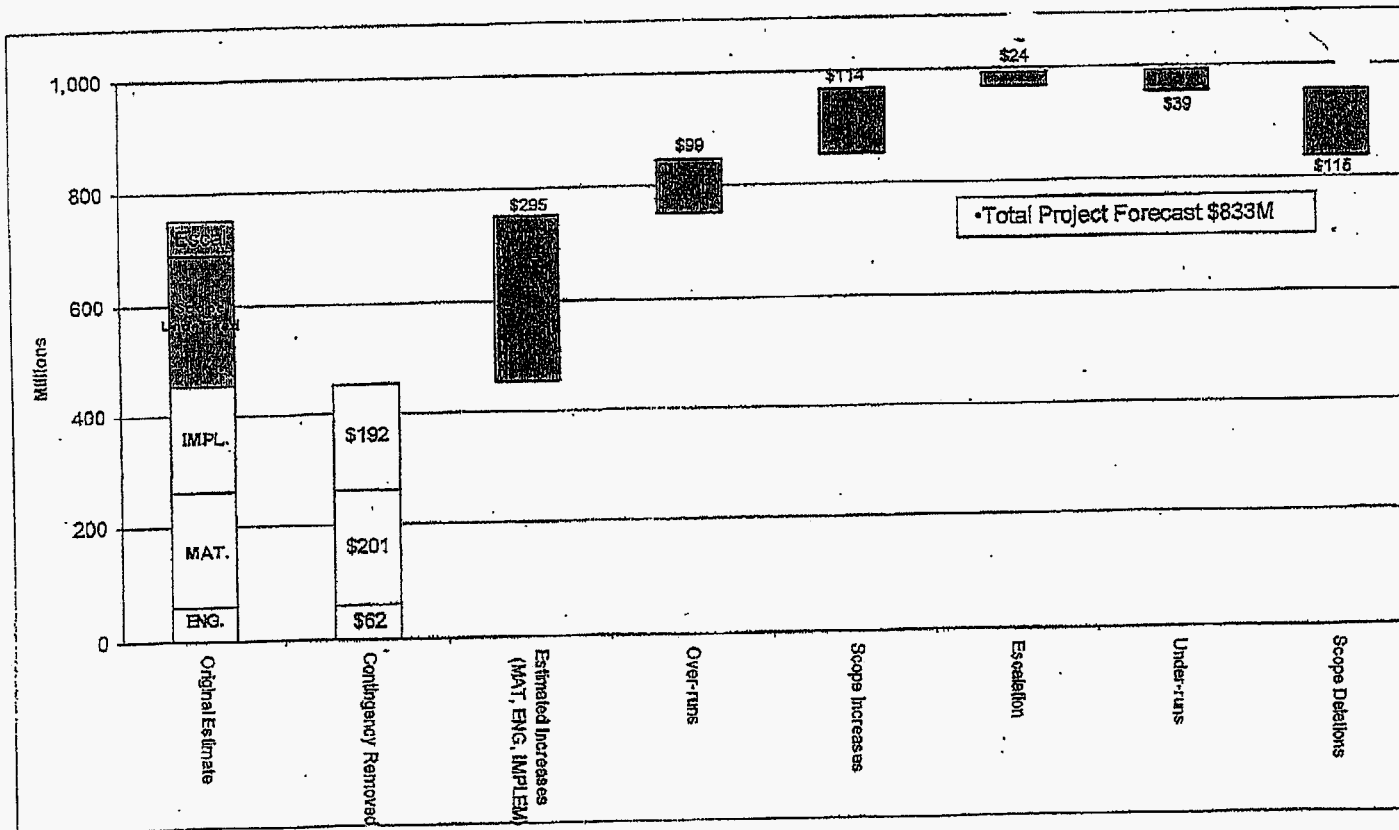
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I. Overview

Forecast Overview Walk-Thru

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II. Area Summary and Line by Line

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II. Area Summary

Current Budget of \$749M increased to \$833M (Current Forecast*) –

- The causes for the increase were primarily due to the following:
 - Initial Shaw feasibility estimates were based on conceptual scope
 - Scope Growth driven by – LAR and Design Evolution
 - Bechtel Field Non-manual (FNM) and Indirect costs for the EPC contract are higher than expected
 - Material costs significantly higher than Shaw original estimates

*excludes scope undefined

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II. Area Summary

Licensing Cost

Licensing Engineering costs were higher than planned by \$34mm due to:

- Base contract costs higher than anticipated
- EPU analysis significantly more extensive and intrusive than stretch power uprate like Seabrook
- New analysis methodologies required to achieve acceptable results
- NRC regulatory guidance issued expanding scope/ complexity of LAR
- Fast Track schedule caused work to be performed with draft inputs and re-worked later
- Core LAR staff owner's functions largely contracted

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II. Line by Line - LAR

Licensing Engineering costs were higher than planned

DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	EXPLANATION / NOTES
WEC Analysis and Engineering				
WEC NSSS and Fuel Analysis	\$20,000,000			Base Scope
Areva Replacement Components Analysis				Base Scope
Contract Incentives				Base Scope
RAI Support				Base Scope
SFP Criticality Analysis				Base Scope
Decay Heat Analysis				Transferred from Shaw Base Scope
PRA Analysis				ACRS now requires showing EPU is risk beneficial
Reconstitute BMI Stress Analysis				No existing analysis of record
TRACE Inputs - NRC Confirmatory Analysis				New NRC req't to perform confirmatory LOCA analyses
BAF Scoping/Pressurizer Impact				Prior methodology for BAF no longer accepted by NRC
Unresolved WEC Scope Changes				Analysis areas requiring more work than originally estimated by WEC due to unacceptable results
Mid Process Scope Review Changes				#1 - 4 FWH, Cond Pumps, SGFPs
Additional Analyses				Analyses from review cycle, unacceptable results, LTC/BA precipitation
SUBTOTAL	\$20,000,000	\$33,603,830	-\$13,603,830	

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II. Line By Line - LAR

LAR Walk-thru

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DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	EXPLANATION / NOTES
BOP Analysis and Engineering				
Shaw BOP Analyses	\$6,000,000			Base Scope
Contract Incentives				Base Scope
RAI Support				Base Scope
Shaw scope adjustments				Base Scope
MSV/MSCV Disk Qualifications				Industry OE of failed disks
Mid Process Review				#1 - 4 FMH, Cond Pumps, SGFPs
Additional Analyses				Analyses from review cycle, unacceptable results
FPL LAR Engineering				
FPL MOD Engineering Support for LAR				
SUBTOTAL	\$6,000,000	\$18,050,705	-\$12,050,705	
Grid Stability Risk Study	\$250,000			
Other Contracts				
Third Party Reviews	\$222,000			Owners Support and independent reviews
Environmentally Assisted Fatigue Reanalysis				Prior methodology for EAF no longer accepted by NRC
AST Dose Analysis				New dose analysis needed to support acceptable results at EPU conditions and address control room habitability conditions
Cameron Testing Services for MUR				Validates power uncertainty for determining RTP value for uprate
Integrated LAR Compilation				Compile LAR in E-form for submittal
Other RAI Support				
SUBTOTAL	\$222,000	\$7,226,563	-\$7,004,563	
NRC Review Fees	\$2,200,000	\$3,385,864	-\$1,185,864	AST, EPU and Confirmatory Analyses
Sub Total	\$2,200,000	\$3,385,864	-\$1,185,864	
Total without Escalation and Contingency	\$28,672,000	\$62,648,935	-\$33,976,935	

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II. Area Summary

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Engineering Costs

- **Modification Engineering costs increased by \$49mm due to:**
 - Original Shaw Estimates conceptual vs. detail
 - Number of Modifications increased due to Scope Growth and LAR Analysis
 - Bechtel increases in Home Office and Overhead costs

ICDR 1.6b-3 EPU

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II. Line by Line - Engineering

This table represents the variance in Engineering costs between the original budget and the current forecast. The significant differences are shown.

SCOPE	ORIGINAL	FORECAST	VARIANCE	EXPLANATIONS / NOTES
OVERRUNS	ENG.	ENG.	ENG.	
Condenser Replacement/Amertap	\$500,000			Amertap and cathodic protection system replacements vs. upgrades. Scope increase
Simulator	\$50,000			Reactor core model vs. entire EPU parameter change model. Scope increase.
New Turbine Controls DE-VE-C	\$500,000			Engineering underestimated
Replace FAC-Identified Piping	\$100,000			Configuration verification and stress analysis required
Allowance for Additional Cooling Mods to TPCW/CW	\$200,000			Existing heat exchangers can not be modified for EPU conditions
Install Condensate Pumps - Replace Internals	\$200,000			Rewind motors adequate, new pumps required with motor filler modifications. Scope increase
Modify The Isolated Phase Bus Duct Cooling System	\$200,000			Coolers acceptable. IPBD not adequate for load. Scope increase.
Allowance for MSR replacement	\$1,300,000			Install drain tanks and modify crossover piping. Scope increase.
Add New Fast closing FW Isolation Valves Outside Containment	\$1,080,000			MOV's cannot meet design requirements AOVs must be used.
Main Steam Piping Support Mods And / Or New Supports	\$300,000			Potential for more extensive modification with additions
Sub - Total	\$4,430,000	\$21,378,000	-\$16,948,000	
OVERRUNS \$1M				
Implement LEFM Check Plus MUR	\$500,000			Based on detailed mod package estimates.
Steam Dump Valves/piping Modifications	\$120,000			Actuators, positioners and new cabling from control room vs. local valve work only
Replace 2 HP FW Htrs - #5 (4 Sub - Total For 2 Units)	\$300,000			Scope increase; larger heaters, stress analysis plus stranded costs
Replace 2 HP FW Htrs - #6 (4 Sub - Total For 2 Units)	\$345,000			Scope increase; larger heaters, stress analysis plus stranded costs
Alternate SFP Cooling System	\$200,000			Scope increase, increased analysis manhours and job complexity
Allowance For Replacement Of Gravity Drain Piping - #5 Heater	\$200,000			Scope increase; longer pipe section replacement and stress analysis issues.
FW Regulating Valve (FRV) Trim Replacement	\$200,000			Scope increase; actuator and solenoid replacements with additional stress analysis
BOP Instrumentation & Control Setpoint, Rescaling & Hardware Mk	\$450,000			Larger BOP instrument & control setpoint changes. Scope increase.
Replace The Main Transformers	\$350,000			Engineering evaluation eliminated transformer replacement in lieu of cooler upgrade. Scope increase.
Increase Aux FW Pump Capacity & CST Volume	\$100,000			Minor valve modifications in lieu of pump modifications. Scope increase.
Sub - Total	\$2,785,000	\$9,107,097	-\$6,342,097	

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II. Line by Line- Engineering

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SCOPE	ORIGINAL	FORECAST	VARIANCE	EXPLANATIONS / NOTES
UNDERRUNS				
Add FW Hrs # 5 & # 6 Digital Level Controls	\$2,450,000			Eliminated due to scope reduction (1-4 feedwater heaters no longer being replaced)
Emergency Containment Filter Removal	\$724,000			Abandon in place vs. complete removal
Station Electrical Load Study (ETAP)	\$400,000			Reduction due to single ETAP analysis per outage vs. by mod.
Sub - Total	\$3,574,000	\$2,010,000	\$1,564,000	
SCOPE INCREASES				
Heater Drain Tank Alternate Drains				Existing valves undersized for EPU conditions
Modifications for AST	\$100,000			Extensive emergency control room ventilation and NATE baskets vs. chemical injection
HVAC CBUS Switchgear (Actuals)				Actuals for 30% design. Mod not required for existing heat loads.
Turbine TAPS	\$0			Needed for data collection for HP turbine design
Sub - Total	\$100,000	\$3,245,000	-\$3,145,000	
SCOPE DELETIONS				
Rx Vessel Upper Head Temp Conver. (DHEHC) CRDM Anal.	\$1,000,000			Not required per engineering evaluation
24 Month Fuel Cycle	\$1,000,000			Not being pursued.
Pressurizer Loop Seal Removal	\$1,000,000			Removal not required, setpoint change only.
Addition of Trim Coolers to Exciter	\$400,000			Trim cooler not required. Existing cooler being replaced with larger capacity
Replace 2 LP FW Hrs - #3 (4 Sub - Total For 2 Units)	\$300,000			Not required due to 3 condensate pump option.
Replace 2 LP FW Hrs - #4 (4 Sub - Total For 2 Units)	\$300,000			Not required due to 3 condensate pump option.
FW Pump Thrust Bearings	\$250,000			FW pump modifications not required due to 3 condensate pump option.
Cooler Replacement to Support Gen Hydrogen Cooling	\$200,000			Hydrogen cooler engineering cost included in Siemens generator upgrade
Allowance For New Jet Impingement Shields And / Or Pipe Whip F	\$180,000			Scope combined with main steam pipe supports and whip restraints
Current Transformers & Bushings Replacement	\$20,000			Scope combined with Siemens generator upgrade cost
Containment Cooling Mods - Chilled Water (NCCs)	\$850,000			Replacing NCCs only. Not adding chilled water.
Sub - Total	\$5,270,000	\$1,682,000	\$3,588,000	
IGDR 1-6B-2-EPU				004253
TOTAL	\$15,139,000	\$37,422,097	-\$21,283,097	

*Totals do not represent all Engineering items



II. Scope Reductions

Major Scope Reduction Items

DESCRIPTION	EST.	PROs	CONs	RISK	MITIGATION
Reactor Vessel Upper Head Temperature Conversion	[REDACTED]	Cost Savings	Potential CRDM temperature issues	Medium	AREVA to perform CRDM Thermal Analysis
Replace the Main Transformers		Cost Savings	None	Low	Increased cooling capacity for existing transformers
Feedwater Heaters #1 thru #4 deletion		Cost Savings	Increased inspections required	Medium	Increased inspection cycles. Potential flow accelerated corrosion and internal vibration issues. May require some upgrades after EPU based on inspection results.
Addition of Trim Coolers to Exciter		Cost Savings	Potential reduced life cycle	Low	Siemens analysis/Project Management reviews
Alternate Spent Fuel Pool Cooling Sys		Cost Savings	During outages, intake and component cooling water will not be able to be removed from service	Medium	Additional Spent Fuel Pool Heat Exchanger
24 Month Fuel Cycle		Cost Savings	Not technically feasible	Low	Keep existing Fuel Cycle
Cooler Repl to support Gen H2 Cooling		Cost Savings	Potential reduced life cycle	Low	Additional monitoring
Use of Existing Feed Water Pumps		Cost Savings	Pumps will be operating the limit of their capability. Potentially increased maintenance	Medium	Performing field testing and dynamic analysis of secondary performance. Upgrading control instrumentation.
Containment Cooling Mods (NCCs)		Cost Savings, less equip to maintain	None	Low	Normal Containment Coolers are being replaced instead of a new, supplemental cooling system installed on the plant Aux. Bldg. roof.
Exciter Re-Wind		Cost Savings	Exciters are forty years old	Low	Exciters are inspected on a preventive maintenance program and the fleet has a spare.
Balance of Scope Reductions					
GDR 1.6b-3 EPU	\$57,060,914				001254

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II. Scope Additions

Major Scope Additions & Increases

DESCRIPTION	REQUIREMENT	RISK OF NOT DOING	TOTAL VARIANCE
Condenser Replacement/Amertap	Results in increased MW's and increased plant reliability	MW Loss	[REDACTED]
Allowance for MSR Replacement	Results in increased MW's and increased plant reliability	MW Loss	
HP Internal & Rotor/Generator Rewind/Rotor Hi Lift	Results in increased MW's	Can not perform upgrade	
License Amendment Request Support Activities	NRC Required	LAR activities required to up-rate units	
Project Support - FPL Project Management Services	Appropriate contract and project administration	Reduced Contract Oversight can result in an unwanted plant event and budget/schedule over-runs.	
Steam Generator Moisture Carry Over	Reduce moisture of steam to turbine	Potential turbine damage	
Plant Craft Support	Various work scopes such as disposal costs, transportation, supplemental services	Significant to Station	
Replace FAC -Identified piping	Higher Flows	Additional inspection of and maintenance cost	
Outage Extension	Support Plant during extended outage	Required Plant Support not available	
New Turbine Controls DH/EHC	New HP Turbine Upgrade	MW Loss; EPU not achieved	
Add'l Cooling Mods to TPCW/ICW	Additional cooling required for generator components	Limit unit load during Summer (MW loss)	
Isophase Bus Duct Cooling Sys	Upgrade requires replacement of Isophase Bus Duct system rather than increased cooling capacity	MW Loss	
License Amendment request - AST Mod's	Alternate Source Term LAR required modifications	Control Room Emergency Ventilation and Accident mitigation - NaTB Baskets	
Balance of Scope Increases			
ICDR 1.6b-3 EPU Total			001255 \$405,166,593

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II. Area Summary

Material Costs

- Major equipment estimates increased by \$36.5M due to changes in fabrication costs and scope increases.
 - Original estimates based on best known price of materials at the time. Condenser material cost ~ 75% higher than original Shaw estimate
 - Moisture Separator Reheater scope increased due to raising elevation and adding condensate drain tanks. Material increase ~ 32%.
 - Other large components exceeded estimates-Feedwater Isolation Valves, IsoPhase Bus, Turbine Digital Controls, Turbine Plant Cooling Water Heat Exchangers.
 - Field procured material costs are higher than assumed in the original estimates

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II. Line by Line - Material

This table represents the major variance in material costs between the original budget and the current forecast. The significant material cost differences are shown.

DESCRIPTION	ORIGINAL	FORECAST	VARIANCE	EXPLANATION / NOTES
OVER-RUNS				
Condenser Replacement	\$ 30,000,000	\$ [REDACTED]	\$ [REDACTED]	Raw material price, Amertap, Cathodic protection
New Turbine Controls DEH/ EHC	\$ 4,800,000	\$ [REDACTED]	\$ [REDACTED]	Scope increase, replace capital spares
Add FW HTR #5 & #6 Digital Level Controls	\$ 459,200	\$ [REDACTED]	\$ [REDACTED]	Based on Preliminary estimate, Forecast based on recent PTN installations
Add new fast closing FW Isolation valves	\$ 1,500,000	\$ [REDACTED]	\$ [REDACTED]	Current contract exceeds original budget
FW Regulating Valve Trim Replacement	\$ 330,000	\$ [REDACTED]	\$ [REDACTED]	Current contract exceeds original budget
TOTAL	\$ 36,889,200	\$ 69,656,214	\$ -32,767,014	
UNDER-RUNS				
Replace HP FWH #6	\$ 8,000,000	\$ [REDACTED]	\$ [REDACTED]	
Alternate SFP Cooling System	\$ 3,900,000	\$ [REDACTED]	\$ [REDACTED]	Reduced cooling capacity for incremental heat load (Risk item)
Allowance for replacement of gravity dr. piping	\$ 250,000	\$ [REDACTED]	\$ [REDACTED]	Based on Preliminary estimate
TOTAL	\$ 10,150,000	\$ 5,223,873	\$ 4,926,127	
SCOPE INCREASES				
MSR Replacement	\$ 24,200,000	\$ [REDACTED]	\$ [REDACTED]	Unanticipated drain tanks, piping and valve size changes
Additional Cooling Mods to TFCW/ ICW	\$ 2,000,000	\$ [REDACTED]	\$ [REDACTED]	Heat Exchanger Costs, Original Scope - Valve Installation
Modify the Iso-Phase Bus Duct Cooling System	\$ 450,000	\$ [REDACTED]	\$ [REDACTED]	Scope change from Cooling to replace entire Isophase bus
Implement LBFM Check Plus MUR	\$ 2,400,000	\$ [REDACTED]	\$ [REDACTED]	Current contract exceeds original budget
Control Room Emergency Ventilation	\$ -	\$ [REDACTED]	\$ [REDACTED]	AST driven additional scope
TOTAL	\$ 29,050,000	\$ 47,178,442	\$ -18,128,442	
SCOPE DELETIONS				
Replace The Main Transformer	\$ 16,000,000	\$ [REDACTED]	\$ [REDACTED]	Upgrade vs. Replacement
Replace LP FWH #1	\$ 4,000,000	\$ [REDACTED]	\$ [REDACTED]	Not required for 3 Condensate Pump option
Replace LP FWH #2	\$ 3,000,000	\$ [REDACTED]	\$ [REDACTED]	Not required for 3 Condensate Pump option
Replace LP FWH #3	\$ 3,000,000	\$ [REDACTED]	\$ [REDACTED]	Not required for 3 Condensate Pump option
Replace LP FWH #4	\$ 3,000,000	\$ [REDACTED]	\$ [REDACTED]	Not required for 3 Condensate Pump option
Feedwater Pump Thrust Bearings	\$ 800,000	\$ -	\$ -	Mid Cycle scope review reductions (Risk item)
Main Steam Piping support Mods	\$ 200,000	\$ -	\$ -	Based on Preliminary estimate
Increase Aux FW Pump Capacity & CST volume	\$ 100,000	\$ -	\$ -	Engineering Evaluation (Risk item)
TOTAL	\$ 30,100,000	\$ 9,210,200	\$ 20,889,800	
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GRAND TOTAL	\$ 106,189,200	\$ 131,269,729	\$ -25,080,529	

*Totals do not represent all Material items

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III. Implementation

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III. Implementation

Project Implementation

- **Original Project Organization structure contemplated in 2007 was with seconded (contract) staffing overseeing the EPU effort**
 - Original Structure
 - Self Perform model (FPL + Contractors)
 - Contracted staffing was approximately 88+ for PTN
 - Fast track for large component purchase with licensing and design in parallel
 - Early 2008 Decision to utilize EPC Contractor
 - Project Organization structure changed based on contract award to Bechtel EPC Provider
 - FPL Management stationed at PTN 01/01/2009
 - Oversight reduced to 52 FTE including Engineering, Project Management and Project Controls

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III. Implementation

Summary of all implementation costs

Cost Center	Original Budget	Forecast at Completion	Vs. Current Budget	To Go
Implementation	\$192,033,500	\$438,589,705	(\$246,556,205)	\$386,934,648
EPC Construction				
EPC - Bechtel Indirect Constr.				
Siemens Labor				
Siemens Alliance Open/Close				
Outage Extension Costs				
Project Support - FPL Home Office				
FPL Project Management				
Plant Craft Support				
Start-Up				
Training & Procedures				
RX Vessel Upper Head Temp. Conv.				
Steam Gen. Moisture Carry Over				
Pressurizer Loop Seal				
MSR - Crossover Piping / Valve				
Misc. Non-EPC Work				

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III. Implementation

**Current forecast to complete scope is
\$439M vs. the current budget of \$192M**

- Capacity of organization does not support self perform. EPC construction costs will be higher. Risk of outage schedule impacts are reduced.
- Lack of Constructability reviews of the Original Estimates
- Increased Scope in original modifications
- Increased number of required modifications
- Bechtel Field Non-manual, Home Office and Indirects

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III. Implementation Line by Line

Original implementation estimates based on limited field information. Costs for EPC contractors are higher than anticipated.

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DESCRIPTION	ORIGINAL	FORECAST	VARIANCE	EXPLANATION/NOTES
OVER-RUNS				
Condenser Replacement/Ameritap	23,500,000			Increased work scope definition: heavy haul, handling. Increased scope, Ameritap, cathodic protection, Bechtel Indirects
Project Support - FPL Project Management Services	18,624,800			Original estimate based on preliminary staffing plan (5.5% of total cost)
HP Turbine Siemens Alliance - Open/Close Cost	0			\$2 FTEs
Generator - Rotor Replace Open and Close	7,000,000			Not included in turbine scope estimate
Project Support - 5 FPL Home Office	4,358,000			Not included in generator rew ind dollars
Generator - Stator Rew ind	7,000,000			Original estimate based on preliminary implementation staffing plan, forecast is combined support
Replace 2 HP FW Htrs - #6 (4 Total For 2 Units)	1,650,000			Add'l individual Siemens tasks wrapped into one project (H2 cooler, CT's, bushings, rew ind)
Replace 2 HP FW Htrs - #5 (4 Total For 2 Units)	1,650,000			Increased work based on detailed scope, Bechtel Indirects
Install Condensate Pumps - Replace Internals	1,800,000			Increased work based on detailed scope, Bechtel Indirects
Allowance for Additional Cooling Mods to TPCW/KCW	1,500,000			Mid Course Scope Review - Added additional work for 3-pump operation.
BOP Instrumentation & Control Setpoint, Rescaling & Hardware Mods	210,000			Scope growth - Fix Rplcmt vs Isolation valves
Allowance For Replacement Of Gravity Drain Piping - #5 Heater	1,162,400			Increased work scope due to better scope definition
Main Steam Piping Support Mods And / Or New Supports	350,000			Increased work based on detailed field walkdowns
Add New Fast closing FW Isolation Valves Outside Containment	6,000,000			Increased scope due to added supports
Add FW Htr #5 & #6 Digital Level Controls	2,640,000			Scope changed due to different valve type
Implement LEPM Check Plus MUR	3,100,000			Mid Course Scope Review - Scope reduced but per unit estimate increased
Upgrade MSIV Internals	150,000			Increased work based on detailed field walkdowns
TOTAL	\$ 81,705,200	\$ 255,056,832	-\$170,359,632	Implementation costs
UNDER-RUNS				
Containment Cooling Mods - Chilled Water (NCC's)	5,500,000			Allocated to other Mods
Main Steam Safety Valve / Piping Modification	700,000			Conservative original estimate based on worst case scope
Alternate Spent Fuel Cooling System	3,900,000			
TOTAL	10,100,000	3,970,000	\$5,230,000	

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III. Implementation - Line by Line

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DESCRIPTION	ORIGINAL	FORECAST	VARIANCE	EXPLANATION / NOTES
SCOPE INCREASES				
Allowance for MSR replacement				Increased work due to drain tank additions, height elevation change and large bore pipe
Replace FAC-identified Piping				Low original estimate based on Shaw recommended scope, Bechtel indirects
Training & Procedures				Specific item not included in Shaw's base scope
Modify The Iso Phase Bus Duct Cooling System				Scope evolution and increased cost to implement duct replacement vs. coolers
Replace The Main Transformers				Total contracted cost for cooler replacement
O&M				Anticipated material write-offs
Heater Drain Tank Alternate Drains				Additional work required
General Conditions (Env. Permitting, Other)				Scope evolution
Turbine Gantry Crane scoping study				New scope for mission critical
Turbine TAPS				New scope for turbine performance testing
Steam Dump Valves/piping Modifications				Increased work due to better scope definition
Modifications for AST				New LAR scope: Control room ventilation, NaTB Baskets (vs. Chemical Injection)
Replace normal and emergency heater drain valves				Implementation costs
New turbine control DE/HIC				Implementation costs: includes capital spare replacement components not in base scope
Outage Extension cost				Thru up for actual outage duration
FW Regulating Valve (FRV) Trim Replacement				Implementation cost
Steam Generator Moisture Carry over (erosion / corrosion degraded)				Bechtel support of Westinghouse
TOTAL	\$57,454,300	\$144,987,569	-\$87,533,259	
SCOPE DELETIONS				
24 Month Fuel Cycle				Scope decrease based on evaluation
Replace 2 LP FW Htrs - #3 (4 Total For 2 Units)				Mid Cycle scope review reductions
Replace 2 LP FW Htrs - #4 (4 Total For 2 Units)				Mid Cycle scope review reductions
Pressurizer Loop Seal Removal				Scope decrease based on evaluation
Addition of Trim Coolers to Exciter				Scope evolution and distribution into other mod
Replace 2 LP FW Htrs - #1 (4 Total For 2 Units)				Mid Cycle scope review reductions
Replace 2 LP FW Htrs - #2 (4 Total For 2 Units)				Mid Cycle scope review reductions
Cooler Replacement to Support Gen Hydrogen Cooling				Scope evolution from Shaw evaluation and distribution into other mod
FW Pump Thrust Bearings				Mid Cycle scope review reductions
Allowance For New Jet Impingement Shields And / Or Pipe Whip F				Engineering evaluation
Nozzle block and blade modification				Incorporated into turbine work
Reactor Vessel upperhead temp conversion CRDM analysis				Engineering evaluation; not required
New Turbine High Lift valve Mod (See Item 39)				Incorporated into turbine work
TOTAL	40,335,000	3,067,500	\$37,267,500	
GRAND TOTAL	189,594,500	407,081,891	-215,385,391	001293

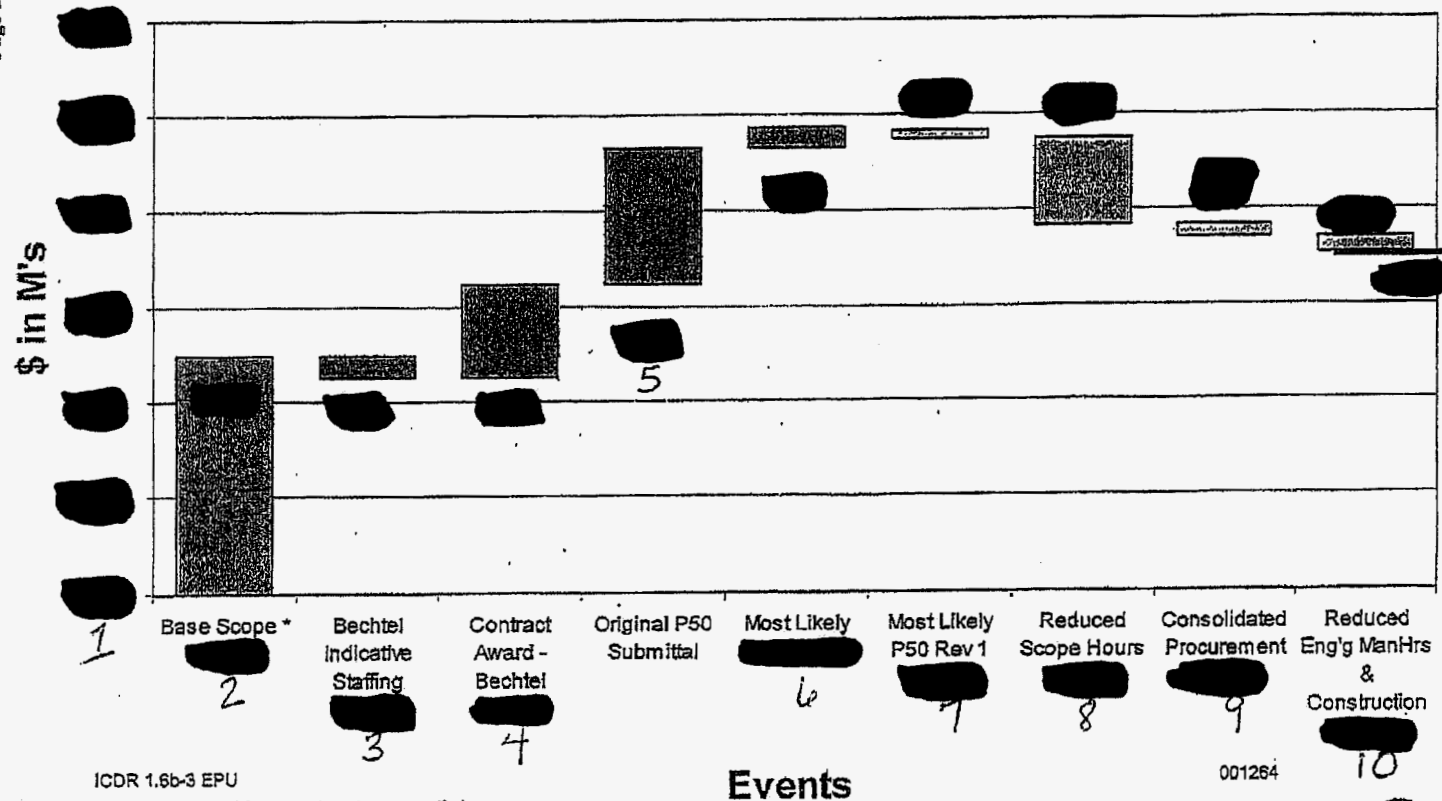
*Totals do not represent all Implementation items



III. Implementation

Bechtel Proposal Estimate Changes

FPL-EPU Turkey Point Project
Bechtel Forecast Adjustments



* Base scope as defined by Contract scope list



III. Implementation

This timeline shows original Bechtel costs and the changes that resulted in a reduced EPC costs

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PTN EPC Scope and Forecast Evolution									
Approx. Date	5/15/2008	Prior to contract (10/15/08)	11/07/08	05/03/09	06/30/09	7/1/2009 ??	07/02/09	07/02/09	07/14/09
Item	FPL Project Forecast prior to EPC (Shaw Estimates) We only have dollars	FPL Project Forecast based on Bechtel Indicative staffing.	Contract Award date. FPL Project Forecast based on Bechtel Manning Submittal	Original Bechtel P50 Submittal	Most likely P50	Same as previous submittal with clarification of scope - \$ 4.765 M	P50 with reduced scope (Changes to MODS scope from Mid-cycle scope review)	P50 with reduced scope (Consolidation of Procurement & Reduction in Management Services)	P50 with reduced scope and reduced Eng. & Craft Hrs after MOD by MOD Estimate Reviews
Total NM Man-hours									
Total Craft Hrs									
Total Dollars		\$	\$	\$	\$	\$	\$	\$	\$
Scope	Based on 43 MODS per Unit.	33 EPC Modifications Identified in Spec M-156.	Based on 43 EPC Modifications Identified in Spec M-156 Rev.1	Based on 43 EPC Modifications Identified in Spec M-156 Rev.1 plus additional scope for AST MOD's and Wraparound MOD's	Based on 43 EPC Modifications Identified in Spec M-156 Rev.1 including scope revision's to MOD plus additional scope for AST MOD's and Wraparound MOD's	Based on 43 EPC Modifications Identified in Spec M-156 Rev.1 including scope revision's to MOD plus additional scope for AST MOD's and Wraparound MOD's	Based on 43 revised/eliminated EPC Modifications Identified in Spec M-156 Rev.1 including scope revision's to MOD's along with Reduction to Design Engr & Supv. And FE hours hrs. based on Area and NSR strategy.	Based on 43 EPC Modifications Identified in Spec M-156 Rev.1 including scope revision's to MOD's, Reduction on Design Engr & Start up hrs and removing Management Service	Based on 43 EPC Modifications Identified in Spec M-156 Rev.1 including scope revision's to MOD's, Reduction on Design Engr & Start up hrs and removing Management Service & reductions due to MOD estimates

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III. Line by Line - Total

This table represents the total variance between the original budget and the current forecast. Further breakdown for LAR, engineering and implementation appear on other slides

DESCRIPTION	ORIGINAL	FORECAST	VARIANCE	EXPLANATION / NOTES
OVER-RUNS				
Balance of Plant material cost, heavy haul, Amertap replacement, Cathodic protection and Bechtel Indirects				
Condenser Replacement/Amertap	\$54,000,000			Siemens' proposal greater than original estimate
HP Internals & Rotor/Generator Rewind, Rotor/ Hi-Lift Valves	\$100,062,000			NGSS/Fuel, BOP Engineering, Licensing, LAR Support, NRC Fees
License Amendment Request Engineering, Licensing and Support	\$28,670,000			Implementation costs, Includes capital spare replacement components - not in base scope
New Turbine Controls DEH/ERC	\$10,480,000			Heat Exchanger Costs, Original Scope - Valve installation
Allowance for Additional Cooling Mods to TPCW/CW	\$3,700,000			New Pumps, Re-wind Motors, Recirc Piping, HVAC
Install Condensate Pumps - Replace Internals	\$5,000,000			Heater Cost, increased work based on implementation details
Replace 2 HP FW Htrs - #5 (4 Total For 2 Units)	\$4,950,000			Increased work based on detailed field walkdowns
Allowance For Replacement Of Gravity Drain Piping - #5 Heater	\$1,612,400			Based on preliminary estimates
Implement LFRM Check Plus MUR	\$8,000,000			Based on preliminary estimates
Replace 2 HP FW Htrs - #6 (4 Total For 2 Units)	\$7,995,000			Engineering identified additional supports required
Main Steam Piping Support Mods And / Or New Supports	\$650,000			Increased work scope due to better scope definition
BOP Instrumentation & Control Setpoint, Recalling & Hardware Mo	\$1,265,000			Based on preliminary estimates
Add New Fast closing FW Isolation Valves Outside Containment	\$8,580,000			Reduced scope for LP Heaters
Add FW Htr # 5 & # 6 Digital Level Controls	\$5,549,200			Increased work scope due to better scope definition
Steam Dump Valves/piping Modifications	\$380,000			Reactor Core Simulator model / versus entire EPU parameter change model
Simulator	\$350,000			Increased material costs
FW Regulating Valve (FRV) Trim Replacement	\$680,000			
"Total Walk-Thru" Over-Runs Sub-Total	\$240,603,800	\$463,174,382	-\$222,570,782	
UNDER-RUNS				
Containment Cooling Mods - Chilled Water (NOC's)	\$10,150,000			Scope reduced from Supplemental Chillers on Aux roof to NOC's
Main Steam Safety Valve / Piping Modification	\$1,175,000			Based on preliminary estimates
"Total Walk-Thru" Under-Runs Sub-Total	\$11,325,000	\$9,968,686	\$1,356,314	

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III. Line by Line - Total

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DESCRIPTION	ORIGINAL	FORECAST	VARIANCE	EXPLANATION / NOTES
SCOPE INCREASES				
Allowance for MSR replacement	\$32,360,000			Material Cost, Elevated MSRs- rework Crossover Pipes, drain tank addition
Project Support - FPL Project Management Services	\$28,419,300			Original based on preliminary needs assessment (total 5.5% of total cost); based on 52 FTEs
Steam Generator Moisture Carry Over (Erosion-Corrosion Degrade	\$25,000,000			Bechtel support of Westinghouse
Plant Craft Support	\$0			Project Services not included in base: disposal, NPS, security, transport etc
Replace FAC-Identified Piping	\$6,020,000			Implementation cost, Bechtel indirects
Outage Extension Costs	\$18,000,000			Trued up for actual outage durations
Modify the Isolated Phase Bus Duct Cooling System	\$1,040,000			Eng determined scope changes from cooler replacement to isophase duct, also includes Generator Neutral work
Transfer of work responsibility (Nurses/Ops, etc.)	\$0			Bechtel work transferred to FPL
Modifications for AST	\$1,500,000			New LAR scope: Control Room ventilation, NaTB baskets (vs chem injection)
Training & Procedures	\$0			Specific item not included in Shaw's base scope
Start-Up	\$0			Specific item not included in Shaw's base scope
Heater Drain Tank Alternate Drains	\$0			Additional work required
Temp. Facilities	\$210,000			Warehousing and increased inprocessing not in base
AFW Controls	\$0			Additional work required
Replace Normal & Emergency Heater Drain Valves	\$2,062,600			Implementation costs
O&M	\$0			Material write-off
Turbine Gantry Crane scoping study	\$0			Not in original scope - Crane is mission critical
Turbine TAPS	\$0			New scope for turbine performance testing
Upgrade Internal Trim and Controllers on the MSR Reheater Steam	\$0			Additional work required
HVAC CBUS Switchgear (Actuals)	0			Additional work required, then Mid Cycle scope review
General Conditions (Env. Permitting, Other)	\$0			Additional work required
SGFP - Actual	\$0			Expended engineering dollars prior to mid course scope review
"Total Walk-Thru" Scope Increases Sub-Total	\$114,811,900	\$297,207,710	-\$182,595,810	

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III. Line by Line - Total

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DESCRIPTION	ORIGINAL	FORECAST	VARIANCE	EXPLANATION / NOTES
SCOPE DELETIONS				
Replace Vessel Upper Head Temp Conver.	\$14,000,000			Engineering Evaluation; not required
Replace The Main Transformers	\$18,394,200			Scope reduced from replacement to cooler replacement
Addition of Trim Coolers to Exciter	\$4,500,000			Not required due to turbine plant cooling water replacement
Alternate SFP Cooling System	\$8,000,000			Reduced cooling capacity for incremental heat load (Risk item)
Replace 2 LP FW Htrs - #4 (4 Total For 2 Units)	\$4,950,000			Not required for 3 Condensate Pump option
Replace 2 LP FW Htrs - #3 (4 Total For 2 Units)	\$4,950,000			Not required for 3 Condensate Pump option
24 Month Fuel Cycle	\$3,000,000			Engineering Evaluation; not required
Cooler Replacement to Support Gen Hydrogen Cooling	\$2,800,000			Part of Generator scope
Replace 2 LP FW Htrs - #1 (4 Total For 2 Units)	\$5,950,000			Interferences
Pressurizer Loop Seal Removal	\$3,804,000			Engineering Evaluation; not required
Replace 2 LP FW Htrs - #2 (4 Total For 2 Units)	\$4,950,000			Not required for 3 Condensate Pump option
FW Pump Thrust Bearings	\$1,200,000			Mid Cycle scope review reductions
LP Turbine - Analysis	\$400,000			Engineering Evaluation; not required
Allowance For New Jet Impingement Shields And / Or Pipe Whip R	\$375,000			Engineering Evaluation; not required
Community Outreach	\$370,000			Mid Cycle scope review reductions
Update EQ Qualification	\$250,000			Engineering Evaluation; not required
Update Checksum Software For FAC	\$100,000			Engineering Evaluation; not required
Emergency Containment Filter Removal	\$1,839,000			Mid Cycle scope review reductions (Abandon in place)
Upgrade MSIV Internals	\$670,000			Engineering Evaluation; not required
Increase Aux FW Pump Capacity & CST Volume	\$300,000			Engineering Evaluation (Risk items to replace rotating element)
"Total Walk-Thru" Scope Deletions Sub-Total	\$80,902,200	\$25,407,411	\$55,494,789	
OTHER				
Station Electrical Load Study (ETAP)	\$400,000			
Project Support - 5 FPL Home Office	\$6,825,000			
Escalation	\$0			Original escalation included in individual line items
NSSS Material / Mainstream Check Valve Implementation	\$0			
Project Escalation (Shaw)	\$82,008,928			
Project Contingency (Shaw)				
"Total Walk-Thru" Other Sub-Total	\$301,738,410	\$36,827,649	\$264,910,761	
TOTAL FPL PROJECT COSTS	\$749,181,110	\$832,585,838	-\$83,404,728	001268



III. Risk and Mitigation

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(Tu Page)	Origin Date	Risk Event Description	H/M/L	Impact Level	Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob. Level	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
Turkey PL RISK											
1	9/8/08	Implementation and Schedule execution may cost more than Proforma (Bechtel Engineering and Implementation)		Significant	Cost	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Contingency will be needed to expended for any shortfalls not predicted by Proforma Note: Bechtel indicates costs will be higher than indicative bid	Assessing scope and staff estimates See Mitigation Plan for Details
2	4/23/09	Turbine Gantry Crane travel speed, available laydown space, etc. Crane may be Less than Adequate to efficiently support the EPU outages		Critical	Schedule					Inability to efficiently remove and replace equipment needed for power uprate within the proposed Outage time frame	Obtain qualified OEM to evaluate the overall condition of the Crane and provide recommendations Review recommendations and implement repairs as necessary to improve crane reliability and condition See Risk Mitigation Plan for details
3	10/10/08	Error discovered in the Containment Integrity Design Basis Analysis		Critical	Programmatic					The Error (non conservative) may significantly reduce the Containment Pressure Margin needed for the Extended Power Uprate conditions	Favorable results with best sink model, Further CCW mode may be necessary. Performing KT Analysis to determine scope and significance of modification See Risk Mitigation Plans for Details
4	2/4/09	Site Capacity: Given the total quantity of work planned (including work from other projects), the overall work imposed on the station for such items as PORC reviews, procedures, training, WO Reviews, etc. may be beyond the capacity for the station to support	M	Significant	Cost/ Schedule					Potential to extend the Outage and/or slip a cycle for the in-service date	Being reviewed per Bechtel levelization and Outage Scope Plan Meetings routinely being held with station to ensure they are integrated with the project
5	10/14/08	There is potential that Legacy Analysis or License basis issues may be uncovered during re-analysis for EPU LAR		Significant	Programmatic					Three such items have already been identified: PG F/W temp, PTN CTMT analysis and PTN ECP dose PTN has already experienced emergent mods and additional analysis	EPPI-346 new instruction that defines risk identification and mitigation utilizing WM-AA-1000.
6	1/8/09	New NRC mandated Maintenance rule working hours will further limit allowed working hours	M	Marginal	Cost					Potentially extend outage Durations and/or increase costs	EPU management working with Licensing to ensure an acceptable procedure which will minimize the impact to EPU

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III. Risk and Mitigation

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Origin Date	Risk Event Description	PMIC	Impact Level	Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob. Level	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
5/29/08	WEC and SHAW vendor staffing level may not be sufficient to support project	M	Significant	Schedule	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Could cause delays with LAR schedule and/or cost additional monies	Westinghouse provided Recovery Plan Mitigation actions being implemented Will continue to monitor the effectiveness of actions Agreement on re-baselining reached; no impact to end date for Shaw and WEC
4/23/09	FPL PRA support is not adequate to complete all activities within the schedule.	[REDACTED]	Significant	Schedule	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	There are a large number of activities which need to be performed as well as PSL and PTN PRA activities are being performed concurrently with all tasks being scheduled in series. PRA group has limited resources to accomplish this and several tasks have no resources assigned at all.	Determine if any activities can be accomplished in parallel Supplement staff through EPU if necessary
6/3/2008	Transition to Nuclear Asset Management Systems (NAMS)	M	Marginal	Programmatic	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	May cause delays with review and approval of work planning.	Per Fleet wide Change Management Plan Hold meeting with NAMS coordinator and Site PMs
2/12/08	License Amendment Request NRC Review could be delayed due to errors and omissions - NRC Acceptance - NRC Technical Review - ACRS Review - SBLOCA Confirmatory Analysis	[REDACTED]	Critical	Regulatory / Schedule	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Depending on the extent of the delay, could result in additional cost and extension of the project length Engineering Resources are needed to support LAR	1. Prepare LAR consistent with RS-001, NRR Review Standard for Extended Power Upgrades. • Develop EPP1 for format and level of detail 2. Use Ginna EPU submittal as a guide for format and level of detail 3. Sequester reviews and challenge boards at certain Interim LAR milestones • Self Assessment after 1st LAR Section 4. Multi-party peer reviews using industry and regulatory experts 5. Advance meetings with NRC prior to submittal 6. VP Nuclear Power Uprate met with NRR management 7/21/08 7. Monthly meetings with NRR 8. CNO met with EDO on 3/23 to discuss schedule 9. Plan to establish a presence in Washington to coordinate NRC questions and responses to RAs Current schedule adequate to meet current needs
4/8/08	Based on the amount of work planned, the work may not be sufficiently integrated to prevent interference with implementation	M	Marginal	Schedule	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Potential to extend the Outage duration	Schedule Fragments to be reviewed by Bechtel and Project team after Scope, Outage Durations and Crane condition are better defined

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Origin Date	Risk Event Description	THREAT	Impact Level	Type	Maximum Cost Exposure (\$500)	Type of Estimator	Prob. Level	Weighted Risk Exposure (\$500)	Impact Description	Mitigation Action
7/15/09	SDVs to Condenser and Runback	M	Significant	Cost	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Potential Plant Trips / Loss of MW	Install Runback modifications
7/18/09	Interim Operation Evaluation (Umbrella Operation/Evaluation)		Significant	Cost					Loss of Interim setpoints and configuration; Potential of system transients/trip	Prepare evaluation, Revise appropriate procedures, Ops training
7/18/09	Runback Circuit Mods for Condensate, SG feedwater, and heater Drains Pumps		Critical	Cost					Potential Plant Trips / Loss of MW	Install successful runback circuit
7/18/09	Wrap Around Mod for LAR		Significant	Cost					Plant Configuration may not match Plant Technical Specification	Identify inputs, Perform modification
7/18/09	Gland Steam Piping to Gland Steam Condenser is undersized		Significant	Cost					Potential Turbine damage	Resize the gland steam piping
7/18/09	SG Feedwater Pump Recirc Lines		Significant	Cost					Potential feedpump damage	Implement modification to increase recirculation pipe size
7/18/09	CCW Cooling Capacity Undersized	M	Critical	Cost					Exceed Technical Specification limits for component cooling water components	Complete analysis and implement any analysis
7/18/09	Emergency Containment Filter Removal (Abandon in place is budgeted)	M	Marginal	Cost					Potential reduction to outage durations not realized	Remove one housing and removal of internal components of two
7/10/09	Add Fdwr Htr #1 thru #4 Digital Level Controls	M	Significant	Cost					Control Stability during transients	Implement modification
7/18/09	Turbine Building Structure Mods (potential)	M	Significant	Cost					Vibration and potential equipment damage	Repair building structure / structure analysis
7/18/09	Siemens generator bonus (per contract)	M	Significant	Cost					Unbudgeted funds	Improve schedule to delay additional costs

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III. Risk and Mitigation

Risk Matrix

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Origin Date	Risk Event Description	HML	Impact Level	Type	Maximum Cost Exposure (\$000)	Type of Estimate	Prob. Level	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
7/8/09	Siemens Turbine bonus Upgrade (per contract)	M	Significant	Cost	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	Unbudgeted funds	Improve schedule to defray additional costs
24 7/22/09	Spent Fuel Cooling 100% Redundant Heat Exchanger	M	Significant	Cost					Single point failure vulnerability decreased plant margin	Install second redundant Heat Exchanger
25 7/22/09	Additional Westinghouse and Shaw PIN growth		Significant	Cost					Unbudgeted funds	Scope control
26 7/22/09	Aux Feedwater Pump Upgrade	M	Significant	Cost					Required Pump overhauls to meet Plant Technical Specifications	Ensure pumps upgraded including spares; complete analysis
27 7/22/09	Lack of Completeness of MOD Eng. & Lack of Detail Estimates		Significant	Cost					Future cost overruns due to scope growth	Complete Engineering
28 7/22/09	Transportation for Siemens Component		Significant	Cost					Cost overrun per contract	Fund cost
29 7/22/09	Siemens Implementation: Charge and Delay Claims		Significant	Schedule					Unbudgeted funds	Strong Contract Management and Oversight
30 7/22/09	BOP Piping Vibration Modifications		Significant	Cost/ Schedule					Evaluate existing & expected EPU vibration to BOP piping and implement recommended mods as necessary	Engineering evaluation in progress, scope has not been identified
								\$147,097		

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III. Risk and Mitigation

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- Undefined Scope in Formal Analysis [REDACTED] 1
- High Risks accounts for [REDACTED] of weighted Risks 2
Exposure
- Medium Risks accounts for [REDACTED] of weighted Risk 3
exposure

ICDR 1.6b-3 EPU

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IV. NRC Schedule

1CDR 1.6b-3 EPU

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IV. NRC Schedule

NRC LAR Schedule

- **AST LAR submitted 6/25/09**
 - Staff acceptance review in progress
 - Responding to two requests
 - 12 month review projected

- **EPU LAR Planned submittal in June 2010**
 - 14 month review period projected

ICDR 1.6b-3 EPU

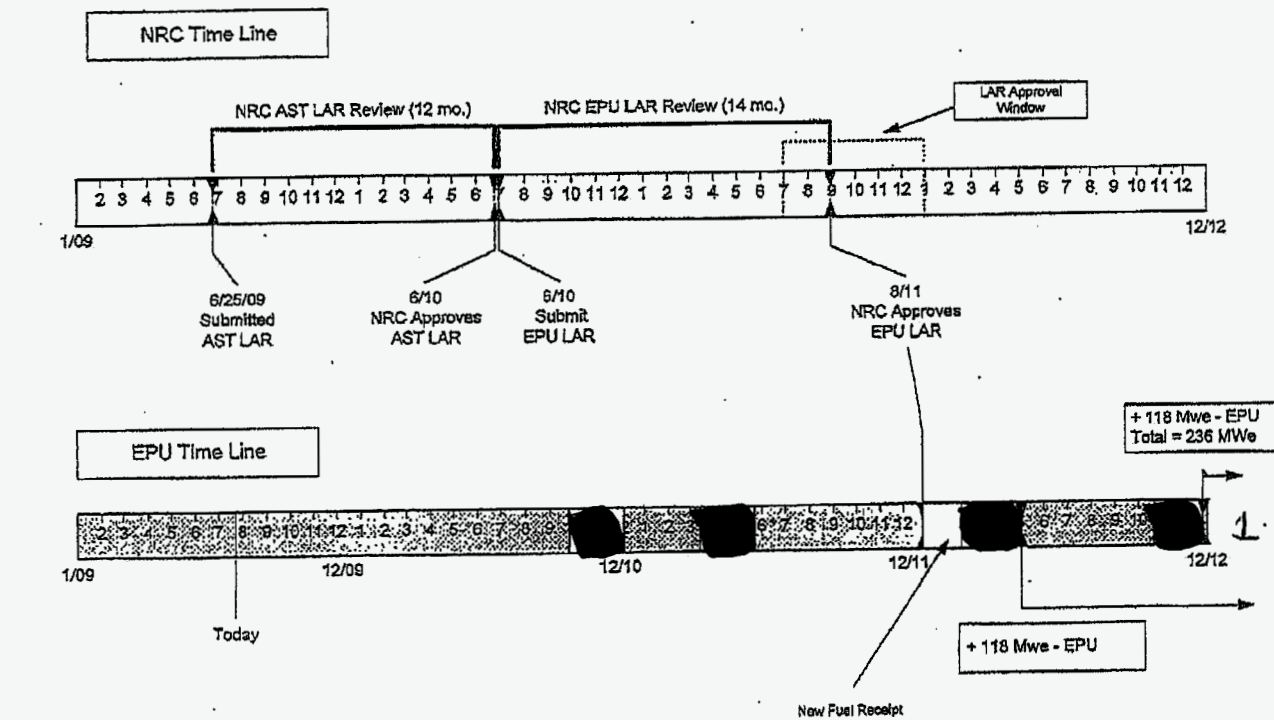
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IV. NRC Schedule

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Turkey Point Timeline



ICDR 1.6b-3 EPU

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V. Lessons Learned

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- **Scope Control**
 - Did not use formal process such as Plant Review Board to approve scope growth during design process prior to 01/01/09
 - No formal cost benefit was performed on design changes
 - Changes were made late in the designs (design evolution)
- **Cost Reporting and Early Warning**
 - No contingency established of emergent items or increased scope
 - Must include contingency based on level of risk/progress on project
 - Key Performance Indicators not established early
 - Individual Modifications Budgets and Site Department budgets not established

ICDR 1.6b-3 EPU

001277



V. Lessons Learned

• Contingency and Risk Assessment

- Did not assess the licensing risks and establish contingency that was aligned to the licensing risk
- Did not look at individual projects risks early such as Feedwater heaters
- Need a better way to assess risks to material costs increases
- Under estimated the risk and costs associated with the fast track project concept
- Did not assess the regulatory risk of the linked LAR to AST

• NRC Licensing Costs

- Need a formal licensing risk analysis of the LAR and related issues
- Did not assess the risk of legacy plant issues associated with LAR analysis
- Need to follow industry trends for estimating licensing costs and factor in plant specific scope considerations



V. Lessons Learned

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- **Fast Track Modification Control**

- Looked at the project only from a high level risk assessment
- Should have done a more detailed risk assessment when establishing the budget
- Did not assess the quality of original site staffing due to fast tracking

ICDR 1.6b-3 EPU

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DRAFT

Extended Power Upgrades Project Update Saint Lucie

July 25 2009

Draft - Proprietary & Confidential Business Information

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Agenda

- **Background**
- **Overview**
- **Area Summary & Line by Line**
- **Implementation**
- **Risk and Mitigation**
- **Implementation Options**
 - NRC Licensing Schedule
 - 35/85 Option
 - FPSC Needs Filing
 - Cost & MWE
 - CPVRR Results summary
- **Lessons learned**



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Background

- **Fast Track schedule working outside the project management process resulted in cost uncertainty**
- **Schedule plan based on minimizing regulatory risk**
 - Activity progression different from conventional sequence
- **Full scope still not known**
 - Many costs are still at the conceptual level



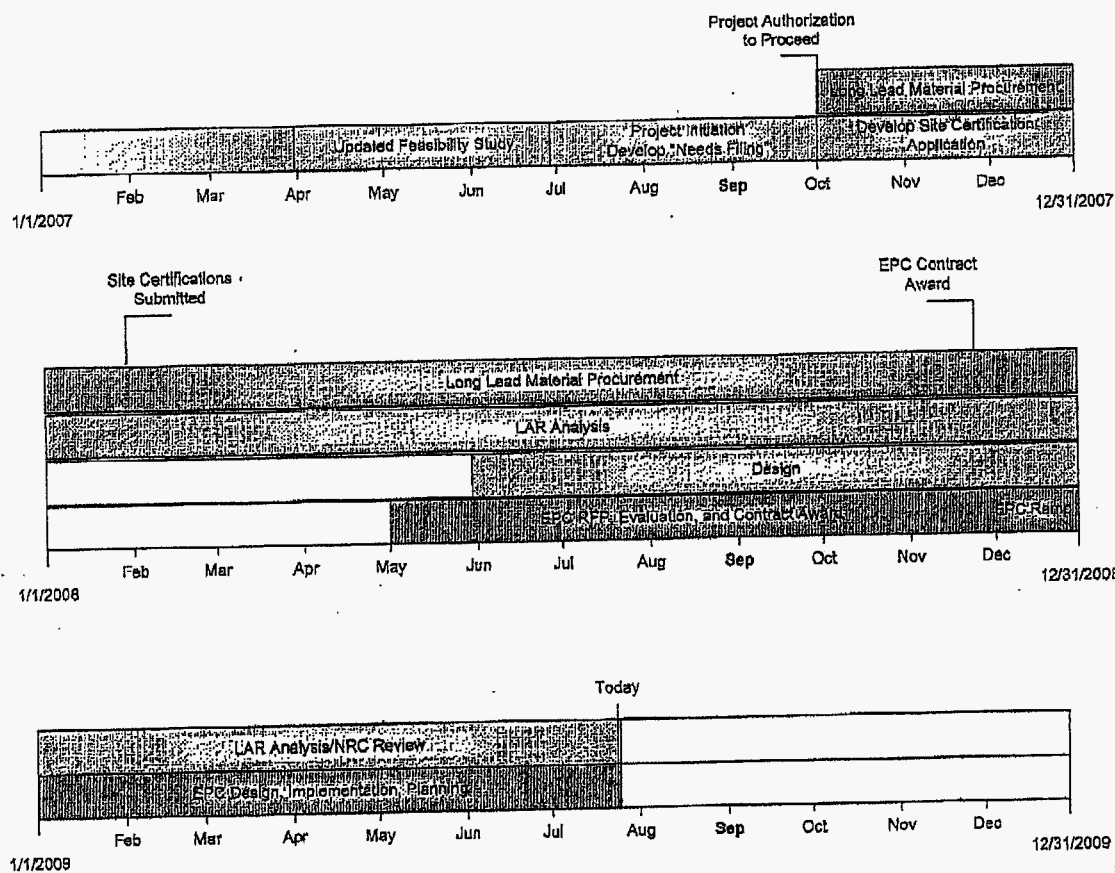
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Background

Key Activities and Milestones Leading to Current Situation (2007-2009)



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I. Overview



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I. Overview

Plans and Targets

	PROFORMA		FORECAST	
	U-1	U-2	U-1	U-2
LAR Submittal	9/01/09	9/01/09	9/30/09	1/31/10
1 st Outage				
Duration				
2 nd Outage				
Duration				
In Service Date	October 2011	April 2012	December 2011	June 2012
MWE	103	103	129 ⁵	136 ⁵

1
2
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6

Notes

All Outage durations to be reviewed & approved by CNO upon completion of scope definition

¹ Outage durations driven by Generator rewind currently in the approved Outage schedule

³ Outage duration driven by HP & LP Turbine and MSR Replacements

⁴ Target goal for Six Sigma Team rewind outage durations

⁵ MWe based on Siemens heat balance (contract target)

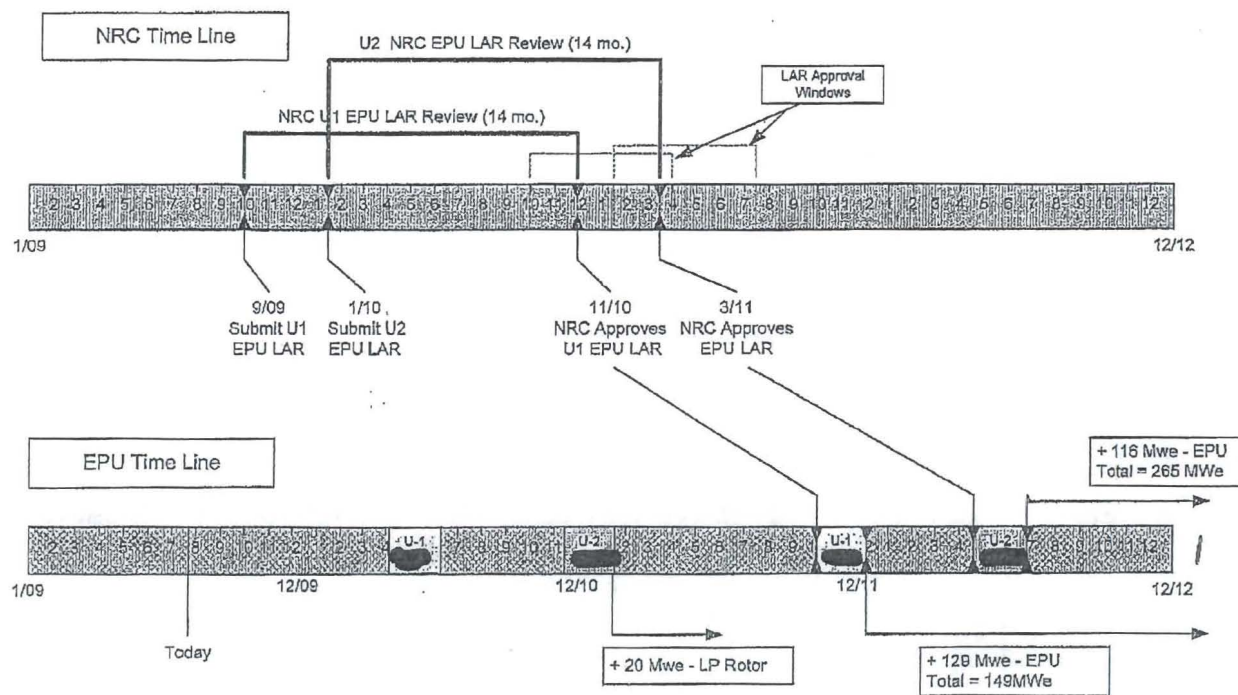
Longer duration Outages have been included in the business model



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I. Overview

St. Lucie Timeline



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Overview – St. Lucie

Cost Overview

	ORIGINAL ESTIMATE	CURRENT FORECAST	VARIANCE	ACTUAL/ ACCRUALS	AMOUNT TO GO
LAR	\$45,487,000	\$72,593,139	(\$27,106,139)	\$40,367,341	\$32,225,798
ENGINEERING	\$18,678,000	\$36,206,073	(\$17,528,073)	\$7,756,071	\$28,450,002
MATERIALS	\$220,855,900	\$255,103,129	(\$34,247,229)	\$43,080,988	\$212,022,141
IMPLEMENTATION	\$119,714,200	\$360,383,433	(\$240,669,233)	\$20,848,457	\$339,534,976
SCOPE UNDEFINED / RISK ITEMS	\$182,130,797	\$60,031,616	\$122,099,181		\$60,031,616
ESCALATION	\$69,524,707	\$11,640,000	\$57,884,707		\$11,640,000
TOTAL	\$656,390,604	\$795,957,390	(\$139,566,786)	\$112,052,857	\$683,904,533

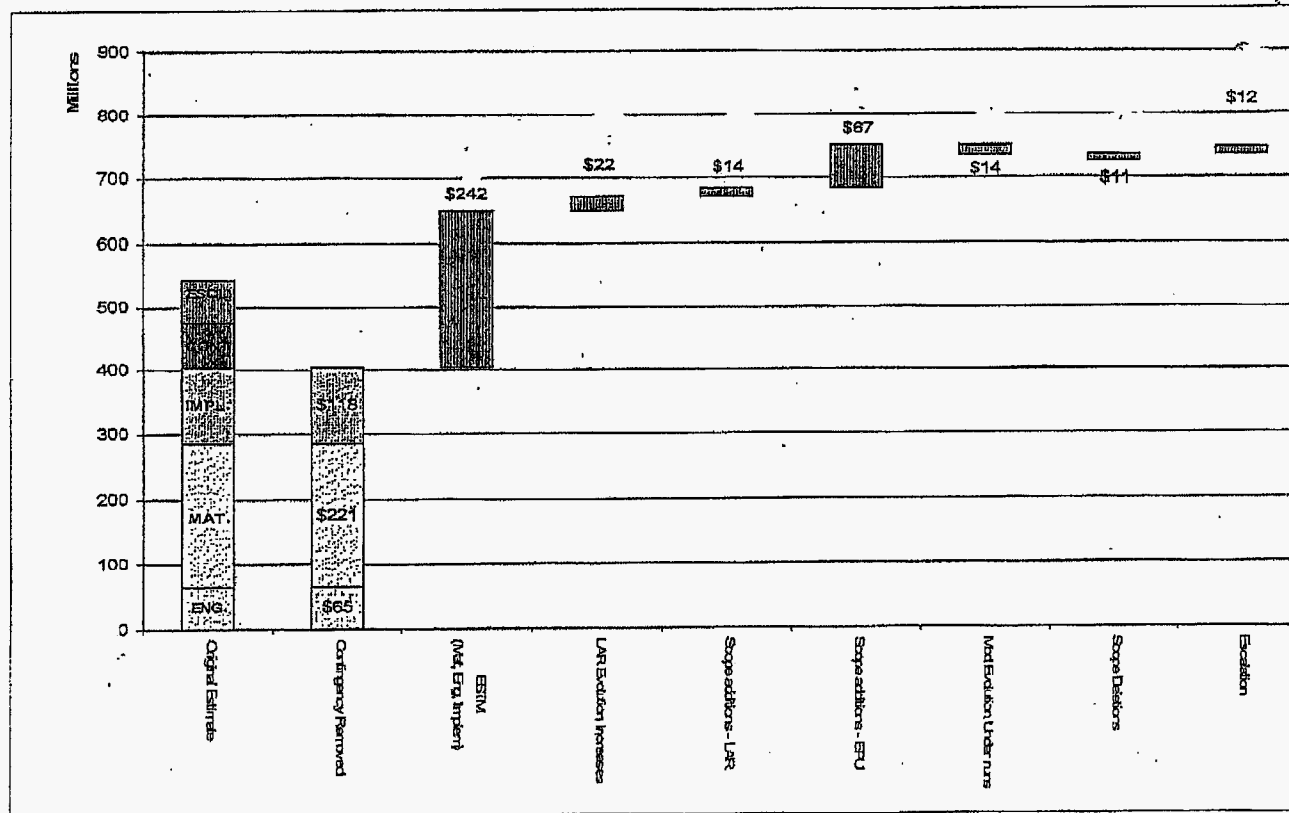
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Forecast Overview Walk-Thru
Identifies changes from original budget to current forecast



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II. Area Summary and Overview



II. Area Summary

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Current Budget of \$656M increased to \$736M (Current Forecast)

- The causes is primarily due to the budget being based on feasibility study / estimates not detailed engineering and project planning:
 - LAR and initial design evaluations identified additional scope not addressed in Feasibility Study.
 - Bechtel Field Non-manual (FNM) costs for the EPC contract are higher than originally expected.
 - Material costs have increased for large components such as pumps and large valves
 - Capacity of the plant and other support organizations to absorb additional work was under estimated
 - Allowance for new scope was underestimated
 - Base scope contract cost were higher than estimated

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II. Area Summary

Licensing Costs

- **Licensing costs increased by \$27M due to higher than budgeted base scope major contract costs**
 - WEC
 - Shaw
 - Areva

II. Line by Line - LAR

Base Scope costs were higher than expected

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DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	EXPLANATION OF SIGNIFICANT VARIANCE
NSSS Analysis and Engineering				
Westinghouse Unit 2 Fuels, NSSS	\$25,157,000			Base Scope
Areva Unit 1 Fuels, Unit 2 RSGs, Rx Heads				Base Scope (original budget for RSGs shown)
B&W Canada RSGs	\$500,000			Base Scope
Areva Unit 2 RSGs	\$200,000			Included in Areva scope above
Contract Incentives				Base Scope
RAI Support				Base Scope
PRA Analysis	\$350,000			ACRS now requires showing EPU is risk beneficial
Areva Add'l Sensitivity Runs--SBLOCA, SDBS, SBO, LBLOCA, SGTR				Additional analysis to achieve acceptable results
Containment Spray Flow Reanalysis--LBLOCA				Emergent technical issue from CBDIs
Post-LOCA LTC add'l analysis				Initial results were unacceptable
New P-T Curves				Saves extensive additional effort in 2 - 3 years to reanalyze and license new P-T curves
Mid Process Scope Review Changes				#5 FWH replacement scope deletion
Additional Analyses				Reduced HPSI flow for SBLOCA, additional analyses from review cycle, pwr nozzle loads
SUBTOTAL	\$26,207,000	\$41,931,385	-\$15,724,385	
BOP Analysis and Engineering				
Shaw BOP Analyses	\$7,350,000			Base Scope
ETAP Analysis	\$400,000			Base Scope--Included in BOP analysis
Contract Incentives				Base Scope
RAI Support				Base Scope
Separate reports for PSL1 and PSL2 LARs				Separating PSL1 and 2 LAR schedules forced issuing certain deliverables twice, once for each unit to reflect each unit's analysis
Piping Vibration Analysis				High displacements at PSL atypical
PORV Piping Analysis				Analysis reconstitution required
Rx Vessel Supports Increased Temps				Temps exceeded existing values analyzed
High Containment Spray Flow				Emergent technical issue from CBDIs
Mid Process Scope Review Changes				#5 FWH replacement scope deletion
Additional Analyses				Additional analyses from review cycle
SUBTOTAL	\$7,750,000	\$13,269,355	-\$5,519,355	

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II. Line by Line - LAR

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DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	EXPLANATION OF SIGNIFICANT VARIANCE
Grid Stability Risk Study	\$250,000	\$0	\$250,000	
Other Contracts				
Third Party Reviews/Owner Support	\$222,000			Review vendor outputs, generate CLBs, LR sections
Radiological Analyses				Base Scope-Update AST analyses for EPU
Spent Fuel Criticality Analysis				Base Scope
Other Analyses Update				Base Scope
Integrated LAR Compilation				Compile LAR in E-form for submittal
Additional Analyses				Owners support and radiological
Other RAI Support				
SUBTOTAL	\$222,000	\$3,460,795	-\$3,238,795	
NRC Review Fees	\$3,000,000			2 EPU Independent LARs, recent EPU 10,000 hours, TRACE model confirmatory analysis
Licensing and Environmental				Environmental permitting analysis
SUBTOTAL	\$4,480,000	\$4,158,604	\$321,396	
LAR Internal Staffing	\$6,578,000			Owners Functions-Additional effort for 2 EPU LARs
Total	\$45,487,000	\$72,593,139	-\$27,106,139	

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II. Area Summary

Engineering Costs

- **Modification Engineering costs increased by \$18M primarily due to new scope additions and existing design issues.**
 - Detailed LAR evaluations identified additional scope and existing design issues not addressed in Feasibility Studies.
 - New scope items identified in the Shaw Scoping Study and evolution of the LAR.
 - Lack of margin in secondary systems, structures, and components
 - Addition of EPC contractor necessitates additional EPU BOP Vendor (Shaw) interface
 - EPC vendor used for PC/M development

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II. Line by Line - Engineering

Modification Engineering costs increase primarily due to new scope additions and existing design issues.

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ENGINEERING (EXCLUSIVE OF LAR)				EXPLANATION / NOTES
DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	
OVER-RUNS				
ALLOWANCE FOR MSR REPAIR / REPLACEMENT	\$ 1,300,000	\$ [REDACTED]	[REDACTED]	MSR's are larger than existing, additional impacts to structures and systems, includes Bechtel Engineering costs.
HP / LP / GENERATOR TOTAL	\$ 2,220,000	\$ [REDACTED]	[REDACTED]	Bechtel Engineering costs for design package.
REPLACE 2 HP FW HTRS - # 8	\$ 345,000	\$ [REDACTED]	[REDACTED]	Heaters are larger than existing, additional impacts to structures and systems, includes FAC pipe replacement, Bechtel pre-outage ramp value excessive, includes Bechtel Engineering costs.
PROJECT SUPPORT - FPL HOME OFFICE	\$ 1,482,000	\$ [REDACTED]	[REDACTED]	Required support for original scope and additional scope underestimated. 1 FTE's estimated, 3 FTE's forecasted.
MODIFY ISOLATED PHASE BUS DUCT COOLING SYSTEM	\$ 200,000	\$ [REDACTED]	[REDACTED]	Component inspections identified additional scope from linkage and bus damage, also due to increased temperatures at EPU conditions an auto transfer feature is now required. Includes Bechtel Engineering costs.
PROJECT SUPPORT - 23 FPL CONTRACTORS	\$ 4,075,500	\$ [REDACTED]	[REDACTED]	Required support for original scope and additional scope underestimated. 11 FTE's estimated, 15 FTE's forecasted.
REPLACE TRANSFORMERS	\$ 350,000	\$ [REDACTED]	[REDACTED]	Revised scope from replacing 4 transformers to replace 2, upgrade coolers, and swap spare, includes Bechtel Engineering costs.
CONDENSER MODIFICATIONS	\$ 100,000	\$ [REDACTED]	[REDACTED]	Combined all other Condenser modifications, increased scope based on vendor recommendations for tube staking and air removal piping modifications, includes Bechtel Engineering costs.
FEED PUMP MODIFICATION	\$ 500,000	\$ [REDACTED]	[REDACTED]	Revised scope from refurbish existing pumps to replace with new, includes Bechtel Engineering costs.
UPGRADE CONDENSATE PUMPS	\$ 100,000	\$ [REDACTED]	[REDACTED]	Revised scope from refurbish existing pump rotating assemblies to replace with new, includes Bechtel Engineering costs.
CONTROL ROOM AC MARGIN ISSUE - PSL2 ONLY	\$ 400,000	\$ [REDACTED]	[REDACTED]	Original estimate was not sufficient for safety related installation and missile protection requirements, includes Bechtel Engineering costs.
REPLACE #2 HEATER DRAIN CONTROL VALVE	\$ 180,000	\$ [REDACTED]	[REDACTED]	Increase in scope from 2 to 10 valve replacements, includes Bechtel Engineering costs.
FW REGULATING VALVE (FRV) REPLACEMENT	\$ 120,000	\$ [REDACTED]	[REDACTED]	Revised scope from refurbish existing valves to cut out and replace with new valves and actuators, includes Bechtel Engineering costs.
MSIV ACTUATOR REPLACEMENT	\$ 125,000	\$ [REDACTED]	[REDACTED]	Revised scope from refurbish existing actuators to replace with new actuators, includes Bechtel Engineering costs.
UPDATE CHECKWORK FOR FAC	\$ 100,000	\$ [REDACTED]	[REDACTED]	Minor
TOTAL				(\$12,727,994)
UNDER-RUNS				
MISC MATERIALS AND SERVICES	\$ 1,150,000	\$ [REDACTED]	[REDACTED]	Allocated to other mods
ELEC BUS SYSTEM MARGIN IMPROVEMENT	\$ 820,000	\$ [REDACTED]	[REDACTED]	Minor
COMMUNITY OUTREACH	\$ 370,000	\$ [REDACTED]	[REDACTED]	Allocated to other mods
BOP INST. & CTRL SETPOINT, RESCALING, & HOWR CHNGS	\$ 450,000	\$ [REDACTED]	[REDACTED]	
CONTROL ROOM HABITABILITY UPGRADES	\$ 645,000	\$ [REDACTED]	[REDACTED]	Bechtel Engineering costs.
DEH COMPUTER REPLACEMENT	\$ 800,000	\$ [REDACTED]	[REDACTED]	Material costs less than estimated based on PTN bids for similar scope, includes Bechtel Engineering costs.
UPDATE EQ QUALIFICATION DQC PACKAGES	\$ 250,000	\$ [REDACTED]	[REDACTED]	Allocated to other mods
CONDENSER MODS - MATERIAL CONDITION	\$ 200,000	\$ [REDACTED]	[REDACTED]	Scope moved to Condenser Upgrade Modification
IMPLEMENT LEFM CHECK PLUS MUR	\$ 500,000	\$ [REDACTED]	[REDACTED]	Implementation costs were underestimated based on Shaw scoping study, includes Bechtel Engineering costs.
SIMULATOR UPGRADE	\$ 50,000	\$ [REDACTED]	[REDACTED]	Minor
TOTAL				\$3,547,288

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ENGINEERING (EXCLUSIVE OF LAR)				EXPLANATION / NOTES
DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	
SCOPE INCREASES				
SHAW	\$ -	\$ [REDACTED]	\$ [REDACTED]	Additional support and analysis, bid specifications and design interface with EPC vendor
TCW HEAT EXCHANGERS	\$ -	\$ [REDACTED]	\$ [REDACTED]	New scope not in feasibility evaluation - Identified in Shaw scoping study
INCREASE STEAM BYPASS FLOW TO CONDENSER - PSL1	\$ -	\$ [REDACTED]	\$ [REDACTED]	New scope - LAR
HEATER DRAIN / MSR SYSTEM DIGITAL CONTROLS	\$ -	\$ [REDACTED]	\$ [REDACTED]	New mod resulting from elimination of Feedwater Heater Digital controls.
IMPROVE HOT LEG INJ FLOW	\$ -	\$ [REDACTED]	\$ [REDACTED]	New scope - LAR
HEATER DRAIN PUMPS REPLACEMENT & SPARE	\$ -	\$ [REDACTED]	\$ [REDACTED]	New scope resulting from Shaw BOP hydraulic modeling.
TURBINE GANTRY CRANE	\$ -	\$ [REDACTED]	\$ [REDACTED]	New scope - Reliability and margin improvement
STRENGTHEN PARTITION PLATES 4A & 4B FW HEATERS	\$ -	\$ [REDACTED]	\$ [REDACTED]	New scope - LAR
RESIZE MSR FLOW ORIFICES	\$ -	\$ [REDACTED]	\$ [REDACTED]	New scope resulting from Shaw BOP hydraulic modeling.
TOTAL				(\$10,040,636)
SCOPE DELETIONS				
ADD FW HEATER LEVEL DIGITAL CONTROLS	\$ 1,020,500	\$ [REDACTED]	\$ [REDACTED]	Modification not required for EPU after Engineering review
REWIND CONDENSATE PUMP MOTORS FOR 8.9 KV	\$ 300,000	\$ [REDACTED]	\$ [REDACTED]	Modification not required for EPU after Engineering review
DEH CONSTANT PRESSURE PUMPS	\$ 200,000	\$ [REDACTED]	\$ [REDACTED]	Modification not required for EPU after Engineering review
MAIN STEAM SAFETY VALVE ORIFICE CHANGE	\$ 100,000	\$ [REDACTED]	\$ [REDACTED]	Modification not required for EPU after Engineering review
CIRCULATING WATER PUMP REFURBISHMENT	\$ 100,000	\$ [REDACTED]	\$ [REDACTED]	Modification not required for EPU after Engineering review
MAIN STEAM SAFETY VALVES / PIPING MODIFICATIONS	\$ 125,000	\$ [REDACTED]	\$ [REDACTED]	Modification not required for EPU after Engineering review
TOTAL				\$1,693,271
GRAND TOTAL				(\$17,528,073)

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II. Scope Reductions

Scope Reductions

Item	Description	Proposed	Comments	Risk
1	Circulating Water Pump Refurbishments - refurb pumps to original design condition	Re-establishes original baseline of pumps and improves reliability	Risk for down-powering Units in summer months. Cannot be justified for EPU	Med
2	Condensate Suction Piping U2 - increase pipe size	Eliminates source of oxygen (strainers) and reduces pipe flow velocities	Does not address pump vibration issues	Med
3	Add Dedicated power Supply for 1C/2C Condensate Pumps - replace exist 1C/2C 4.16 kV motors, install 6.9kV Switchgear cubicle and remove transfer switch	Eliminates existing OPS burden with transfer switch	Auto-swap very expensive and cannot be justified for EPU	Low
4	Replace DEH Constant Pressure Pumps - Replace exist centrifugal pumps with constant pressure	Eliminates obsolete unloading pressure regulators and tubing fatigue issues	Cannot be justified for EPU	Low
5	Feedwater heater digital controls	Improves reliability	Does not eliminate obsolescence issues	Low
6	Main Steam Safety Valve/ Tailpipe Mods	Not required after engineering review	N/A	None
7	Main Steam Safety Valve Orifice Change -	Not required after engineering review	N/A	None
8	Main Steam ADV Trim Change out -	Not required after engineering review	N/A	None
9	Exciter Upgrade / rewind	Not required after Siemens review	None	None

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II. Scope Additions

Scope Additions

Item	Description	Requirement	Risk of not doing	Cost Total
1	Replace TCW Heat Exchangers - Shaw Study	Increased Turbine Generator Heat Loads at EPU Conditions	Existing heat exchangers have no margin for current plant conditions. Downpowers during summer months	\$ [REDACTED]
2	Rod Control Upgrade - Margin	Reliability	Decreased Reliability	\$ [REDACTED]
3	Replace Heater Drain Pumps & Spare - Replace Pump Internals using existing cans and motors - Shaw Study	Need greater flow and NPSH for EPU conditions Original analysis targeted Condensate Pump replacement, but hydraulic model pinpointed Heater Drain pumps	Invalidate EPU Hydraulic Model, jeopardize achieving planned uprate	\$ [REDACTED]
4	Heater Drain/MSR Digital Controls - Replace current pneumatic level controls with digital	Existing pneumatic level controls are obsolete, time consuming to install and difficult to calibrate. Level controls small bore piping must be reworked as part of heat exchanger replacement.	Inability to reinstall and return to working status could delay the outage. Level control failures could result in a plant trip.	\$ [REDACTED]
5	Turbine Gantry Crane - Margin	Gantry Crane parts are obsolete and existing cranes are unreliable to support EPU lift schedule	Outage delays	\$ [REDACTED]
6	Improve Hotleg Injection Flow - Increase flow capability w/ full bore valve or pipe size increase - LAR	Hot leg injection flow requirements to address boron precipitation increase for EPU. Flow path cannot achieve flow. NRC Regulatory requirements.	Invalidate EPU boron precipitation calculation, jeopardize achieving planned uprate. Not in compliance with NRC regulatory requirements	\$ [REDACTED]
7	Shaw Modification Support	Provide package input to EPC contractor as required to support EPU	EPC contractor will not have adequate basis for modifications	\$ [REDACTED]
8	Increase Steam Bypass Flow to Condenser U1 - LAR	Plant trip cannot be accomplished without lifting the MSSV's. Increased capacity and improved opening time will resolve this problem.	MSSV's will lift on a plant trip.	\$ [REDACTED]
9	Strengthen Pass Partition Plates 4A/B FW Heaters - LAR	Partition plate maximum allowable dP is exceeded with 2% tube plugging at EPU conditions. One #4 FWH has 2% tubes plugged. Modification will allow #4 FWH's to accommodate 10% tube plugging similar to all other heaters.	Partition plate failure.	\$ [REDACTED]
10	Spare FW Pump - Shaw Study	To retain Capital Spares stock, a spare FW Pp comparable to the new pumps is required	A current capital spare to replace the existing would not be realized	\$ [REDACTED]
11	Increase MSR/HP Exhaust Relief Capacity - Increase relief valve size based on Input from Turbine Supplier (Siemens) - Margin	EPU steam flows increase by ~12%. Relief valve capacity increase required to protect MSR/LP equipment from overpressure.	Invalidate EPU steam relief requirements, jeopardize achieving planned uprate	\$ [REDACTED]

II. Area Summary

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Material Costs

- Material costs increased from [REDACTED] to [REDACTED] primarily due to Turbine / Generator cost. Increases from project scope estimate to contract establishment.
- Transformer and pump material costs escalate at greater than assumed rates
- Added scope for LAR and Design analysis has also caused increased material cost for the added items

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Material costs increased from \$221M to \$255M primarily due to Turbine / Generator cost.

MATERIAL		ORIGINAL	CURRENT	VARIANCE	EXPLANATION / NOTES
OVER-RUNS					
HP / LP / GENERATOR TOTAL	\$ 141,100,000	\$			Siemens labor included in material contract
FEED PUMP MODIFICATION	\$ 4,150,000	\$			Added costs for Spare Feed Pump
REPLACE 2 HP FW HTS6 - 8.0	\$ 6,000,000	\$			Actual PO values slightly higher than estimate, added FAC piping
UPGRADE CONDENSATE PUMPS	\$ 671,000	\$			Scope change from rebuild to new rotating assemblies
MODIFY ISOLATED PHASE BUS DUCT COOLING SYSTEM	\$ 450,000	\$			Actual PO values higher than estimated
MSW ACTUATOR REPLACEMENT	\$ 30,000	\$			Scope change from rebuild to new actuators
CONTROL ROOM HABITABILITY UPGRADES	\$ 300,000	\$			Original estimate based on GAR Estimate developed in 2005
REPLACE #2 HEATER DRAIN CONTROL VALVE	\$ 65,000	\$			Minor
CONDENSER MODIFICATIONS	\$ 900,000	\$			
TOTAL					(\$25,863,987)
UNDER-RUNS					
REPLACETRANFORMERS	\$ 24,000,000	\$			Scope changed from replace 4 to replace 2 & upgrade 2
DEH COMPUTER REPLACEMENT	\$ 6,000,000	\$			Values obtained from PTN bid proposals
ALLOWANCE FOR MSR REPAIR / REPLACEMENT	\$ 24,000,000	\$			PO value slightly lower than estimate
IMPLEMENT LEFW CHECK PLUS MSR	\$ 4,800,000	\$			PO value slightly lower than estimate
CONDENSER MODS - MATERIAL CONDITION	\$ 600,000	\$			Scope moved to Condenser Upgrade Modification
ELEC BUS SYSTEM MARGIN IMPROVEMENT	\$ 510,000	\$			Minor
SIMULATOR UPGRADE	\$ 500,000	\$			Minor
FW REGULATING VALVE (FRV) REPLACEMENT	\$ 680,000	\$			Minor
KOP INST. & CTRL SETPOINT, REBALANCING DWR CHNGS	\$ 605,000	\$			Minor
CONTROL ROOM AC MARGIN ISSUE - PSLT ONLY	\$ 1,140,000	\$			Minor
TOTAL					\$8,833,178
SCOPE INCREASES					
TOW HEAT EXCHANGERS	\$	\$			New scope not in feasibility evaluation - identified in Shaw scoping study
HEATER DRAIN PUMPS REPLACEMENT & SPARE	\$	\$			New scope resulting from Shaw BOP hydrolic modeling.
HEATER DRAIN / MSR SYSTEM DIGITAL CONTROLS	\$	\$			New mod resulting from elimination of Feedwater Heater Digital controls.
INCREASE STEAM BYPASS FLOW TO CONDENSER - PSLT	\$	\$			New scope - LAR
IMPROVE HOT LEG IN FLOW	\$	\$			New scope - LAR
RESIZE MSR FLOW ORIFICES	\$	\$			New scope - LAR
TOTAL					(\$10,233,162)
SCOPE DELETIONS					
MAIN STEAM SAFETY VALVE ORIFICE CHANGE - DELETED	\$ 1,087,100	\$			Modification not required for EPU after Engineering review
REWIND CONDENSATE PUMP MOTORS FOR 4.5 KV	\$ 600,000	\$			Modification not required for EPU after Engineering review
CIRCULATING WATER PUMP REFURBISHMENT	\$ 2,700,000	\$			Modification not required for EPU after Engineering review
ADD FW HEATER LEVEL DIGITAL CONTROLS	\$ 360,000	\$			Modification not required for EPU after Engineering review
DEH CONSTANT PRESSURE PUMPS - DELETED	\$ 300,000	\$			Modification not required for EPU after Engineering review
MAIN STEAM SAFETY VALVES / PIPING MODIFICATIONS - DEL	\$ 100,000	\$			Modification not required for EPU after Engineering review
TOTAL					\$2,820,661
GRAND TOTAL					(\$34,247,228)

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III. Implementation



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III. Implementation

Project Implementation

- **Original Project Organization structure envisioned minimal staffing supplemented with competent suppliers**
 - Original Structure
 - Self Perform model (FPL + Contractors) using NAP 401
 - Fast track for large component purchase with licensing and design in parallel
 - Project Organization structure changed following performance issues with Point Beach Fall 2008 Outage
 - Abandon Self Perform model and use Engineer-Procure-Construct (EPC) ideology
 - EPC structure targeted A/E with ability to proceed independently (Bechtel)
 - EPU Balance of Plant Vendor (Shaw) services still required for overall EPU assessment



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III. Implementation

Summary of all Implementation Costs

Cost Center	Original Budget	Forecast at Completion	Vs. Current Budget	To Go
Implementation	119,714,200	360,383,433	(240,669,233)	339,534,976
EPC Construction				
Plant Support				
FPL Project Management				
Siemens Labor				
Rod Control				
Outage Extension				
Turbine Gantry Crane				
FPL Juno PM/Eng Support				
Capital, Non-Recoverable				
Scope Growth Allowance				

1 2 3 4



III. Implementation

Implementation Costs

- **Implementation costs increased from \$120M to \$360M.**

- Initial budget / Feasibility Estimate was based on conceptual scoping

- Scope additions contributed to the cost increase above the original budget. Examples of scope adds are Rod Control, TCW Heat Exchanger, and Turbine Gantry Crane upgrades.

- Implementation model changed from FPL self-perform to EPC

- Plant and other owner support was not fully recognized in Feasibility Study.

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III. Implementation - Line by Line

Original implementation estimates on limited field information / conditions.
Costs for EPC contractor are higher than expected

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HP / LP / GENERATOR TOTAL	\$ 44,100,000	\$		Primary contributor is implementation costs. (Bechtel & Siemens)
PLANT SUPPORT	\$ -	\$		Project Services not included in base. Includes Plant and plant craft support, Start-up services, Security, work controls, QA/QC, Construction craft from supplemental labor contract, offices and facilities maintenance.
PROJECT SUPPORT - 28 FPL CONTRACTORS	\$ 19,094,400	\$		Required support for original scope and additional scope underestimated 28 FTE's. Currently at 82 FTE's are required to manage LAR submittals, major procurements and multiple outage construction modifications. Approximately 3,000,000 manhours to implement this project. 8% total project.
REPLACE 2 HP FW HTRS - # 1	\$ 1,650,000	\$		Heaters are larger than existing, additional impacts to structures and systems, includes FAC pipe replacement, Bechtel pre-outage ramp value excessive, includes Bechtel implementation costs.
OUTAGE EXTENSION COSTS	\$ 18,000,000	\$		Original estimate used \$150K per day, forecast based on \$200K per day. Forecast will be adjusted based on final values from Business Operations and outage optimization determination.
CONDENSER MODIFICATIONS	\$ 800,000	\$		Combined all other Condenser modifications, increased scope based on vendor recommendations for tube staking and air removal piping modifications, includes Bechtel implementation costs.
ALLOWANCE FOR MSR REPAIR / REPLACEMENT	\$ 6,660,000	\$		MSR's are larger than existing, additional impacts to structures and systems, includes Bechtel implementation costs.
CONTROL ROOM AC MARGIN ISSUE - PSL2 ONLY	\$ 2,300,000	\$		Original estimate was not sufficient for safety related installation and missile protection requirements, includes Bechtel implementation costs.
MODIFY ISOLATED PHASE BUS DUCT COOLING SYSTEM	\$ 380,000	\$		Component inspections identified additional scope from linkage and bus damage, also due to increased temperatures at EPU conditions an auto transfer feature is now required, includes Bechtel implementation costs.
PROJECT SUPPORT - 5 FPL HOME OFFICE	\$ 1,978,000	\$		Required support for original scope and additional scope underestimated 5 FTE's. 1% total project.
FEED PUMP MODIFICATION	\$ 1,200,000	\$		Revised scope from refurbish existing pumps to replace with new, includes Bechtel implementation costs.
BOP INST. & CNTRL SETPOINT, RESCALING & HDWR CHNGS	\$ 210,000	\$		Based on clarification of scope as design evolves.
OFFICE TRAILER PARK / EQUIPMENT / CAPITAL PURCHASE	\$ 30,000	\$		Original estimate was not sufficient for rental of outside facility large enough to house the EPU project team and Bechtel, for 2 years and inclusion of Jupiter West facility.
REPLACE #2 HEATER DRAIN CONTROL VALVE	\$ 150,300	\$		Increase in scope from 2 to 10 valve replacements, includes Bechtel implementation costs.
IMPLEMENT LEFM CHECK PLUS MUR	\$ 1,600,000	\$		Implementation costs were under estimated based on Shaw scoping study, includes Bechtel implementation costs.
PROJECT RELATED O&M	\$ -	\$		Allowance for O&M related accounting treatment
FW REGULATING VALVE (FRV) REPLACEMENT	\$ 340,000	\$		Revised scope from refurbish existing valves to cut out and replace with new valves and actuators, includes Bechtel implementation costs.
REPLACE TRANSFORMERS	\$ 4,388,000	\$		Revised scope from replacing 4 transformers to replace 2, upgrade coolers, and swap spare, includes Bechtel implementation costs.
CONTROL ROOM HABITABILITY UPGRADES	\$ 325,000	\$		Bechtel implementation costs.
ELEC BUS SYSTEM MARGIN IMPROVEMENT	\$ 560,000	\$		Bechtel implementation costs.
UPGRADE CONDENSATE PUMPS	\$ 587,000	\$		Revised scope from refurbish existing pump rotating assemblies to replace with new, includes Bechtel implementation costs.
SIMULATOR UPGRADE	\$ 300,000	\$		Bechtel implementation costs.
MSV ACTUATOR REPLACEMENT	\$ 60,000	\$		Revised scope from refurbish existing actuators to replace with new actuators, includes Bechtel implementation costs.
TOTAL				(\$193,810,171)
UNDER-RUNS				
ALLOWANCE FOR SCOPE	\$ 4,000,000	\$		Allocated to other mods



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III. Implementation - Line by line

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CONSTRUCTION / IMPLEMENTATION				EXPLANATION / NOTES
DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	
UNDER-RUNS				
ALLOWANCE FOR SCOPE	\$ 5,000,000	\$ [REDACTED]		Allocated to other mods
CONDENSER MODS - MATERIAL CONDITION	\$ 2,500,000	\$ [REDACTED]		Scope moved to Condenser Upgrade Modification
DEH COMPUTER REPLACEMENT	\$ 2,000,000	\$ [REDACTED]		Material costs less than estimated based on PTN bids for similar scope, includes Bechtel implementation costs.
MISC MATERIALS AND SERVICES	\$ 200,000	\$ [REDACTED]		Allocated to other mods
TOTAL			\$8,084,689	
SCOPE INCREASES				
ROD CONTROL UPGRADE	\$ -	\$ [REDACTED]		New scope - Reliability and margin improvement
TOW HEAT EXCHANGERS	\$ -	\$ [REDACTED]		New scope not in feasibility evaluation - Identified in Shaw scoping study
TURBINE GANTRY CRANE	\$ -	\$ [REDACTED]		New scope - Reliability and margin improvement
HEATER DRAIN / MSR SYSTEM DIGITAL CONTROLS	\$ -	\$ [REDACTED]		New mod resulting from elimination of Feedwater Heater Digital controls.
IMPROVE HOT LEG INJ FLOW	\$ -	\$ [REDACTED]		New scope - LAR
HEATER DRAIN PUMPS REPLACEMENT & SPARE	\$ -	\$ [REDACTED]		New scope resulting from Shaw BOP hydrolic modding.
INCREASE STEAM BYPASS FLOW TO CONDENSER - PSL1	\$ -	\$ [REDACTED]		New scope - LAR
STRENGTHEN PARTITION PLATES 4A & 4B FW HEATERS	\$ -	\$ [REDACTED]		New scope - LAR
RESIZE MSR FLOW ORIFICES	\$ -	\$ [REDACTED]		New scope resulting from Shaw BOP hydrolic modding.
INCREASE MSR / HP EXHAUST RELIEF CAPACITY	\$ -	\$ [REDACTED]		New scope resulting from Shaw BOP hydrolic modding.
TOTAL			(\$80,087,251)	
SCOPE DELETIONS				
ADD FW HEATER LEVEL DIGITAL CONTROLS	\$ 2,200,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
REWIND CONDENSATE PUMP MOTORS FOR 4.8 KV	\$ 750,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
MAIN STEAM SAFETY VALVE ORIFACE CHANGE	\$ 730,500	\$ [REDACTED]		Modification not required for EPU after Engineering review
CIRCULATING WATER PUMP REFURBISHMENT	\$ 600,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
MAIN STEAM SAFETY VALVES / PIPING MODIFICATIONS	\$ 543,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
DEH CONSTANT PRESSURE PUMPS	\$ 300,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
TOTAL			\$5,123,500	
GRAND TOTAL			(\$240,669,233)	

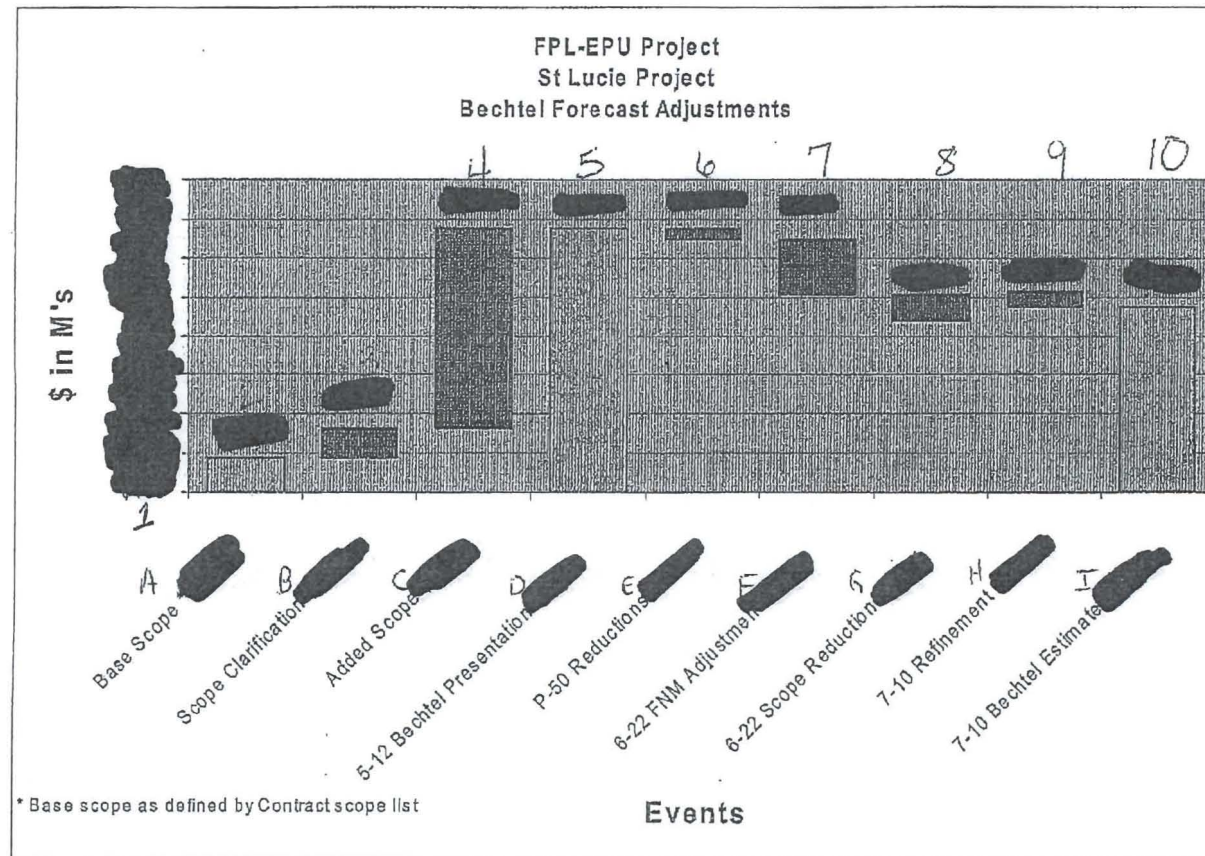
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Bechtel Proposal Estimate Changes



III. Implementation

Change Walk- Thru

BECHTEL FORECAST TIMELINE

MONTH	EVENT	NUMBER OF MODS	FORECAST FPL (EL) BECHTEL (EL)	NOTES
May-09	BECHTEL PROVIDED INDICATIVE VALUES AS PART OF TOTAL PROJECT FORECAST	19	[REDACTED]	BASED UPON ORIGINAL BECHTEL "INDICATIVE STAFFING PLANS" Based on 19 EPC Modifications
May-09	INITIAL BECHTEL TOTAL PROJECT FORECAST	49	[REDACTED]	BECHTEL SUBMIT INITIAL TOTAL PROJECT ESTIMATE 49 Modifications with Bechtel involvement (Based on [REDACTED] Scope Growth and [REDACTED] Clarification) 34 Mods 19 Original EPC Modifications Plus 15 New modifications added to Spec M-157 15 New Items 5 MSP's, 4 new mods, 5 LAR Modifications and 1 support other vendors. P-50 ESTIMATE BASED ON PARAMETERS PROVIDED BY FPL 49 Modifications with Bechtel involvement
June-09	P-50 REV.0 ESTIMATE	49	[REDACTED]	34 Mods 19 Original EPC Modifications Plus 15 New modifications added to Spec M-157 15 New Items 5 MSP's, 4 new mods, 5 LAR Modifications and 1 Support other vendors. REDUCED CONTINGENCY IN FIELD NON-MANUAL STAFFING
June-09	P-50 REV.1 ESTIMATE	49	[REDACTED]	3 SCOPE REDUCTIONS 40 Modifications with Bechtel involvement
June-09	P-50 REV.2 ESTIMATE	40	[REDACTED]	9 Deleted scope SCOPE REFINEMENT 40 Modifications with Bechtel involvement
July-09	P-50 REV.3 ESTIMATE	40	[REDACTED]	5 9 Deleted scope Based on scope refinement and Gap analysis

A



III. Line by Line – Total

This table represents the total variance between the original budget and the current forecast. Further breakdown for LAR, engineering, materials and implementation appear in other slides.

TOTAL	DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	EXPLANATION / NOTES
OVER-RUNS					
HP / LP / GENERATOR TOTAL		\$ 187,420,000	\$ [REDACTED]		Primary contributor is implementation costs (Bechtel and Siemens)
PLANT SUPPORT		\$ -	\$ [REDACTED]		Project Services not included in base. Includes Plant and plant craft support, Start-up services, Security, work controls, QA/QC, Construction craft from supplemental labor contract, offices and facilities maintenance.
LAR		\$ 45,487,000	\$ [REDACTED]		See Detailed LAR Analysis
PROJECT SUPPORT - 28 FPL CONTRACTORS		\$ 22,149,400	\$ [REDACTED]		Required support for original scope and additional scope underestimated 28 FTE's. Currently at 52 FTE's are required to manage LAR submittals, major procurements and multiple outage construction modifications. Approximately 3,000,000 man-hours to implement this project. 6% total project.
REPLACE 2 HP FW HTS - # 6		\$ 7,895,000	\$ [REDACTED]		Heat exchangers are larger than existing, additional impacts to structures and systems, includes FAC pipe replacement, Bechtel pre-outage ramp valve excessive, includes Bechtel implementation costs.
OUTAGE EXTENSION COSTS		\$ 18,000,000	\$ [REDACTED]		Original estimate used \$185K per day, forecast based on \$200K per day. Forecast will be adjusted based on final values from Business Operations and outage optimization determination.
ALLOWANCE FOR MSR REPAIR / REPLACEMENT		\$ 31,960,000	\$ [REDACTED]		MSR's are larger than existing, additional impacts to structures and systems, includes Bechtel implementation costs.
CONDENSER MODIFICATIONS		\$ 1,600,000	\$ [REDACTED]		Combined all other Condenser modifications, increased scope based on vendor recommendations for tube staking and air removal piping modifications, includes Bechtel implementation costs.
CONTROL ROOM AC MARGIN ISSUE - PSL2 ONLY		\$ 3,840,000	\$ [REDACTED]		Original estimate was not sufficient for safety related installation and missile protection requirements, includes Bechtel implementation costs.
MODIFY ISOLATED PHASE BUS DUCT COOLING SYSTEM		\$ 1,040,000	\$ [REDACTED]		Component inspections identified additional scope from linkage and bus damage, also due to increased temperatures at EPU conditions an auto transfer feature is now required, includes Bechtel implementation costs.
FEED PUMP MODIFICATION		\$ 5,860,000	\$ [REDACTED]		Revised scope from refurbish existing pumps to replace with new, includes Bechtel implementation costs.
PROJECT SUPPORT - HOME OFFICE		\$ 3,450,000	\$ [REDACTED]		Required support for original scope and additional scope underestimated 8 FTE's. 1% total project.
REPLACE #2 HEATER DRAIN CONTROL VALVE		\$ 396,300	\$ [REDACTED]		Increase in scope from 2 to 10 valve replacements, includes Bechtel implementation costs.
BOP INST. & CNTRL SETPOINT, RESCALING		\$ 1,265,000	\$ [REDACTED]		Based on clarification of scope as design evolves.
OFFICE TRAILER PARK / EQUIPMENT / CAPITAL PURCHASE		\$ 210,000	\$ [REDACTED]		Original estimate was not sufficient for rental of outside facility large enough to house the EPU project team and Bechtel, for 2 years and inclusion of Jupiter West facility.
UPGRADE CONDENSATE PUMPS		\$ 1,658,000	\$ [REDACTED]		Revised scope from refurbish existing pump rotating assemblies to replace with new, includes Bechtel implementation costs.
FW REGULATING VALVE (FRV) REPLACEMENT		\$ 1,120,000	\$ [REDACTED]		Revised scope from refurbish existing valves to cut out and replace with new valves and actuators, includes Bechtel implementation costs.
PROJECT RELATED O&M		\$ -	\$ [REDACTED]		Allowance for O&M related accounting treatment
CONTROL ROOM HABITABILITY UPGRADES		\$ 1,270,000	\$ [REDACTED]		Bechtel implementation costs.
MSV ACTUATOR REPLACEMENT		\$ 226,000	\$ [REDACTED]		Revised scope from refurbish existing Actuators to replace with new actuators, includes Bechtel implementation costs.
IMPLEMENT LEFM CHECK PLUS MUR		\$ 8,900,000	\$ [REDACTED]		Implementation costs were underestimated based on Shaw scoping study, includes Bechtel implementation costs.
SIMULATOR UPGRADE		\$ 800,000	\$ [REDACTED]		Minor
ELEC BUS SYSTEM MARGIN IMPROVEMENT		\$ 1,990,000	\$ [REDACTED]		Minor
UPDATE CHECKWORK FOR FAC		\$ 100,000	\$ [REDACTED]		Minor
TOTAL					(\$284,098,333)

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III. Line by Line - Total

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TOTAL	DESCRIPTION	ORIGINAL	CURRENT	VARIANCE	EXPLANATION / NOTES
	UNDER-RUNS				
	ALLOWANCE FOR SCOPE	\$ 6,000,000	\$ [REDACTED]		Allocated to other modifications
	CONDENSER MODS - MATERIAL CONDITION	\$ 3,500,000	\$ [REDACTED]		Scope moved to Condenser Upgrade Modification
	DEH COMPUTER REPLACEMENT	\$ 7,800,000	\$ [REDACTED]		Material costs less than estimated based on PTN bids for similar scope, includes Bachtel implementation costs.
	REPLACE TRANSFORMERS	\$ 28,438,000	\$ [REDACTED]		Revised scope from replacing 4 transformers to replace 2, upgrade coolers, and swap spare, includes Bachtel implementation costs.
	MISC MATERIALS AND SERVICES	\$ 1,450,000	\$ [REDACTED]		Allocated to other mods
	COMMUNITY OUTREACH	\$ 370,000	\$ [REDACTED]		Allocated to other mods
	UPDATE EQ QUALIFICATION DOC PACKAGES	\$ 250,000	\$ [REDACTED]		Allocated to other mods
	TOTAL			\$14,212,889	
	SCOPE INCREASES				
	TCW HEAT EXCHANGERS	\$ -	\$ [REDACTED]		New scope not in feasibility evaluation - identified in Shaw scoping study
	ROD CONTROL UPGRADE	\$ -	\$ [REDACTED]		New scope - Reliability and margin improvement
	HEATER DRAIN PUMPS REPLACEMENT & SPARE	\$ -	\$ [REDACTED]		New scope resulting from Shaw BOP hydraulic modeling.
	HEATER DRAIN / MSR SYSTEM DIGITAL CONTROLS	\$ -	\$ [REDACTED]		New mod resulting from elimination of Feedwater Heater Digital controls.
	TURBINE GANTRY CRANE	\$ -	\$ [REDACTED]		New scope - Reliability and margin improvement
	IMPROVE HOT LEG INJ FLOW	\$ -	\$ [REDACTED]		New scope - LAR
	SHAW NON LAR ENGINEERING	\$ -	\$ [REDACTED]		Additional support and analysis, bid specifications and design interface with EPC vendor
	INCREASE STEAM BYPASS FLOW TO CONDENSER - PSL1	\$ -	\$ [REDACTED]		New scope - LAR
	STRENGTHEN PARTITION PLATES 4A & 4B FW HEATERS	\$ -	\$ [REDACTED]		New scope - LAR
	RESIZE MSR FLOW ORIFICES	\$ -	\$ [REDACTED]		New scope resulting from Shaw BOP hydraulic modeling.
	INCREASE MSR / HP EXHAUST RELIEF CAPACITY	\$ -	\$ [REDACTED]		New scope resulting from Shaw BOP hydraulic modeling.
	TOTAL			(\$80,330,991)	
	SCOPE DELETIONS				
	ADD FW HEATER LEVEL DIGITAL CONTROLS	\$ 4,624,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
	MAIN STEAM SAFETY VALVE ORIFACE CHANGE	\$ 1,897,800	\$ [REDACTED]		Modification not required for EPU after Engineering review
	REWIND CONDENSATE PUMP MOTORS FOR 6.9 KV	\$ 1,650,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
	CIRCULATING WATER PUMP REFURBISHMENT	\$ 3,400,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
	DEH CONSTANT PRESSURE PUMPS	\$ 800,000	\$ [REDACTED]		Modification not required for EPU after Engineering review
	MAIN STEAM SAFETY VALVES / PIPING MODIFICATIONS	\$ 771,800	\$ [REDACTED]		Modification not required for EPU after Engineering review
	TOTAL			\$10,663,982	
	CONTINGENCY	\$ 182,130,797	\$ [REDACTED]		
	ESCALATION	\$ 69,524,707	\$ [REDACTED]		
	TOTAL			\$251,685,604	
	Unallocated Escalation	\$ -	\$ [REDACTED]	(\$11,640,000)	
	GRAND TOTAL			(\$79,535,169)	

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III. Risk and Mitigation

Rank	Date	Risk Event Description	Impact	Category	Maximum Cost Exposure (\$500)	Typical Estimate (\$500)	Weighted Risk Exposure (\$500)	Event Description	Mitigation Action
1	4/3/09	Elimination of MSSVs lifting on a Plant Trip will require a significant modification to the Steam Dump system - or - reduction of T-cold	Significant	Design				U-1 Significant cost to modify the steam dump system or a reduction in MWs if T-cold is lowered	U-1: Plan to increase capacity of Steam dump and Bypass System, Reviewed and accepted by Plant Health Committee U-2: Perform K-T analysis and provide recommendations to Senior Management ready for internal challenge with Chief
2	4/30/09	U-1 PRA for Total Loss of Feedwater indicates PORVs are undersized for uprate condition	Significant	Schedule Cost				Cost and schedule could be impacted if PORVs need to be replaced	Working on alternative Solutions Will likely require more other than PORV replacement Risk Mitigation Plan in development
3	7/19/09	Automate U1 Containment Mini-Purge - Replace manual isolation valves with automatic valves, controls and indication - LAR	Significant	C/S				Containment design pressure will be exceeded without a reduction in initial containment pressure. Lower operating containment pressure cannot be maintained without a mini-purge similar to Unit 2.	Engineering evaluation in progress, scope has not been identified
4	7/19/09	MSR Shell Drain Loop Seal Piping	Significant	C/S				Shaw modeling of system indicates steam entrainment in MSR drains causing high flow through line.	Data Collection, engineering evaluation in progress, scope has not been identified
5	7/19/09	Generator Stator Core Hot Spots	Significant	C/S					Engineering evaluation in progress, scope has not been identified
6	7/19/09	U1 PRA Modifications	Significant	C/S				EPU conditions challenge ability to achieve Cope Through Cooling (OTC)	Engineering evaluation in progress, scope has not been identified
7	7/19/09	Main Steam, Feedwater, & Condensate Piping Support Modifications	Significant	C/S				Evaluate for EPU dynamic and increased thermal loads and implement recommended mods as necessary	Engineering evaluation in progress, scope has not been identified
8	7/19/09	Steam Bypass Control System Increase Flow to Condenser - U2	Significant	C/S				Plant trip cannot be accomplished without lifting the MSSVs.	Engineering evaluation in progress, scope has not been identified
9	7/19/09	Low Pressure Feedwater Heater Inspections/ Modifications	Significant	C/S				Yuba report for FWH review at EPU conditions identified numerous nozzle flow criteria exceeded at EPU conditions. Inspections will validate existing condition of the FWH's.	Engineering evaluation in progress, scope has not been identified
10	7/19/09	BOP Piping Vibration Modifications	Significant	C/S				Evaluate existing & expected EPU vibration to BOP piping and implement recommended mods as necessary	Engineering evaluation in progress, scope has not been identified
11	7/19/09	Evaluate U2 CVCS piping for voiding under NRC Generic Letter 2008-01	Significant	C/S				CVCS will be credited for EPU LOCA analyses. GL 2008-01 would then apply to the system.	Engineering evaluation in progress, scope has not been identified

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III. Risk and Mitigation

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Item #	Start Date	Task Event Description	Impact	Priority	Task Status	Task Description	Task Action
12	7/10/09	UT Safety in Lockout Tank Design Pressure Increase	Significant	C/S		SBLOCA analysis will not meet design criteria without an increase in SIT pressure.	Engineering evaluation in progress, scope has not been identified
13	7/10/09	CCW Piping Analysis / Modifications (U2 Only)	Significant	C/S		Evaluate CCW for increased thermal loads and implement recommended mods as necessary	Engineering evaluation in progress, scope has not been identified
14	7/10/09	Additional Isophase Bus Duct Air Flow Test U1	Significant	C/S		Unit 1 and 2 isophase bus duct configurations are different. Test will ensure the replacement equipment is properly sized.	Engineering evaluation in progress, scope has not been identified
15	7/10/09	SG Calorimetric Transmitters	Significant	C/S		The calorimetric uncertainty calculations show that replacement of these transmitters is necessary or steam enthalpy uncertainty will become the dominant term in the calorimetric.	Engineering evaluation in progress, scope has not been identified
16	7/10/09	Westinghouse / AREVA / B&W - LAR	Significant	C/S		Potential of labor increases to support FPL through NRC review phase.	Continue to monitor contractor performance and perform any possible evaluations in-house (lower rates)
17	7/10/09	Shaw / SWEC - LAR	Significant	C/S		Potential of labor increases to support FPL through NRC review phase.	Continue to monitor contractor performance and perform any possible evaluations in-house (lower rates)
18	7/10/09	Third Party Reviews / Grid Stability - LAR	Significant	C/S		Potential of labor increases to support FPL through NRC review phase.	Continue to monitor contractor performance and perform any possible evaluations in-house (lower rates)
19	7/10/09	FPL Engineering - LAR	Significant	C/S		Additional personnel required to support NRC review.	Manage personnel and overtime.
20	7/10/09	Bechtel Engineering - Modifications	Significant	C/S		Additional personnel required to support scope growth.	Continue to monitor contractor performance and perform any possible engineering in-house (lower rates). FPL manage engineering or lump sum conversion.
21	7/10/09	Shaw / SWEC - Modifications	Significant	C/S		Additional personnel required to support scope growth.	Continue to monitor contractor performance and perform any possible engineering in-house (lower rates)
22	7/10/09	FPL Engineering - Modifications	Significant	C/S		Additional personnel required to support scope growth.	Manage personnel and overtime.
23	7/10/09	FPL Juno PM / Engineering Support - Modifications	Significant	C/S		Additional personnel required to support scope growth.	Manage personnel and overtime.
24	7/10/09	Bechtel Procured Materials	Significant	C/S		T&M contract for Bechtel	Continue to monitor purchasing program.
25	7/10/09	Bechtel Construction	Significant	C/S		Additional craft required to support extra work. Construction estimates supplied by Bechtel are Order of Magnitude at this time.	Continue to estimate "To-Go" scope in detail and resource load detail schedules. Lump sum conversion, possible (by Outage for example).
26	7/10/09	Plant Support	Significant	C/S		Additional scope is likely to add impact to plant.	Continue to estimate "To-Go" scope in detail and resource load detail schedules.
27	7/10/09	FPL Project Management	Significant	C/S		Additional personnel overtime required to control project.	Manage personnel and overtime.
28	7/10/09	Siemens Implementation Labor	Significant	C/S		No contracts have yet been signed.	Lock down lump sum contracts as soon as possible. Use any economies of scale possible.
29	7/10/09	Rod Control Modifications	Significant	C/S		Westinghouse study not yet final.	Review vendor study to optimize system modifications and reduce cost.
30	7/10/09	Turbine Gantry Crane Upgrade	Significant	C/S		Construction risk.	Control supplemental labor support and validate planning and implementation processes.

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III. Risk and Mitigation

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Item	Date	Description	Impact	Severity	Type	Maximum Cost Exposure (\$100)	Project Estimate (\$100)	Available Budget (\$100)	Impact Description	Mitigation
31	1/29/08	Available Containment Pressure Margin reduced due to the discovery of Legacy LOCA analysis error	M	Significant	Design				Impact is not yet fully analyzed. Current available margin has been reduced from 7 PSI to 4 PSI	Preliminary analysis for U-2 is acceptable U-1 will require a mini-purge system Plant Health Committee has reviewed. Will process Scope Change
32	12/18/08	Preliminary evaluations indicate that the current design flow for U1 hot leg injection may be less than adequate to support the uprated condition without a modification	M	Marginal	Schedule/Cost				May require an additional modification. The scope/cost of mod is not yet determined	Will require system modification. Processing Scope Change
33	Prior to 2/1/08	License Amendment Request NRC Review could be delayed due to errors and omissions - NRC Acceptance - NRC Technical Review - ACRS Review - SBLOCA Confirmatory Analysis	M	Critical	Regulatory/Schedule				Depending on the extent of the delay, could result in additional cost and extension of the project length	1. Prepare LAR consistent with RS-001, NRC Review Standard for Extended Power Uprates. • Develop EPP for format and level of detail 2. Use Ginnia EPU submittal as a guide for format and level of detail 3. Sequester reviews and challenge boards at certain interim LAR milestones • Self Assessment after 1st LAR Section 4. Multi-party peer reviews using industry and regulatory experts 5. Advance meetings with NRC prior to submittal 6. VP Nuclear Power Uprate met with NRC management 7/21/08 7. Monthly meetings with NRC 8. CNO met with NRC EDO on 3/23/08 to discuss review schedules 9. FPL to establish a presence in Washington to coordinate questions and RAs
34	7/30/08	Rewind at PB and PSL overlap	M	Significant	Schedule				Specialty Technicians and equipment are required the same time at PD and PSL. Could delay Wind at PSL and affect PSL Critical	Siemens requires 31 days from start of PSNP outage and the start of PSL outage; currently 38 days exist in the schedule (Difference of 6 days) Scope Shift from 5L-1-23 to 5L-1-24 being evaluated which may alleviate the overlap See Mitigation Plan for details

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III. Risk and Mitigation

	Order Date	Issue Description	Impact Rating	Category	Maximum Cost Exposure (\$100)	Current Estimate (\$100)	Prob. Value (\$100)	Value (\$100)	Impact Description	Mitigation Action
35	5/29/08	WEC & SHAW vendor staffing level may not be sufficient to support project	M	Significant	Schedule				Could cause delays with LAR schedule and/or cost additional monies	Agreement on re-baselining reached; no impact to end date for Shaw and WEC
36	1/6/09	New NRC mandated Maintenance rule working hours will further limit allowed working hours	M	Marginal	Cost				Potentially extend outage durations and/or increase costs	EPU management working with Licensing to ensure an acceptable procedure which will minimize the impact to EPU
37	10/14/08	There is potential that Legacy Analysis or License basis issues may be uncovered during re-analysis for EPU LAR	M	Significant	Programmatic				Two such items have already been identified: PB FW temp and PTN-CTMT analysis which are being tracked by a separate line item. The impact is difficult to quantify until discovery	Developed and issued EPP1-345; new instruction that defines risk identification and mitigation utilizing WM-AA-1000. Thus far, the process has been effective
38	8/3/2008	Transition to Nuclear Asset Management Systems (NAMS)	M	Marginal	Programmatic				May cause delays with review and approval of Engineering Documents	Per Fleet wide Change Management Plan Hold meeting with NAMS coordinator and Site PMs Transition to NAMS currently scheduled for Dec 09

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Risk and Mitigation

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- Undefined Scope in Formal Analysis [REDACTED] 1
- Approximate High Risk Weighted Exposure = [REDACTED] 2
- Approximate Total weighted Risk Exposure = [REDACTED] 3

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IV. Implementation Options



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IV. Implementing Options

NRC LAR Schedule

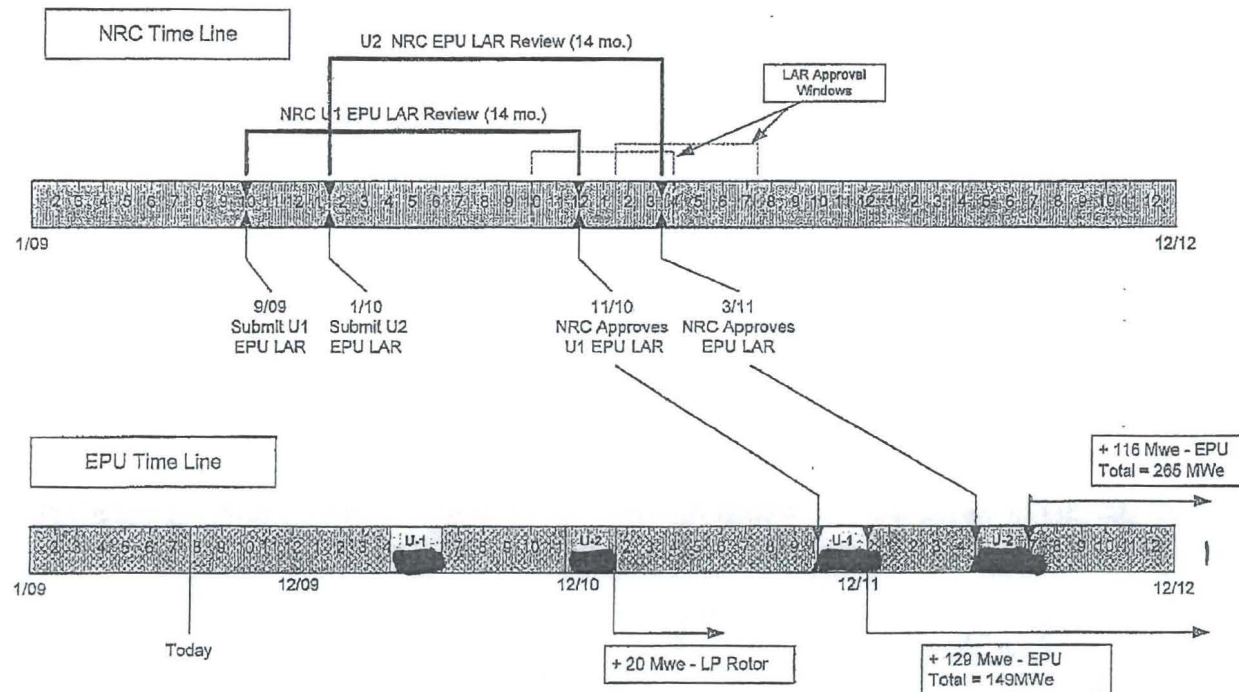
- **PSL1 EPU LAR Planned Submittal September 2009**
 - 14 month review period projected
- **PSL2 EPU LAR Planned Submittal January 2010**
 - 14 month review period projected



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IV. Implementing Options

St. Lucie NRC Schedule



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IV. Implementation Options

PSL and PTN EPU Outage Durations being considered to have one short – one long Outage. Advantages appear to be as follows:

Advantages

- No overlapping Outages
- Improves certainty in Engineering and Planning
- Allows Site teams to develop team work and efficiencies
- Fewer complex Outages
- Improved leveraging of Fleet and Specialty resources

IV. Implementing Options

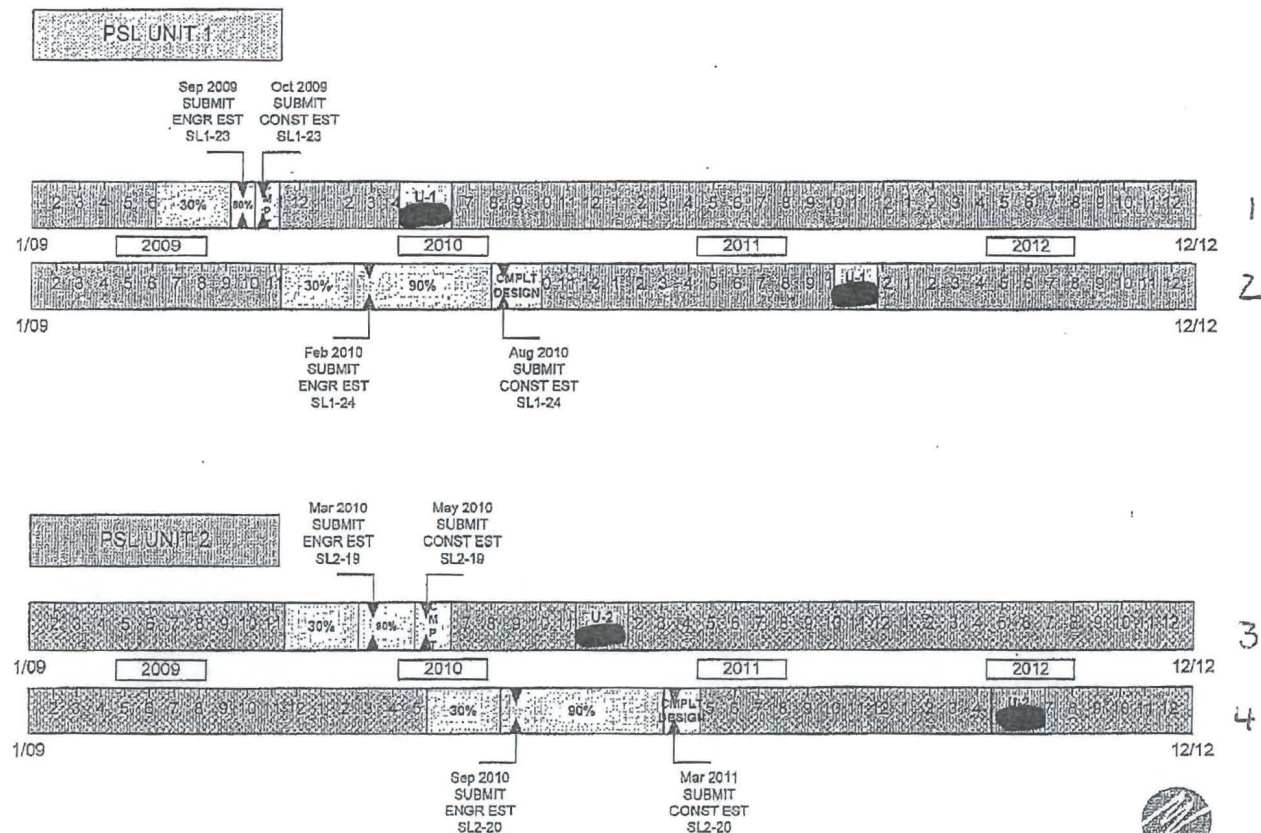
Project Estimates and Valuation

- **Estimates are conceptual only**
 - Formal estimates can not be established until designs are complete
 - Current design completion will not occur until 2011.
 - Current Bechtel EPC costs are based on a "load board" concept
 - Significant variability in the cost when compared to original budget
- **Initial licensing and engineering has resulted in increased project scope**
- **Capacity of the organization does not support self performance EPC construction costs will be higher but have lower implementing risks**
- **Current higher estimates continue to show value to the customers without reliance on increased MWe output**

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IV. Implementing Estimates

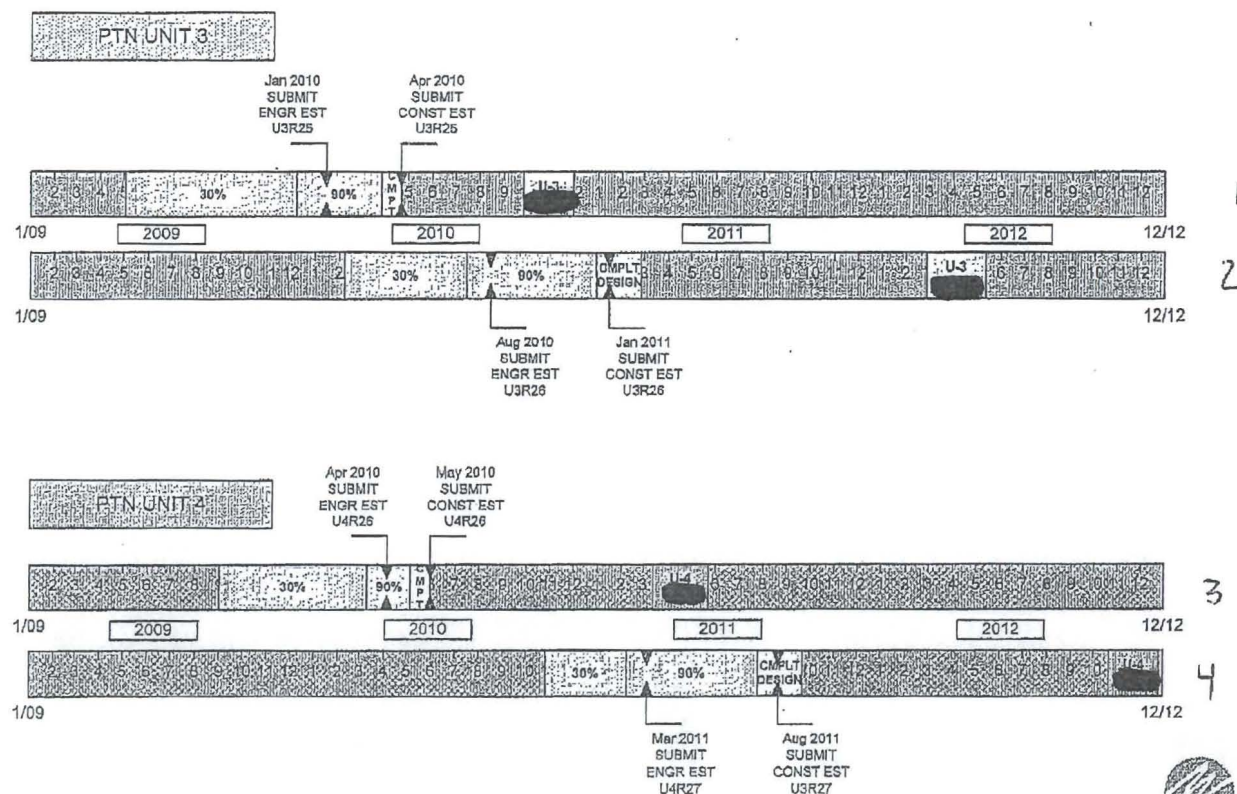
PSL - Design and Estimating Time line Current Plans to not complete estimates until 2011



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IV. Implementing Estimates

PTN - Design and Estimating Time line Current Plans to not complete estimates until 2011



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IV. Implementing Estimates

FPSC Needs Filling St. Lucie (9/17/09)

- Perform Major Work for Each Unit During Separate Outages in 2011 and 2012
- Increase in Gross Power of 11% for Each Unit
- Net Electrical Increase from 840 MWe to 943 MWe
- Combined Two Unit Total of 206 MWe
- Estimated Nominal Cost for PSL are Approximately \$651 Million
- Annualized Base Revenue Requirements for the First 12 Months of Operation, PSL1 - \$59.8 Million PSL2 - \$61.8 Million



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IV. Implementing Estimates

FPSC Needs filing Turkey Point (9/17/09)

- Perform Major Work for Each Unit During Separate Outages in 2011 and 2012
- Increase in Gross Power of 14% for Each Unit
- Net Electrical Increase from 700 MWe to 804 MWe
- Combined Two Unit Total of 208 MWe
- Estimated Nominal Cost for PTN are Approximately \$750 Million
- Annualized Base Revenue Requirements for the First 12 Months of Operation, PTN3 - \$76.4 Million PTN4 - \$72.9 Million



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IV. Implementing Estimates

FPSC Needs Filing St. Lucie & Turkey Point Common Elements (9/17/09)

- Perform Major Work for Each Unit During Separate Outages in 2011 and 2012
- Plan to Submit LAR to NRC in January 2009
- Expected Approval by NRC but not Assured Spring 2010
- Changes to the Transmission System for All 4 Units is Estimated to be \$45 Million
- Customer Bill Impact Between 2009 and 2012 is Conservatively Estimated Between \$0.34 to \$1.79 per 1000 kWh
- Customer Bill Impact in 2013 from all 4 Units is Conservatively Estimated to be \$0.21 per 1000 kWh for the First Full Year of Operation of All the Upgrades
- Aggressive Schedule to Complete in 2011 and 2012. May be Impacted by Regulatory Reviews and Procurement and Could Cause Delays in Schedule
- Requested Exemption from the FPSC Bid Rule



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IV. Implementing Estimates

FPSC Needs Filing St. Lucie & Turkey Point Common Elements (9/17/09)

- Economic Analysis performed on Nine Scenarios of Fuel Costs and Environmental Compliance Costs
 - Uprates have a lower CPVRR in 8 of 9 Scenarios
 - CPVRR Savings in 8 of 9 Scenarios range from \$122 Million to \$ 863 Million
 - In 7 of 9 CPVRR Savings is Greater than \$200 Million
 - In One Case with Low Gas and Minimum Environmental Costs Results Indicate a \$33 Billion in CPVRR Savings for Our Customers on an FPL System Wide Basis Due to the Large Amounts of Natural Gas Used on FPL's System.
- Based on FPL's Analysis
 - Likely Net CPVRR for Our Customers
 - Non-GHG Emitting Generation for Many Years
 - Ultimately a Net Savings, Not a Net Cost, to Customers



IV. Implementing Estimates

Saint Lucie Outages

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	Proforma		Current		ForeCast	
PSL	U-1	U-2	U-1	U-2	U-1	U-2
LAR Submittal	9/1/2009	9/1/2009	9/1/2009	1/31/2010	9/1/2009	1/31/2010
1 st Outage						
Duration						
						20 MWe
2 nd Outage						
Duration						
In Service Date	October 2011	April 2012	Dec-11	June 2012	Dec-11	June 2012
MWE	103	103	129 ⁵	136 ⁵	129 ⁵	136 ⁵

Notes

All Outage durations to be reviewed & approved by CNO upon completion of scope definition

1 Outage durations driven by Generator rewind currently in the approved Outage schedule

2 Outage duration driven by Alloy 800 cold leg nozzle repair

3 Outage duration driven by HP & LP Turbine and MSR Replacements

4 Target goal for Sbx Sigma Team rewind outage durations

5 MWe based on Siemens heat balance (contract target)

Longer duration Outages have been included in the business model



IV. Implementing Estimates

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Turkey Point Outages

PTN	Proforma		Current		Forecast	
	U-3	U-4	U-3	U-4	U-3	U-4
LAR Submittal	9/1/2009	9/1/2009	6/01/10 ⁵	6/01/10 ⁵	6/01/10 ⁵	6/01/10 ⁵
1 st Outage						
Duration						
2 nd Outage						
Duration						
In Service Date	April 2012	October 2012	May 2012	December 2012	May 2012	December 2012
MWE	104	104	118 ⁴	118 ⁴	118 ⁴	118 ⁴

Notes

All Outage durations to be reviewed & approved by CNO upon completion of Scope definition

¹ Outage durations driven by Generator rewind currently in the approved Outage schedule

² Outage duration driven by HP Turbine and MSR replacements

³ Target goal for Six Sigma Team rewind outage durations

⁴ MWE based on Siemens heat balance (contract target)

⁵ AST LAR must be approved prior to submittal of EPU LAR

Longer duration Outages have been included in the business model



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Feasibility Analyses for EPU Project

Feasibility Analyses for EPU Project

	Needs Filing 2007	NCRC May 2008	NCRC May 2009	EPC Risk Analysis at 399 MWe	EPC Risk Analysis at 481 MWe
PSL Cost \$M	\$651	\$657	\$657	\$796	\$796
PTN Cost \$M	\$750	\$750	\$750	\$910	\$910
Total Cost \$M	\$1,401	\$1,407	\$1,407	\$1,706 ¹	\$1,706 ¹
PSL EPU MWe	206	206	191 ²	191 ²	245 ²
PTN EPU MWe	208	208	208	208	236
Total EPU MWe	414	414	399	399	481
\$/kW	\$3,384	\$3,399	\$3,526	\$4,276	\$3,547
CPVRR \$M	\$122-\$863 ³	\$346-\$1,109 ⁴	\$683-\$1,574 ⁵	\$282-\$1,210 ³	\$315-\$1,350 ³
AFUDC (Approx)			~ \$350M	~ \$390M	~ \$390M

Notes:

1. Includes Undefined Scope PSL - \$60 M and PTN - \$77 M
2. PSL 2.Participation MWe removed from calculation
3. There is a CPVRR savings in 8 of 9 Scenarios analyzed
4. There is a larger CPVRR savings than the previous year in 8 of 9 scenarios analyzed
5. There is a larger CPVRR savings than the previous year in all scenarios analyzed

Lessons Learned

- **Undefined Scope and Risk Assessment**

- Need to look at individual project risks early in original scoping
- Need a better way to assess Engineering and implementation cost increase risk amounts
- Underestimated the risk and costs associated with the fast track project
- Current undefined scope allowance is not aligned to the risk matrix
- Did not assess capacity of organization and costs

- **NRC Licensing**

- Need a formal licensing risk analysis of the LAR and related issues
- Existing plant conditions with low margin were not assessed for risk completely

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Lessons Learned

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- **Fast Track Modification Impacts and Risks**
 - Looked at the project only from a high level risk
 - Should have done a more detailed risk assessment when establishing the budget
 - Did not address the impact of a fast track project on station staff

- **Cost Reporting and Early Warning**
 - Early warning on cost overruns and undefined scope depletion were not dealt with in a timely manner
 - Undefined scope allowance used in establishing base contracts and work left little for emergent items or increased scope
 - Must include undefined scope allowance based on level of risk/progress on project
 - KPIs and detailed cost reporting structures were not established early enough in the project

DEPOSITION EXHIBIT NO. 6



Extended Power Upgrades Executive Steering Committee St. Lucie and Turkey Point

Steve Reuwer

EPU Implementation Owner - South

September 9, 2009

Agenda

- Status
- Costs
- Other Issues
- Next Steps
- Appendix

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NCR-11

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Status

ICDR 1.6b-3 EPU

001282

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Comprehensive review of EPU project has identified increased potential scope and risks, resulting in a net cost increase. LAR schedule is slipping.

- **July 25th EPU estimate increased to \$1,850M from \$1,706M for the Florida Units (PSL & PTN)**
- **LAR schedule slipping due to less than adequate qualified resources**
- **Implemented Outage Optimization Plan**
- **Established new EPU organization**
 - **Filling key critical vacancies**

Outage schedule has been optimized to accommodate LAR schedule, levelize resources and provide proper planning

Advantages

- **Results in fewer Outage days**
- **Better aligned with station milestones**
- **Timely material delivery and reduced expediting costs**
- **Additional time for Engineering will facilitate more complete design prior to execution**
- **No overlapping Outages between PSL and PTN**

ICDR 1.6b-3 EPU

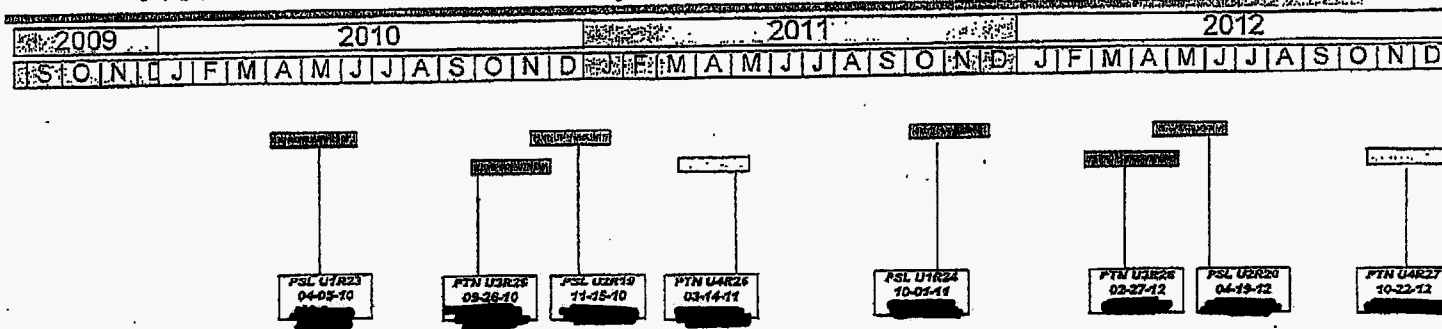
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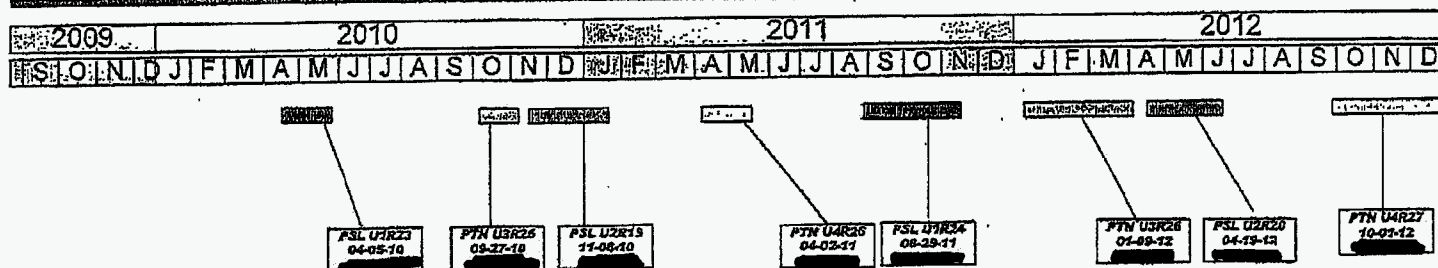
Outage schedule has been optimized and results in 37 fewer total outage days for a total of \$33 Million savings

Outage Optimization Plan

Previous Extended Power Uprate Refueling Outage Plan - PSL / PTN



New Extended Power Uprate Refueling Outage Plan - PSL / PTN



ICDR 1.6b-3 EPU

001285



LAR Engineering continues to identify new work which impacts schedule and costs. Reassessment of current scope may further impact the LAR schedule and costs

- **Additional potential scope from LAR analysis includes:**
 - PSL: Steam Dumps, Hot Leg Injection, Containment purge system, Safety Injection Tanks, Control Room A/C
 - » Rough Order of Magnitude \$40M
 - PTN: Component Cooling Water upgrade, Control Room Ventilation intake, Pressurizer pressure instrumentation, Reactor Coolant System (RCS) hot leg injection, Boric Acid Storage Tank Heat Tracing –
 - » Rough Order of magnitude \$25M
- **Scope changes that could reset the LAR clock includes:**
 - Condenser and Moisture Carry Over (MCO), in or out, affects multiple LAR analyses and calculations that are already completed (i.e., rework!)

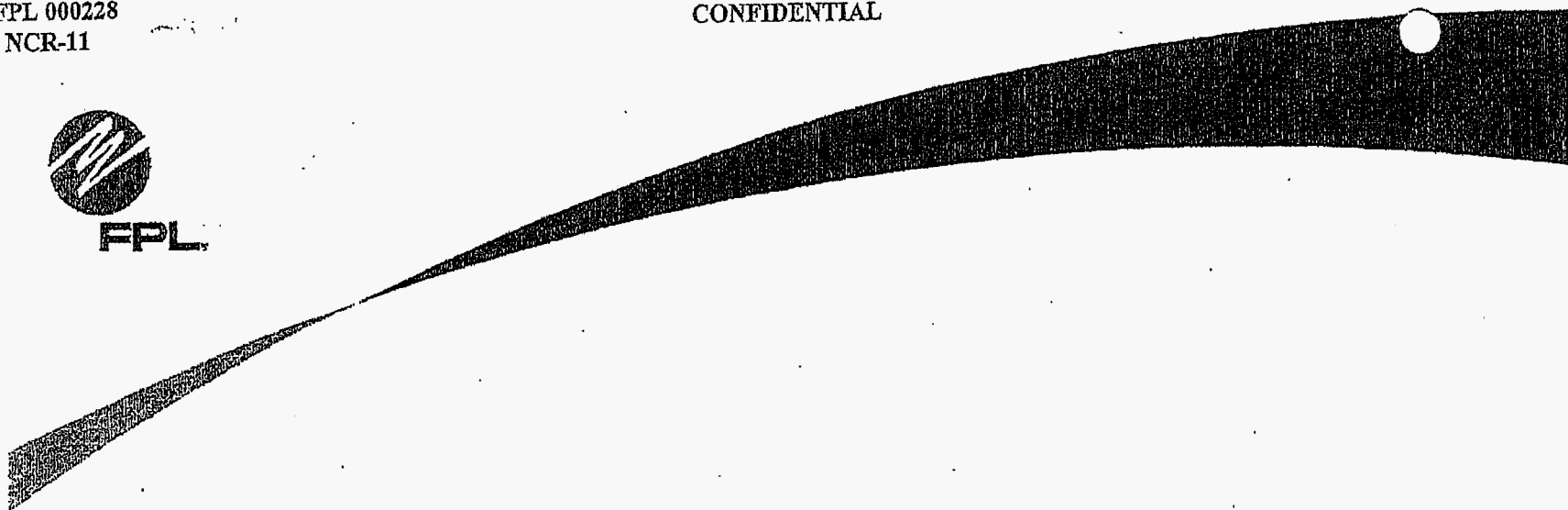
Last Florida Unit LAR submittal is expected June 2010

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FPL



Cost

ICDR 1.6b-3 EPU

001287

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At this time approximately 30% of total project costs have a high certainty and a large portion of the scope is undefined

Cost Estimates by Area

	PSL ORIGINAL	PSL JULY 09 ESTIMATE	PSL AUGUST FORECAST	PTN ORIGINAL	PTN JULY 09 ESTIMATE	PTN AUGUST FORECAST
LAR	\$45.5	\$72.6	\$72.6	\$28.7	\$62.6	\$62.6
ENGINEERING	\$18.7	\$36.2	\$39.6	\$18.5	\$67.8	\$65.8
MATERIALS	\$220.9	\$255.1	\$256.5	\$201.0	\$237.6	\$236.0
IMPLEMENTATION	\$119.7	\$360.4	\$346.9	\$192.0	\$438.6	\$474.8
SCOPE NOT DEFINED	\$182.1	\$60.0		\$245.9	\$77.2	
ESCALATION	\$69.5	\$11.6	\$13.4	\$63.1	\$26.0	\$25.3
RISK			\$20.7			\$61.1
CONTINGENCY			\$81.5			\$93.4
TOTAL	\$656.4	\$795.9	\$831.2	\$749.2	\$909.8	\$1,019.0

Team is working to define scope and quantify remaining costs and risks

**Cost certainty is driven by LAR, engineering completion,
material purchase and implementation contract**

Current status of Cost Certainty

	<u>PSL</u>	<u>PTN</u>
LAR Engineering	80%	60%
Mod Engineering	20%	20%
Material	80%	80%
Implementation	<u>10%</u>	<u>10%</u>
Approximate Total (weighted)	36%	28%

**Engineering and Design will complete in
December 2010 improving cost certainty**

The team is clarifying the remaining scope, quantifying risks and completing engineering (12/10) to improve certainty to project costs

Actions to bring more certainty to costs

- **Define and reevaluating scope**
- **Understand each modification for complete scope and design certainty**
- **Accelerating Modification Engineering and estimating implementation costs**
- **Validation of estimates by Engineering and Construction Department is proceeding (refer to appendix pg. 54 for details)**

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Execution Costs will be challenged by a 3rd party review of Turkey Point (PTN) EPU costs

- **Current Turkey Point execution plan uses Bechtel as EPC Contractor**
- **Third party evaluation planned to be completed in the Fourth Quarter 2009**
- **If the evaluation and review results in the need to change vendors, execution with a new vendor could start in the 1st quarter 2010**
- **Reference page 57 for details**

Difficulties with changing vendors are likely with this approach

FPL 000233
NCR-11

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FPL

Other Issues

ICDR 1.6b-3 EPU

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There are significant issues we are addressing

- **New organizational structure has been defined and implementation is in progress**
 - New structure is decentralized
 - Some critical key positions remain unfilled
- **Cost certainty will increase as engineering approaches 90% for individual modifications**
- **Efforts to reduce costs by reevaluating scope may potentially impact LAR schedule and costs**
 - e.g., Evaluation of Condenser Modification, Moisture Carry Over (MCO), etc.
- **Cost certainty for Bechtel management services should be achieved by 12/09**
- **Challenges with Turkey Point and St. Lucie EPU LAR submittal schedule (reference pages 24-28 for additional details)**

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FPL 000235
NCR-11

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FPL

Next Steps

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Continuing to drive to cost and execution certainty through proper planning and target pricing in contracts

- **Third party review of Engineering and Implementation for PTN**
- **Revise and implement EPU Governance and Oversight Protocol**
- **Establish certainty in Bechtel cost through target pricing**
- **Establish target pricing for Bechtel Spring Outage and Management services**
- **LAR reevaluation / Staffing**

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Appendix

Plans and Targets
Project Dashboard
Project Timeline
Risk Exposure and Mitigation
Bechtel Costs
Vendor Renegotiation
Siemens and related Turbine Costs
Other Action Items
Contingency and Risk analysis

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Plans and Targets – Forecast changed based on Outage optimization plan

St. Lucie

	PROFORMA		FORECAST	
	U-1	U-2	U-1	U-2
LAR Submittal	9/01/09	9/01/09	11/30/09	1/31/10
1 st Outage	4/1/2010	11/1/2010	4/5/2010	11/8/2010
Duration				
2 nd Outage	10/1/2011	5/1/2012	8/29/2011	4/19/2012
Duration				
In Service Date	October 2011	April 2012	November 2011	June 2012
MWE	103	103	129 ⁵	136 ⁵

Notes

- ¹ Outage durations driven by non-EPU Alloy 600 repairs
- ² Outage duration driven by Generator rewind and LP turbine replacement
- ³ Outage duration driven by HP & LP Turbine and Generator rewind
- ⁴ Outage duration driven by HP turbine
- ⁵ MWe gross based on Siemens heat balance (contract target)

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Plans and Targets – Forecast changed based on Outage optimization plan

Turkey Point

	PROFORMA		FORECAST	
	U-3	U-4	U-3	U-4
LAR Submittal	9/01/09	9/01/09	6/30/10 ¹	6/30/10 ¹
1 st Outage	9/26/2010	4/25/2011	9/27/2010	3/19/2011
Duration				
2 nd Outage	3/5/2012	10/22/2012	1/09/2012	10/01/2012
Duration				
In Service Date	April 2012	October 2012	April 2012	December 2012
MWE	104	104	118 ⁴	118 ⁴

Notes

¹ AST LAR must be approved prior to submittal of EPU LAR

² Outage duration driven non-EPU S/G ECT

³ Outage duration driven by: HP Turbine, Generator rewind, Condenser replacement

⁴ MWe gross based on Siemens heat balance (contract target)



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Project Dashboard- PSL

	LAR Submittals	Mod Packages (9 month milestone)	Preps & Plans (Includes long lead Material delivery)	Execution
Schedule	U-1 Targets 11/30/09 U-1 Targets 01/15/10 FPL resources challenged to meet targets	Meeting Station Milestones	Meeting Station Milestones	U-1 Spring 2010 Planned - [REDACTED] (CP- Alloy 600 repairs)
Contracts	Major Contracts issued for LAR development	Meeting Station Milestones	Meeting station Milestones	Meeting Station Milestones Contract issued to Bechtel
Staffing & Vendor Support	WEC resources less challenged with revised submittal plan Shaw resources at critical stage FPL resources do not support targets; efforts to assign short term assistance in progress. U-2 FPL work largely on hold	No Issues	Bechtel staffing to an approved plan Increased staffing required to meet certainty goals	Implementation team on site and planning milestones met
Other Issues or Challenges	U1: many technical issues in resolution process – late discovery may drive mod scope U-2: many technical issues in resolution process; potential for additional. Will drive some mod scope	Rod Control Phase 2 -4 Under evaluation	Core team identified; staffing after Outage	Generator Hot Spots could extend Rewinds
Costs	2009 Budget for Engineering & Staff: \$ 54.5 MM 2009 YTD Budget for Engineering & Staff: \$ 36.7 MM 2009 YTD Actual for Engineering & Staff: \$ 31.3 MM 2009 Forecast for Engineering & Staff: \$ 52.2 MM		2009 Budget for Mtls & Implementation: \$88.6 MM 2009 YTD Budget Mtls & Implementation: \$40.4 MM 2009 YTD Actual for Mtls & Implementation: \$27.8 MM 2009 Forecast for Mtls & Implementation: \$73.6 MM	

ICDR 1.65 3-FPU

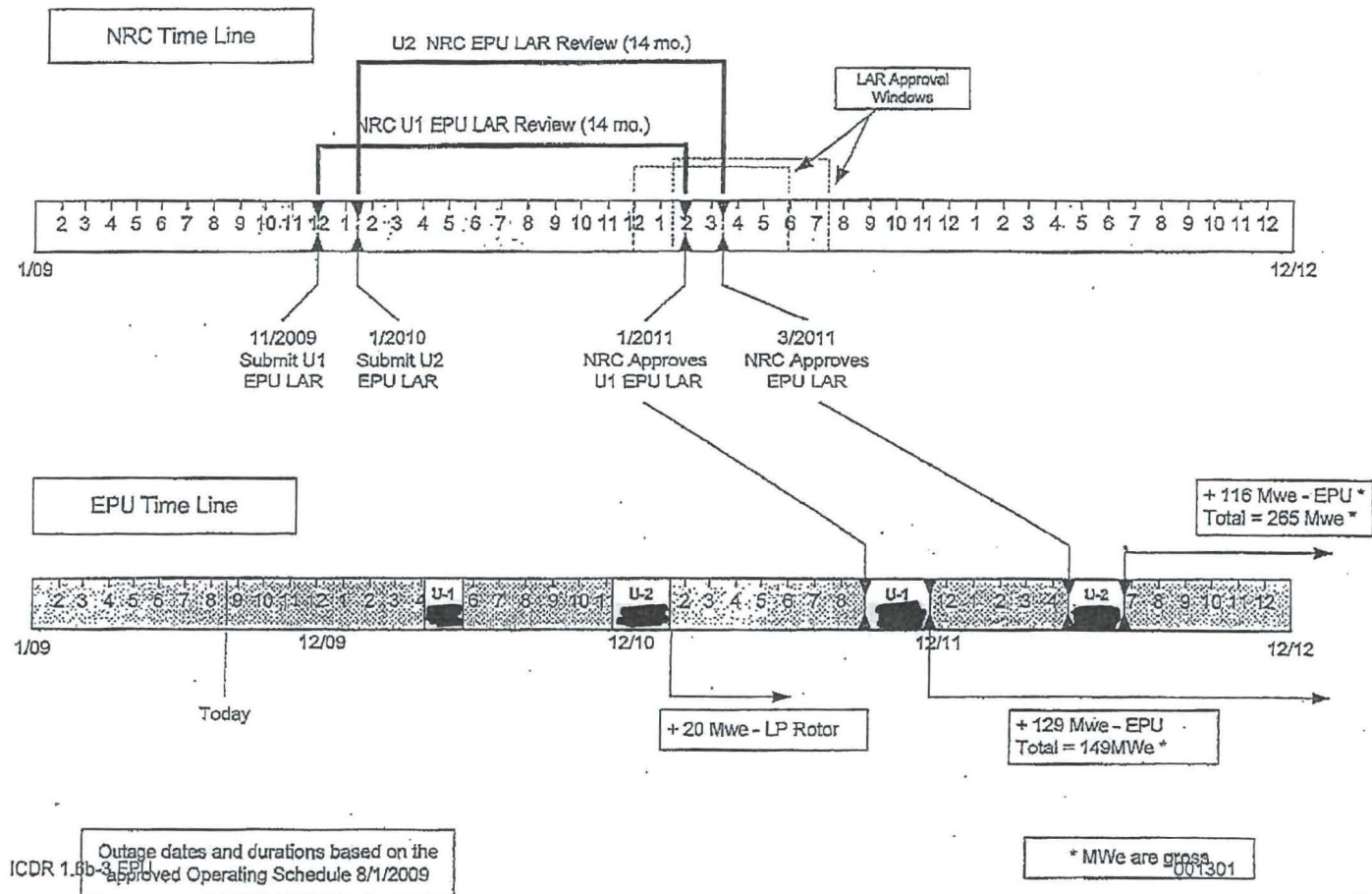


Project Dashboard- PTN

	LAR Submittals	Mod Packages (9 Month Milestone)	Preps & Plans (includes long lead Material delivery)	Execution
Schedule	AST LAR submitted	7 Mods with up to 40 Days negative float to T-9 Station Milestone (Due to Steam Generator Feedwater flow ananalysis)	No Negative float	No Negative Float U-3 Fall 2010 - [REDACTED] (CP: ECT of S/Gs)
	EPU LAR schedule milestone challenged to submit before June 30, 2010. Need earlier submittal due to Outage pull-up. Recovery plan being developed.			
Contracts	Major Contracts issued for LAR development	Contracts issued for Mod Engineering	Need to finalize TEI deliverables on FW heaters. Long lead material contracts for DEHC/TPCW/ SGFP/ Condensate Pumps/ FW Reg Valve	Contract issued to Bechtel
Staffing & Vendor Support	- Weak lead team: FPL staffing inadequate to support work. Recovery plan in development. - WEC resources impacted by Point Beach needs causing delays. - Shaw resources impacted by Point Beach needs and marginal to support overall workload.	Working to fill critical key positions	Bechtel staffing to an approved plan	Implementation team on site and planning milestones met
Other Issues or Challenges	- Numerous technical issues need several resolution paths. - Scope changes impact LAR analyses - rework. - Delay of LAR and moving up of Outage could impact timing and decisions regarding high enriched fuel.	CD/FW Hydraulic flow analysis by Shaw being re-performed - may result in negative impact to LAR analysis and add scope. TPCW /ICW/CCW Cooling analysis	Working with plant and interface issues	Short - Long Outage Concept accepted, reconfiguring scope to the respective Outage
Costs	2009 Budget for Engineering & Staff: \$56.5 MM 2009 YTD Budget for Engineering & Staff: \$35.0 MM 2009 YTD Actual for Engineering and Staff: \$31.8 MM 2009 Forecast for Engineering and Staff: \$47.7MM		2009 Budget for Mtls & Implementation: \$79.2MM 2009 YTD Budget for Mtls & Imp: \$53.1MM 2009 YTD Actual for Mtls & Imp: \$39.7MM 2009 Forecast for Mtls & Imp: \$91.5MM	

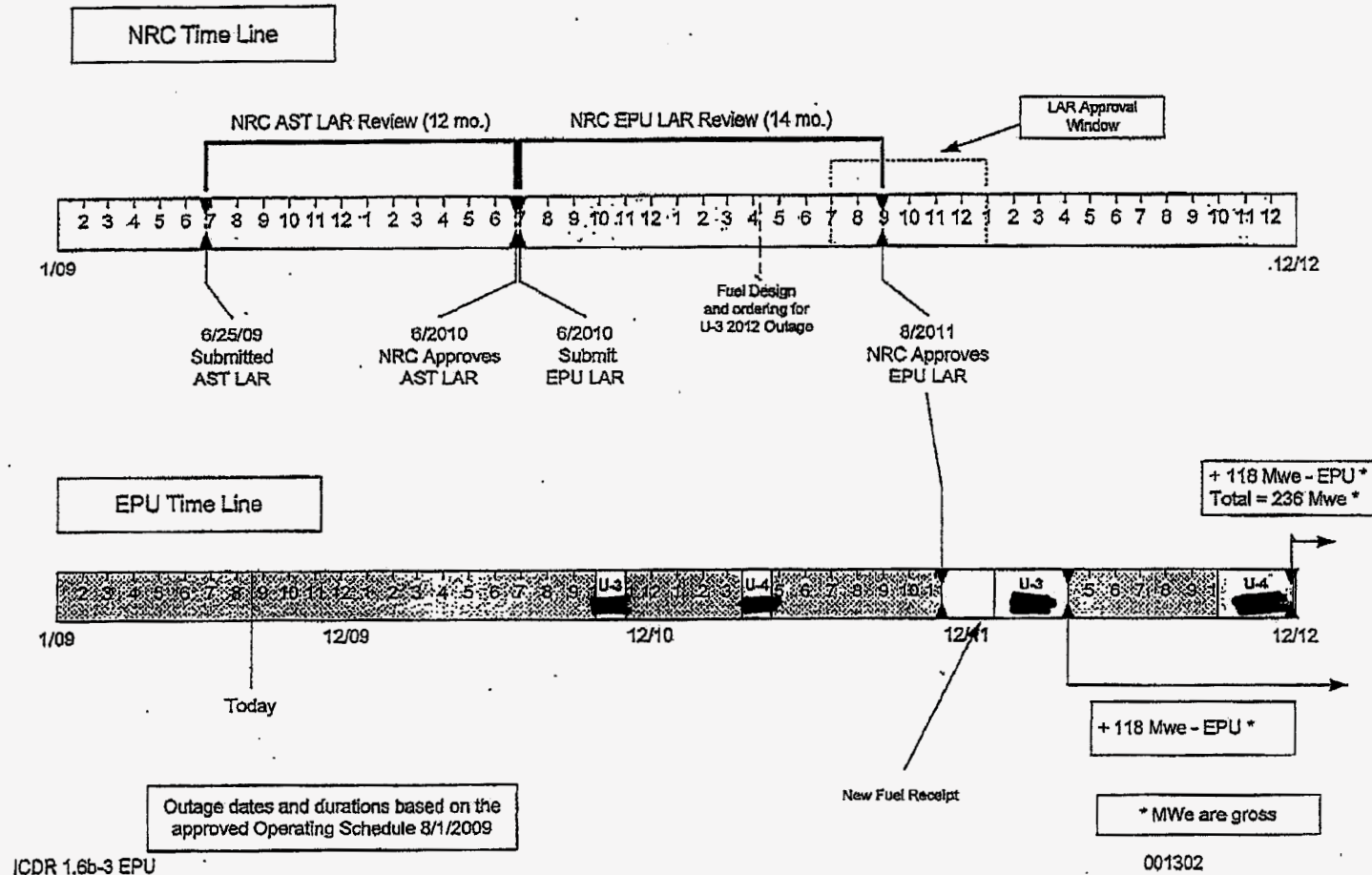
Project Timeline adjusted with Outage Optimization

St. Lucie Timeline



Project Timeline adjusted with Outage Optimization

Turkey Point Timeline



EPU LAR – Significant challenges being addressed

PSL - 1 Technical Challenges

- **FPL & Shaw Challenged to meet current schedules**
- **Unit 1 Technical Issues being resolved, may impact mod scope and/or LAR schedule**
 - Leading Edge Flow Meter (LEFM) initial uncertainty analysis does not meet 0.3% assumed
 - Main Steam Safety Valves (MSSV) Lifting during Normal Plant Trips
 - PRA Evaluation – Risk improvement mods must be identified and selected - schedule challenge
 - Maximum Containment Spray flow – schedule challenge
 - Assessment of Impacts to electrical equipment pending
 - Small Break Loss of Coolant Accident (SBLOCA) error – Areva reworking analysis (under warranty)
 - Pressurizer spray nozzle loading evaluation – reduction in allowable cycles –should be no impact
 - High Energy Line Break (HELB) outside containment – Environmental Qualification (EQ) inputs

ICDR 1.6b-3 EPU

001303

EPU LAR – Significant challenges being addressed (continued)

PSL - 1 Technical Challenges

- **Unit 1 Technical Issues being resolved, may impact mod scope and/or LAR schedule - continued**
 - Reactor Vessel supports impacts for temperature changes, thermal and gamma heating evaluation
 - NAI dose analysis update – Schedule challenge
 - Appendix R Operator response time analysis – SG dryout challenge
 - Station Blackout (SBO) for 1 hour – HVAC evaluation

EPU LAR – Significant challenges being addressed (continued)

PSL- 2 Technical Challenges

- **Unit 2 Technical Issues being resolved**
 - FPL and Shaw activities largely on hold to support Unit 1 LAR
 - MSSV Lifting during Normal Plant Trips
 - PRA Evaluation – Risk improvement mods must be identified
 - Containment Spray high flow issue
 - ECCS Fathom model update
 - Mass and Energy releases
 - Large Break LOCA (LBLOCA)
 - Electrical equipment effects
 - Component Cooling Water (CCW) temperature limitation / stress analysis
 - Control Room A/C must be modified to alleviate CCW temperature Limits
 - CCW temperature increase will cause support modification



EPU LAR – Significant challenges being addressed (continued)

PTN Technical Challenges

- **EPU LAR Schedule challenges**

- FPL, Westinghouse and Shaw resources challenged to meet current schedule
- Modification Scope changes impacting LAR analysis, modification scope and certainty (Condenser, MCO, Steam Generator feed pumps) – 3 months if no further scope changes
- Available schedule float reduced due to U-3 2012 Outage moving up (long/short Outages)
 - LAR required to load high enriched fuel into Spent Fuel Pool (SFP); will need to decide on fuel design and ordering of fuel in Spring 2011 based on progress of LAR
- PRA analysis is sequential to PSL1 and PSL2
- Areva Control Rod Drive Mechanism (CRDM) Analysis late turn-on and deliverables
- Determining if evaluation of Reactor Coolant System (RCS) branch connections for LOCA displacements is required – may result in branch connection support modifications, delaying WEC and Shaw
- Appendix R – new Safe Shutdown analysis is due 12/08 – must identify Operator action timing and evaluate EPU impact – Shaw and WEC impacted

ICDR 1.65-7 (P)

DO 1308

EPU LAR – Significant challenges being addressed (continued)

PTN Technical Challenges

- **Technical Challenges**

- CCW System temperature limits will be exceeded - Evaluating Modification Options
- Evaluating Hot Leg Injection flow path for long term cooling and preclude boric acid precipitation – requires modification
- Long term Containment analysis – challenge to maintain 30 day design basis
- Intake Cooling Water (ICW)/CCW thermal-hydraulic analysis margin issues
- Existing feed pump flow degradation – evaluating alternatives to modify
- ECCS – Justify acceptability of sump strainer losses based on NRC sump strainer agreements
- Perform secondary plant dynamic analysis to ensure adequate margins
- Reconstitute basis for letdown line HELB analysis
- Reconstitute Aux Building post-LOCA heat-up profile, verify adequate ventilation
- Resolve Boric Acid mixing tank limitations with maximum negative Moderator Temperature Coefficient (MTC) design criteria
- Address Emergency Diesel Generator (EDG) over/under frequency issues with degraded voltage for electrical equipment

ICDR 100-2970

001307



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Risk Exposure and Mitigation – PSL

	Origin Date	Risk Event Description	Probability	Impact	N/N/L	Maximum Cost Exposure (\$000)	Type of Estimate	P	C	WF	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
1	4/30/09	PRA Mods - PSL1 for Total Loss of Feedwater indicates PORVs are undersized for uprate condition	Very Likely	Significant								Cost and schedule could be impacted if PORVs need to be replaced Potential Impact to LAR Submittal	PRA Group working on alternative Solutions Will likely require mods other than PORV replacement Risk Mitigation Plan in development
2	7/19/09	Generator Stator Core Hot Spots U-1	Very Likely	Significant								The identification of hot spots requiring attention will only be ascertained following ELCID inspections conducted during the rewinding campaigns (i.e. During The Outage) Repairs could extend the Outage Duration by 5-7 Days. Repair Costs are not included as part of the current Contract	Engineering evaluation in progress, scope has not been identified 3/12/09: ELCID Results: (1) 3 hot spots on U1 (2) 18 areas of concern between slots 12 & 24 on the EE quadrant (3) 120 damaged areas were repaired using stitching during original manufacture (4) 4 building bolt ends were damaged and replaced during manufacture - may need to be changed during rewinding (5) 0 hot spots on U2 Note: Siemens recommends a loop heat core compression cycle to reduce the risk of having a core length out-of-tolerance after adding body iron to restore the core length to its original dimension
3	7/19/09	Main Steam, Feedwater, & Condensate Piping Support Modifications	Very Likely	Significant								Available for EPU dynamic and increased thermal loads and implement recommended mods as necessary. Regulatory risk for incomplete analysis, piping & support failures.	Engineering evaluation in progress. Assume 10 supports to be added.
4	7/19/09	Low Pressure Feedwater Heater Nozzle UTs baseline inspections	Very Likely	Significant								Yuba report for FWH review at EPU conditions identified numerous nozzle flow obstructions exceeded at EPU conditions. Inspections will validate existing condition of the FWHs.	Perform required baseline inspections.
5	7/19/09	NRC Generic Letter 2008-01	Very Likely	Significant								CVCS will be modified for EPU LOCA analyses. GL 2008-01 would then apply to the system. Regulatory risk for non-compliance with GL 2008-01.	Engineering evaluation in progress, scope has not been identified
6	7/19/09	U1 Safety Injection Tank Design Pressure Increase Requalification	Very Likely	Significant								SSLOCA analysis will not meet design criteria without an increase in SIT pressure. Potential impact to LAR submittal	Engineering evaluation in progress. Assume one relief valve addition plus Engineering
7	7/19/09	MSR Shell Drain Loop Seal Piping	Likely	Significant	M							Significant erosion and vibration in the piping possible at EPU conditions. Show modeling of system indicates steam entrainment in MSR drains causing high flow through line.	Data Collection, engineering evaluation in progress, scope has not been identified welling on test results.

ICDR 1.6b-3 EPU

001308



Risk Exposure and Mitigation – PSL (continued)

	Original Date	Risk Event Description	Probability	Impact	H/M/L	Maximum Cost Exposure (\$000)	Type of Exposure	P	C	WF	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
3	7/19/08	Generator Stator Core Hot Spots Unit 2.	Possible	Significant	M	[REDACTED]						The identification of hot spots requiring attention will only be ascertained following ELCID inspections conducted during the rewinding campaign (i.e. During The Outage). Repairs could extend the Outage Duration by 5-7 Days. Repair Costs are not included as part of the current Contract.	Engineering evaluation in progress, scope has not been identified. 5/12/09: ELCID Results: (1) 0 hot spots on U2 Note: Siemens recommends a loop heat core composition cycle to reduce the risk of having a core length out-of-tolerance after adding heavy iron to restore the core length to its original dimension.
9	7/19/08	BOP Piping Vibration Modifications	Unlikely	Significant	M	[REDACTED]						Potential for piping and support failures due to vibration fatigue. Evaluate existing & expected EPU vibration to BOP piping and implement recommended mods as necessary.	Engineering evaluation in progress. Assume 50 supports to be added.
10	7/19/08	CCW Piping Analysis / Modifications (U2 Only)	Unlikely	Significant	M	[REDACTED]						Evaluate CCW for increased thermal loads and implement recommended mods as necessary. Regulatory risk for incomplete analysis, piping & support failures. Potential impact to LAR substantial.	Engineering evaluation in progress. Assume 50 supports to be added.
11	7/19/08	SG Calorimetric Transmitters	Very Likely	Marginal	M	[REDACTED]						The calorimetric uncertainty calculations show that replacement of these transmitters is necessary or steam authority uncertainty will become the dominant term in the calorimetric.	To be included in the LERF PQM. The plant will not be able to prove the calorimetric uncertainty is less than 0.3% and therefore will not realize the full 1.7% MUR uplift.
12	8/20/08	Additional Isophase Bus Duct Supports	Unlikely	Marginal	M	[REDACTED]							Engineering evaluation in progress. Assume 10 supports to be added.
13	8/20/08	ECCS & CS Pump Flow Impacts	Unlikely	Marginal	M	[REDACTED]							Engineering evaluation in progress.
14	7/19/08	Unit 1 & 2 MS & Blowdown Piping Support Analysis	Unlikely	Significant	M	[REDACTED]						Evaluate CCW for increased thermal loads and implement recommended mods as necessary. Regulatory risk for incomplete analysis, piping & support failures. Potential impact to LAR substantial.	Engineering evaluation in progress. Assume 50 supports to be added.
15	Prior to 2/1/08	License Amendment Request NRC Review could be delayed due to errors and omissions - NRC Acceptance - NRC Technical Review - ACRS Review - SBLOCA Confirmatory Analysis	Possible	Significant	M	[REDACTED]						Depending on the extent of the delay, could result in additional cost and extension of the project length.	1. Prepare LAR consistent with RS-001, NRC Review Standard for Extended Power Uprates. - Develop EPPI for format and level of detail. 2. Use Glens EPU submittal as a guide for format and level of detail. 3. Sequential review and challenge boards at certain interim LAR milestones. - Self Assessment after 1st LAR Section. 4. Multi-party peer reviews using industry and regulatory experts. 5. Advance meetings with NRC prior to submittal. 6. VP Nuclear Power Uprate met with NRC management 7/21/08. 7. Monthly meetings with NRC. 8. CRO met with NRC EDO on 3/23/08 to discuss review schedules. 9. FPL 000250 is a presence in Washington to coordinate questions and FAs.

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Risk Exposure and Mitigation – PSL (continued)

	Orig. Date	Risk Event Description	Probability	Impact	HIM/L	Maximum Cost Exposure (\$000)	Type of Estimate	P	C	WF	Weighted Risk Exposure (\$000)	Mitigation Action
16	8/20/09	Switchyard Modifications	Possible	Marginal	M	[REDACTED]						Engineering evaluation in progress.
17	5/29/08	WEG & SHAW vendor staffing level may not be sufficient to support project	Possible	Significant	M	[REDACTED]					Could cause delays with LAR schedule and/or cost additional monies	Agreement on re-baselining reached; no impact to end date for Shaw and WEG
18	10/14/08	There is potential that Legacy Analysis or License basis issues may be uncovered during re-analysis for EPU LAR	Likely	Marginal	M	[REDACTED]					Two such items have already been identified; PE PW'ty and PTN CTMT analysis which are being tracked by a separate line item. The impact is difficult to quantify until discovery	Developed and issued EPP-545; new instruction that defines risk identification and mitigation utilizing VIM-AA-1000. Thus far, the process has been effective
19	6/3/2008	Transition to Nuclear Asset Management Systems (NAMS)	Very Likely	Marginal	M	[REDACTED]					May cause delays with review and approval of Engineering Documents	Per Fleet wide Change Management Plan. Held meeting with NAMS coordinator and Site PMs. Transition to NAMS currently scheduled for Dec 08
20	8/20/09	Neutral Bus Enclosure	Possible	Marginal	L	[REDACTED]						Engineering evaluation in progress.
21	Prior to 2/1/08	Project Staffing Level not sufficient.	Possible	Significant	L	[REDACTED]					Project not able to establish and maintain an adequate level of in-house and contract personnel. Staffing level not sufficient to manage project efficiently.	Re-assessed and raised significance from low to medium 10/29/08. Recent hiring freeze has delayed hiring resources; 12/21: Approval obtained and posted in Guidant allowing site managers to select candidates and begin hiring. Additional changes to the organization structure (in tandem with Projects) should provide additional support as necessary
22	8/12/08	Given the planned construction of new nuclear plants in FL, obtaining adequate skilled labor to support EPU at PTN and PSL may be problematic	Unlikely	Significant	L	[REDACTED]					A lack of adequate skill craft could impact the change schedules and related costs	Have instituted a 60 day notice policy for these individual contractors that leave the site/project voluntarily. Will continue to monitor. If staffing problems or negative trends arise, further contingency actions will be undertaken.
		Cost Exposure (in \$1,000s)				[REDACTED]						

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Risk Exposure and Mitigation – PTN

Order Date	Risk Event Description	Probability	Impact	NWL	Maximum Cost Exposure (\$000)	Type of Estimate	P	C	WF	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
1 4/23/09	Turbine Gantry Crane travel speed, available laydown space, etc. Crane may be Less than Adequate to efficiently support the EPU outages	Likely	Critical								Ability to efficiently remove and replace equipment needed for power upsurge within the proposed Outage time frame	Obtain modified OEM to evaluate the overall condition of the Crane and provide recommendations Review recommendations and implement repairs as necessary to improve crane reliability and condition See Risk Mitigation Plan for details upon receipt of inspection report; probability will be Very Likely, P=1.
2 6/29/08	Submittal & Approval of LAR submittal by NRC is at risk due to: • WEC and SHAW vendor staffing level may not be sufficient to support project. • WEC advised that resources will be diverted to PSL/PB due to higher priority.	Likely	Critical								Delays to LAR schedule could impact to 2012 Upsets- 6 month delay last MW +3 West Coast Shutdown/Severe Change.	Workshops provided Recovery Plan mitigation actions being implemented WEC continue to monitor the effectiveness of actions Agreement on re-baselining reached no impact to end date for Shaw and WEC 8/28-Received WEC letter.
3 8/3/08	Alternate Hot Leg Recirculation flow path does not support EPU	Likely	Significant								The Alternate Hot Leg recirculation flow path does not support EPU. Post-LOCA, when recirculation analysis was significant licensing risk. Potential impact to LAR approval	Eliminate the single failure vulnerability associated with the primary hot leg recirculation flow path through MCN-588. Either provide parallel path to MCN-588 or leave MCN-588 open and install manual isolation valve or check valve
4 2/4/09	Site Capacity: Given the total quantity of work planned (including work from other projects), the overall work imposed on the station for such items as reviews, procedures, training, WOC Reviews, etc. may be beyond the capacity for the station to support	Possible	Significant	M							Potential to extend the Outage and/or slip a cycle for the in-service data	Being reviewed per Technical Evaluation and Outage Scope Plan Meetings routinely being held with station to ensure they are integrated with the project Will Review based on Outage Optimization
5 10/14/08	There is potential that Legacy Analysis or License basis issues may be uncovered during re-analysis for EPU LAR	Likely	Significant	M							Three such items have already been identified: PB FW temp, PTN CTMT analysis and PTN ECF dose The impact is difficult to quantify until discovery	EPPI-345 new instruction that defines risk identification and mitigation utilizing WJA-JA-1000.
6 2/12/08	License Amendment Request NRC Review could be delayed. • NRC Acceptance • NRC Technical Review • ACRS Review • SBLOCA Confirmatory Analysis	Possible	Critical	M							Additional RAI's, depending on the extent of the delay, could result in additional cost and extension of the project length Engineering Resources are needed to support LAR	1. Prepare LAR consistent with RS-021, NRC Review Standard for Extended Power Uprates. • Develop EPPI for format and level of detail 2. Use China EPU submittal as a guide for format and level of detail 3. Sequential reviews and challenge issues at certain interim LAR milestones • Self Assessment after 1st LAR Section 4. Multi-party peer reviews using industry and regulatory experts 5. Advance meetings with NRC prior to submittal 6. VP Nuclear Power Update met with NRC management 7/24/08 7. Monthly meetings with NRC 8. CMO met with EDO on 3/23 to discuss schedule 9. Plan to establish a presence in Washington to coordinate NRC questions and responses to RAIs Current schedule adequate to meet current needs RAI 001311

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Risk Exposure and Mitigation – PTN (continued)

	Origin Date	Risk Event Description	Probability	Impact	RWSL	Maximum Cost Exposure (\$000)	Type of Estimate	P	C	WF	Weighted Risk Exposure (\$000)	Risk Event Description	Mitigation Action
7	7/18/09	SDVs to Condenser and Runback	Possible	Significant	M	[REDACTED]						Potential Plant Trips / Loss of MW	Extend Runback modification
8	7/18/09	Add Fdwtr Htr #1 thru #4 Digital Level Controls	Unlikely	Significant	M	[REDACTED]						Control Stability during transitions	Implement modification
9	7/18/09	Turbine Building Structure Mods (potential)	Possible	Significant	M	[REDACTED]						Vibration and potential equipment damage	Repair building structure / structure analysis
10	7/22/09	Spent Fuel Cooling Additional Capability	Likely	Critical	M	[REDACTED]						Single point failure vulnerability decreased plant margin	Install second redundant Heat Exchanger
11	7/22/09	Siemens Implementation: Change and Delay Claims	Likely	Significant	M	[REDACTED]						Unbudgeted costs	Strong Contract Management and Oversight
12	7/18/09	Runback Circuit Mods for Condensate, SG feedwater, and heater Drains Pumps	Likely	Significant	M	[REDACTED]						Potential Plant Trips / Loss of MW	Detail successful runback circuit
13	7/22/09	Additional Westinghouse and Shaw PTN growth	Possible	Significant	M	[REDACTED]						Unbudgeted costs	Scope control
14	Prior to 2/1/09	Project Staff Level not sufficient	Possible	Significant	M	[REDACTED]						Project not able to combine and maintain an adequate level of in-house and supported staff personnel. Staffing level not sufficient to manage project efficiently.	With The exception of the Engineering Manager Position, the current staffing level is adequate. Engineering Manager position being temporarily filled. Plans underway to fill position with permanent individual. See Mitigation Plan for details.
15	8/21/09	Condensate Pump Foundation	Possible	Significant	M	[REDACTED]						Known problem with vibration. Operating all 3 pumps at 100% power	
16	8/21/09	PTN LAR Staff is not sufficient to support Licensing efforts	Possible	Significant	M	[REDACTED]						The current EPU staff lacks a sufficient number of experienced licensing and design engineers to support resolution of technical issues; development of the EPU LAR and responses to ASY LAR RAs; Potential impact to LAR submittal.	Utilize Zachary for staff augmentation
17	8/21/09	Steam Generator Moisture Carryover Modification may be cancelled- impacts LAR	Possible	Marginal	M	[REDACTED]						Cancellation of the MCO modification will impact several completed or near term WEC analyses	WEC to identify impact resulting from omission of MCO modification

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Risk Exposure and Mitigation – PTN (continued)

	Order Date	Risk/Event Description	Probability	Impact	HML	Maximum Cost Exposure (\$000)	Type of Estimate	P	C	WF	Weighted Risk Exposure (\$000)	Impact Description	Mitigation Action
18	8/31/09	RCS piping branch line stress/support analysis may require significant analysis	Possible	Marginal	M	[REDACTED]						RCL Branch lines were not analyzed for branch line effects. This may be required for EPU, SCTN to Shaw to evaluate	Analysis by Shaw to determine scope and estimate the scope.
19	8/31/09	An increase in the Boric Acid Storage Tank concentration is likely for EPU	Possible	Significant	M	[REDACTED]						Initial analysis results indicate that an increase in BAST boric acid concentration to 4 wt% will be necessary. The BAST area TS will need to be raised from 54 degrees to 65 degrees as a result	Determine if a modification is needed to support the increase in BAST area temperature TS
20	8/31/09	NRC recently rejected Comanche Peak's SFP criticality submittal	Possible	Marginal	M	[REDACTED]						The NRC's rejection was based in part on concerns about the uncertainties in the KENO code that WEC utilizes. This is an industry-wide issue. Potential impact to LAT approval	Utilize reactor core to benchmark the KENO code. Target availability of the benchmark to support responses to potential RAs.
21	1/8/09	Siemens has advised that there is a statistical probability that testing will uncover at least one 'hotspot', perhaps several, that will require corrective action when identified.	Unlikely	Significant	L	[REDACTED]						ELCID Results: (1) 6 hotspots on U3 (2) 41 spot welds were partially blocked on TE shield during manufacturing (misalignment between and shield vent holes & core and plate vent holes) - may need to be corrected, recommending inspection during spring Outage. (3) 0 hotspots on U4 (4) In 1996, one of the building bolt ends was found damaged but apparently usable. Siemens recommends replacing this bolt end. Others may be found damaged that require replacing. (5) In 1998 Several sheets of diagonal plates were noted to be "bight" on the TE. Siemens recommends that the sheets be evaluated as early as possible so that they can be corrected prior to restacking the body iron and steel iron	Siemens to complete their analysis and report and review the results of each specific Unit with the FPL's Site Reps by 2/27 Further inspections performed during U-4 Outage indicate no problems. Plan to perform inspections during U4 outage (Fall 2009)
22	8/12/09	Given the planned construction of new nuclear plants in FL, obtaining adequate skilled labor and experienced professionals to support EPU at PTN and PSL may be problematic	Unlikely	Significant	L	[REDACTED]						A lack of adequate skill craft and professionals could impact the outage schedules and related costs	Have instituted a 90 day rebate policy for those individual contractors that leave the site/project voluntarily Will continue to monitor if staffing problems or negative trends arise, further contingency actions will be undertaken.
23	8/31/09	EDG overfrequency and underfrequency impact not fully assessed	Unlikely	Significant	L	[REDACTED]						A comprehensive assessment of EDG over and underfrequency has not been completed. This could result in delays to the LAR submittal and potential modifications	Shaw to perform a comprehensive assessment of over/underfrequency impact
24	8/3/2009	Transition to Nuclear Asset Management Systems (NAMS)	Possible	Marginal	L	[REDACTED]						May cause delays with review and approval of work planning.	Per Fleet wide Change Management Plan Hold meeting with NAMS coordinator and Site PMs
		Cost Exposure (in \$1,000s)				[REDACTED]							

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Breakdown of Bechtel spend to date

Bechtel Spend to Date Breakdown Summary (as of July 2009)		
	PSL	PTN
Management Cost (Home Office & FNM)	[REDACTED]	[REDACTED]
Design Engineering (Units 3 & 4)	[REDACTED]	[REDACTED]
Implementation Cost (FE, Craft Sup., QC, Weld., Startup, PC, Admin)	[REDACTED]	[REDACTED]
Non Labor Cost (Travel, Per Diem, Mob/Demob)	[REDACTED]	[REDACTED]
Project Fee	[REDACTED]	[REDACTED]
Total Project Cost to Date	[REDACTED]	[REDACTED]

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ISC Has identified and contacted Vendors to renegotiate costs

- **Identified target vendor group based on percent completed, value, commodity component**
- **Began negotiations with selected vendors (TEi and Siemens)**
- **Target completion 9/30/2009**

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Approximately 60% of the Siemens labor costs and Bechtel Siemens support cost are firm

Siemens EPU Costs		
	PSL	PTN
Bechtel (Wrap Around Mod)	[REDACTED]	[REDACTED]
Siemens Open/Close	[REDACTED]	[REDACTED]
Siemens (FPL Materials)	[REDACTED]	[REDACTED]
Siemens Implementation	[REDACTED]	[REDACTED]
Bechtel Support	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]

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Proprietary & Confidential Business Information

Engage PGD and evaluate Siemens labor costs and Bechtel Siemens support cost

Main Generator Rewind Cost Comparison St. Lucie – Manatee 1 & 2 – Turkey Point 3

- **St. Lucie Rewind pricing compared favorably to Manatee pricing**
- **Open/Close estimate consistent with past efforts at Turkey Point**
- **Major Cost Drivers Identified**
- **Improvement Opportunities Identified**

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PGD and St. Lucie cost compare favorably and we understand the cost differences

Major Cost Drivers

- **[REDACTED] - St. Lucie Upgrade requires several major modifications not required for the Manatee generators**
- **[REDACTED] - Use of Siemens for disassembly-reassembly of the generators**
- **\$2.7 million - Project Support costs**
- **[REDACTED] - Use of Siemens for Project Management, Mobilization**
- **\$600 K - Nuclear site access In Processing**

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Improvement opportunities have been identified to reduce turbine related costs

- **Scrub modifications/maintenance work for proper accounting**
- **Change to outage scopes will provide opportunity to optimize resource utilization and reduce open/close cost**
- **Integrate support costs to maximize utilization by the project.**

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Determined write-off costs of Siemens exciter work – [REDACTED]

- **Refurbished System spare exciter to be provided in exchange for previous termination costs**
- **Existing exciter scope of Siemens contracts (4 rewinds totaling approx. [REDACTED] revised to reflect one rewind (approx. [REDACTED])**
- **Results in net Contract Reduction for Florida units of approximately [REDACTED]**
- **Working with Nuclear Business Operations to evaluate regulatory impact of spare exciter**

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Bechtel scope adds, reductions and transfers by costs

St. Lucie

Event	Dollar Change	Comment
Bechtel Indicative Staffing Bid Estimate	[REDACTED]	Original Scope "19 Mods" during Bid Evaluation Phase
Final Contracted Scope & scope Clarifications	[REDACTED]	Scope Increase/Scope Clarification (34 Mods) - 19 Modifications at Contract signing (Nov 2008) - Approx 15 new mod's/scope changes during six months
Mid-Course Review	\$3,500,000	Scope / Material refinement and Mid-Course Review – (40 Mods)
Work Transfer	[REDACTED]	Transfer of Work to FPL Responsibility - Start-up, M&TE, Valves, I&C, Procedures and Nurses
Overhead Refinement	[REDACTED]	Bechtel Optimization - Reduced Field Non-Manual, Home Office, Craft Ramp
	[REDACTED]	Latest Bechtel P50 Estimate – July 23, 2009

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(Current estimate amount)

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Bechtel scope adds, reductions and transfers by costs (continued)

Turkey Point

Event	Dollar Change	Comment
Bechtel Indicative Staffing Bid Estimate	[REDACTED]	Original Scope "33 Mods" during Bid Evaluation Phase
Final Contracted Scope & scope Clarifications (additions)	[REDACTED]	Scope Increase/Scope Clarification - 43 Modifications at Contract signing (Nov 2008) - Approx 40 new mod's/scope changes during six months of 2009
Mid-Course Review	(\$19,800,000)	Scope Decreases due to Mid-Course Review - Deleted 9 Work Scopes
Work Transfer	[REDACTED]	Transfer of Work to FPL Responsibility - Start-up, Valves, I&C and Nurses
Overhead Refinement	[REDACTED]	Bechtel Optimization - Reduced Field Non-Manual, Home Office, Craft Ramp
	[REDACTED]	Latest Bechtel P50 Estimate – July 23, 2009

(Current estimate amount)

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Have evaluated reducing integration and total overhead costs by 20% and have identified some savings

- **Outage optimization has allowed for delaying addition of incremental outage staff resulting in a reduction**
 - \$6.6M (PSL)
 - \$2.6M (PTN)

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Determined the termination cost for each order on hold

- **Saint Lucie**

- Circ water pump
 - Termination Cost - [REDACTED]
 - Total Contract Value - [REDACTED]
- 6.9 KV Cabinet Mod
 - Termination Cost - [REDACTED]
 - Total Contract Value - [REDACTED]

- **Turkey Point**

- FW Heaters
 - Termination Cost negotiated from [REDACTED]
 - Total Contract Value - [REDACTED]

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Reviewed scope adds to determine if they should be CAPEX

- **St. Lucie**

- Scope additions have been reviewed and formal Nuclear Cost Recovery justification forms have been submitted as part of the scope change process.
- Scope additions currently under review by the EPU Oversight Board are:
 - Rod Control System Upgrade.
 - Condensate Pump Refurbishment.
- Scope additions determined CAPEX as a result of review are:
 - Circulating Water Pump Refurbishment.
 - Condensate Pump re-powering to 6.9KV.
 - DEH Constant Pressure Pumps.

- **Turkey Point**

- None at this time

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Optimize Engineering cost and perform as soon as possible to increase certainty by 6/2010

- **Completion of all Engineering Design Packages by June of 2010 was not practical due to the number of resources required to implement.**
- **New plan based on outage optimization for completion of design to meet T-9 milestones has been established.**
 - Allows for project cost certainty by Dec. 2010.
 - Optimizes Engineering cost and resources.

Recommendation: Complete Engineering for lead unit by 12/2010

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Model cash & savings flow for short and long outage including pull up of engineering design

	PSL	PTN
Outage Savings	11.7M	21.6M
Staffing	6.5M	2.6M
Bechtel Savings	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]

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Obtain re-estimates of where we stand on each project by 10/1 along with proposals to reduce costs; create schedule with milestones to get this done

Evaluating opportunities to reduce project costs

Item	Site	Value	Time
Rod Control to CAPEX	PSL	[REDACTED]	3 rd Qtr.
Circ. Pump to CAPEX	PSL	[REDACTED]	3 rd Qtr.
Cond. Pump Material (6.9KV) to CAPEX	PSL	[REDACTED]	3 rd Qtr.
FAC Piping - Analysis Complete	PTN	[REDACTED]	3 rd Qtr.
Condenser -- Re-evaluating Necessity	PTN	[REDACTED]	3 rd Qtr.
Steam Generator Moisture Carry Over Testing	PTN	[REDACTED]	3 rd Qtr.

For short and long outage plan see if short outage can go to Projects to implement

- **Each Site has evaluated their short outage scope and have determined Projects would be more cost effective to implement minor mod work and project support activities.**
 - such as, temporary power, temporary air, scaffolding, insulation and lagging, water delivery, coatings and tool room.
- **Minor mod work**
 - PSL : Testing associated with the Iso-phase Bus Duct Cooling.
 - PTN : Inspection of 1-4 Feed Water Heater inspection.

Determine actions to mitigate adverse outage accrual when changing the outage to a short and long outage model

- **2009 Impact**
 - Reserve increased by \$1.5M
 - Increase included in current O&M forecast
 - Increase covered by additional division reductions
- **2010 Impact**
 - Reserve increased by \$3.8M
 - Will be included in 2010 budget submission
- **Total Impact**
 - Reserve increased by \$5.3M

Develop a formal mitigation plan for any work that was deleted from scope and work with Site Engineering to document as needed

St. Lucie

EPU SCOPE DELETIONS - Station Required Actions for Mitigation

Item	Deleted Item Description	Station actions required - Mitigation
1	Add Dedicated power Supply for 1C/2C Condensate Pumps - replace exist 1C/2C 4.16 kV motors, install 6.9kV Switchgear cube and remove transfer switch	None - Not required based on analysis.
2	Main Steam Safety Valve/ Tailpipe Mods	None - Not required based on analysis.
3	Main Steam Safety Valve Orifice Change	None - Not required based on analysis.
4	Replace DEH Constant Pressure Pumps - Replace exist centrifugal pps with constant pressure	Plant pursue mod as planned based on existing CAR 96-132, PC/M # 99115
5	Circulating Water Pp Refurbishments - refurb pumps to original design condition	Plant perform maint per PM schedule
6	Condensate Suction Piping U2 & Strainers	Plant pursue mod under existing CAR 06-007
7	Main Steam ADV Trim Change out	None - Not required based on analysis.
10	Exciter Upgrade / Rewind	Rewind not required for uprate, cooler upgrade remains in scope.
11	Condenser Material Upgrades	Plant pursue repairs as planned based on existing CR's

Develop a formal mitigation plan for any work that was deleted from scope and work with Site Engineering to document as needed

Turkey Point

EPU SCOPE DELETIONS - Station Required Actions for Mitigation		
Item	Deleted Item Description	Station actions required - Mitigation Plan
1	Replace the Feedwater Pumps- no longer required	Eval/ Rebuild Degraded Bearing Temp-Add to wireless monitoring system. Eval Seal Water system-Enhance PDM monitoring plan.
2	Add an Intake Cooling Water System (ICW) booster pump(partial scope reduction as TPCW heat exchangers will be replaced)	TPCW Shell/Tube HX-Alternative flow rate not required
3	Add cooling to the C electrical bus switchgear -- no longer required	Not required- No Load Increase (Cond. Pump 2500 HP FW Pump N.C.)
4	Replace feedwater heaters (12/unit) partial reduction -- cancel 1-4 htrs	Inspection required-Baseline & periodic (ECT Shell & Tube)
5	Upgrade MSSV outlet Piping	None - Need Hydraulic Analysis complete
6	Upgrade the Actuators to the Atmospheric Dump Valves	None-Still need hydraulic analysis
7	Replace Steam Dump to Condenser Valves --2/unit	None- Need runback study (Cond., HDP & FW)
8	Upgrade remaining Steam Dump to Condenser Valve internals (2/unit)	None- Need runback study (Cond., HDP & FW)
9	Replace the main Condensers - under consideration	Replace Waterboxes(CAR 05-087), hydrided tubes, increased plugging. Tubesheet Steam Erosion, detailed inspection, plug more tubes /preempt higher impingement forces, replace tubes/tubesheet (esp. Unit 4). Vibration mitigation, cleanliness, effectiveness
10	Replace FAC Identified Piping-- Substantial scope change: deletion of 1,2, 5 extraction steam piping and crossunder pipe manway installation	Inspection Plan - Increase inspection frequency
11	Add additional trim coolers for the Generator Exciter --exciter coolers and TPCW heat exchangers being replaced instead	None- Replacing HX with larger capacity
12	Increase AFW Capacity and CST Volume	None- Evaluated as acceptable
13	Replace the 'B' Bus Current Limiting Reactor Coils --no longer required	None - Load not increasing (Cond., FW pump load)
14	Pressurizer Loop Seal Removal: Piping will not be modified; settings on existing PSVs will be changed.	None-Set point change only
15	ECF removal: ECF's will be abandoned in place	None- CR air intake and Trisodium Tetraborate basket MOD's
16	Replace AFW valve position controls -- will not be done	None- Obsolescence only
17	Implement FW Htr Drain Digital Controls Modification -- scope revised to just No.5 and 6 fw htr drains	Pneumatic controls fully capable
18	Increasing size of condensate and feedwater pump motors will require electrical bus, cabling, and relay modifications	None- Use of 2500 HP Motor- Existing cables are ok
19	Replace SAE and Steam Condenser	None- Midcourse Re-eval. -replacement not required

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Engineering and Construction Department is validating the following modification packages of varying designs

<u>Modification</u>	<u>Site</u>	<u>% Eng. Design</u>	<u>Comments</u>
FW Heaters 5&6	PTN	30%	Under Review
MSRH	PTN	10%	Under Review
High Pressure Feed Water Replacement	PSL	10%	Under Review
Unit 1 Main Generator Bushings, CTs and PSS	PSL	30%	Under Review
Feed Water 4AB 5AB Replacement	PBN	90%	Under Review
Mini Flow Recirculation System	PBN	90%	Under Review

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Total Project Cost is comprised of three components:

- **Base – Original defined scope**
- **Risk – known exposure with a weighted cost**
- **Contingency – Unknown Project costs**

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EPU cost increases driven by detailed project analysis, risk identification and contingency evaluation

- **Contingency assigned based on a risk assessment of each project functional area**
- **Uncertainty was assessed in the following functional areas**
 - LAR
 - Design engineering
 - Major Contracts
 - Labor (includes craft and staff)
- **Contingency of 5% to 20% of to-go costs was assigned to each functional area**

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URS Washington Division submitted proposal to provide independent to go estimate for Turkey Point EPU

- **Cost [REDACTED]**
- **Schedule duration of 8 weeks, scheduled to complete November 2009**
- **Deliverables for each mod to include:**
 - Detailed cost estimate for engineering, procurement, construction, and commissioning
 - Resource-loaded level 2 schedule

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Outage Scope - PSL

First Outage	Second Outage	Third Outage (Main Update)	Fourth Outage (Main Update)
SL1-23, May 2010, [REDACTED]	SL2-19, Nov. 2010 [REDACTED]	SL1-24, Augst 2011 [REDACTED]	SL2-24, April 2012 [REDACTED]
Minor inspection/field work (isophase, Turbine test tabs)	Main Generator Rewind LP Turbine Rotor Main Transformer Replacement	U-1 System Upate Main Generator Rewind LP Turbine Rotor HP Turbine Main Transformer Upgrade Major Components (MSR, CCW, FWH) Major Pumps/Motors	U-2 System Upate HP Turbine Main Transformer Replacement Major Components (MSR, CCW, FWH) Major Pumps/Motors Major Pumps/Motors

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Outage Scope - PTN

PTN3-25, September 2010, [REDACTED]	PTN4-26, March 2011, [REDACTED]	PTN3-26, January 2012, [REDACTED]	PTN4-27, October 2012, [REDACTED]
No. 5 & 6 Feed Water Heaters	No. 5 & 6 Feed Water Heaters	U-3 System Uprate	U-4 System Uprate
Digital Upgrades	Digital Upgrades	Main Generator Rewind	Main Generator Rewind
		HP Turbine	HP Turbine
		Major Components (MSR's, NCC's, TPCW HX)	Major Components (MSR's, NCC's, TPCW HX)
		Turbine Digital controls	Turbine Digital controls
		Major Pumps/Motors	Major Pumps/Motors

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