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UTAH PUBLIC

Sierra Energy and Risk Assessment, Inc. (SERA) has been hired by the Utah Committee of Consumer Services (CCS) to review Utah Power & Light Company's and Pacificorp's application (PSCU Case No. 87-035-27) for merger approval and to prepare testimony regarding engineering and some of the economic impacts of the proposed merger. SERA's scope of work primarily consists of evaluating the resource planning, system operations and power marketing elements of the Applicants' case.

I am the project manager for SERA.

Since the SERA contract was executed, the Applicants' actions have made it impossible for SERA to prepare an adequate and comprehensive report and testimony on the economic and engineering impacts of the merger by April 6, 1988 as specified in the current schedule for the proceeding. The Applicants actions which have caused SERA's predicament include, but are not limited to:

- 1. Delay and/or inadequate responses to data requests.
- 2. Refusal and failure to perform and provide to CCS sensitivity cases employing their production costing model.
- 3. Delayed and inadequate responses to CCS's request to obtain the Applicants' production cost modeling system.
- 4. Revisions by the Applicants of their base case and their production costing modeling system and resulting base case used to justify the merger.

SLOW/INADEQUATE RESPONSES TO DATA REQUESTS

Since November 20, 1987, CCS has submitted approximately 174 data requests (DRs) prepared by SERA to Applicants for response. The Applicants' have consistently been late in responding to these DRs. Furthermore, many of their initial responses were either totally or partially inadequate resulting in the need to prepare and submit further data requests in order to obtain at least a portion of their required data. These inadequate responses are documented in letters sent to the Applicants. These actions on the part of the Applicants have resulted necessarily in delays in SERA's analysis and preparation of testimony.

An example of the lateness and inadequate responses received by the Applicants is illustrated by the first set of DRs. UP&L provided an initial response to the CCS first set of DRs on December 23, 1987 and PP&L responded on January 11 and 13, 1988.

SERA prepared letters dated December 31, 1987 and January 13, 1988 documenting nonresponsive answers from the Applicants. These letters form the basis for a number of extended conference calls between CCS, SERA and the Applicants. These conference calls were point-by-point discussions of the DRs and the information needed to make a satisfactory response. With few exceptions, the data requested did exist and were eventually supplied by the Applicant in follow-up responses. Essentially complete responses to the first set of CCS DRs trickled in from late January to early February.

A specific example of critical information received during this period is found in the responses to DRs #43 and #57 of the first CCS data request. These DRs requested information on the firm sale claimed by the Applicant as a major benefit of the merger. A satisfactory response to these questions was not received until February 2, 1988 during the on-site technical conference at PP&L's corporate offices.

REFUSAL BY APPLICANTS TO SUPPLY SENSITIVITY ANALYSES

On December 10, 1987 (DRs #106 and #116) SERA requested that the Applicants run their production costing model to test the sensitivity of the model to various assumptions and input data changes. On January 18 and 21, 1988 inadequate responses were received to those data requests. On February 2, 1988 a conference was held in Portland, Oregon with the Applicants. At that time, Mr. Dennis Steinberg, of PP&L, informed CCS and SERA that PP&L would not run any further sensitivity cases with their production costing model (including the remainder requested in DRs #106 and #116).

On February 12, 1988 a letter (copy attached) was sent to PP&L documenting our discussions and material to be sent by PP&L and UP&L. Included in the letter was documentation on PP&L's refusal to comply with the above referenced DRs.

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On March 1, 1988 in response to the letter, PP&L again responded to DR #116 (copy attached) but did not provide the requested studies. This information has yet to be provided.

SLOW RESPONSE IN PROVIDING PRODUCTION COSTING MODEL

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Since PP&L had refused to provide CCS and SERA with sensitivity cases provided in a timely fashion, we had no choice but to request from Applicants the PP&L modeling system and prepare to employ it in order to be able to satisfactorily analyze the Applicants' case. On February 17, 1988 SERA requested a copy of the Applicants' production costing model and <u>all</u> associated software and necessary data sets to replicate their base case. On March 2, 1988 SERA received a copy of the Applicants' production costing model and input data sets. Receipt of the model occurred seven days after it was promised by the Applicants.

Nine days later, and after numerous discussions with PP&L personnel, it was discovered that the spreadsheets* were not provided even though from the beginning, PP&L personnel were aware that they had only sent three floppy disks to SERA <u>and</u> that the entire production cost modeling system consisted of eight floppy disks.

These spreadsheets are required to produce the required output results and comparative analyses.

Copies of the spreadsheets in computer readable form were reviewed by SERA on March 11, 1988.

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REVISIONS TO APPLICANTS' BASE CASE AND PRODUCTION COSTING MODEL

Upon receipt of the complete PP&L modeling system, SERA personnel immediately began exercising the modeling system and performing simple "sanity checks" to verify that the model did not contain easily detectable bugs. A very basic "sanity check" was to see whether using the PP&L and UP&L "stand-alone" data sets in the merged sub-model without any transmission links would permit replication of the results derived from a simple summing of the stand-alone cases as it should. Unfortunately, the results of this "sanity check" established that substantial errors were present in one or more of the models and that these errors could result in a "phantom" benefit of from \$13 to \$35 million derived from merely running the stand-alone cases through the merged Thus, the modeling system failed the "sanity check". model. This information was presented to PP&L personnel in several discussions commencing on March 14, 1988.

Based in large part on SERA analyses, the Applicants came to realize that the version of their production costing model used to develop their initial base case was inaccurate and inappropriate as the foundation for the economic analysis of this case. Accordingly, the Applicants' replaced the version included in their Application with a revised version. The Applicants

provided their second base case and their second production costing model version to SERA on March 30, 1988.

This revised production costing model reflected, among other things:

- Seven separate code changes, and
- Three input data changes.

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These extensive revisions permitted the model to pass the "sanity check". Having become satisfied that the model at least performed successfully at a rudimentary level on April 1, 1988, SERA began redoing its analysis.

The analysis now being implemented consists of two primary facets. One facet involves reviewing the revised source code, input data changes and available sensitivity cases. Based upon these results additional sensitivity analyses will be undertaken as necessary to assure that the modeling system performs in all important aspects as it should.

The second major facet of the analysis is the evaluation of a revised base case for the stand-alone and merged systems employing the revised PP&L model. Major modifications are being made to:

1. The UP&L system modeling based upon a composite of corrections stemming from SERA production cost modeling and analysis of the results of the UP&L MAINPLAN and PROMOD simulations, UP&L budget and the PP&L modeling of the UP&L system.

The key product of this assessment will be the rebenchmarking of the PP&L model to a more accurate approximation of the UP&L system to reflect, among other changes:

- Production constraints due to coal contracts and coal production capabilities.
- Consistent and realistic forced outage and maintenance rates.
- Incremental fuel and other O&M costs.
- 2. The recharacterization of the merged system and its comparison with the stand-alone systems to reflect, among other things:
 - Deletion of the firm sales.
 - Elimination of WSCC major loop flow.
 - Correction of double counting of UP&L's share of ICP secondary.
 - Correction of a substantial number of differences in assumptions between the UP&L representation in the stand-alone case and UP&L representation in the merged case for identical data elements not affected by the merger.

Once a new base case comparison is completed, alternative scenarios including the presence of a firm sale and other possible variations in the assumed operation of the merged system will be evaluated. The product of these analyses will be reported in testimony.

For the above reasons, I have concluded that SERA cannot provide its analysis to CCS in a timely fashion for filing without a delay in the schedule of filing of CCS testimony of at least fourteen (14) days.

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I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

~ 4/4/98

Robert K. Weatherwax President Sierra Energy and Risk Assessment, Inc.

CORPORATE ACKNOWLEDGMENT NO. 202 RECERCERCE State of On this the 4th day of 19_<u>88</u>, before me, SS. MARTHA Pozdyn County of the undersigned Notary Public, personally appeared SECESERE SECESERES Robert K. Weatherway personally known to me 🕭 2010 DE DE LE COMPANY DE LE proved to me on the basis of satisfactory evidence MARTHA POZDYN to be the person(s) who executed the within instrument as NOTARY PUBLIC --- CALIFORNIA Fresident _____ or on behalf of the corporation therein PRINCIPAL OFFICE IN SACRAMENTO COUNTY named, and acknowledged to me that the corporation executed it. My Commission Expires April 28, 1989 WITNESS my hand and official seal. AND CONTRACTOR AND CO Notary's Signature CARDON CONTRACTOR CONTRA 7120 122 NATIONAL NOTARY ASSOCIATION • 8236 Remmet Ave. • P.O. Box 7184 • Canoga Park, CA 91304-7184



February 12, 1988

Mr. Dennis Steinberg Director, Power Planning Pacific Power and Light Company 920 S. W. Sixth Ave. Portland, Oregon 97204

Dear Mr. Steinberg:

The following materials were promised by PP&L and UP&L during the Technical Conference held in Portland on February 2, 1988.

- #5. PP&L will send additional 1986 resource plan data including monthly loads and resource summaries by resource type.
- #35. PP&L agreed to provide copies of additional sections of the Log Sheets upon request.
- #63. Sam Cannady, PP&L, will provide a map or flow chart and description of the steps taken to move between the UP&L models, budget report and the PP&L model inputs. The description will allow SERA to trace the origin and use of data and assumptions that characterize the UP&L system in the PP&L modeling. UP&L will send work papers explaining changes made to MAINPLAN runs to develop the Budget and Forecast Report.
- #105. PP&L will send Mr. Reed's workpapers in support of his Third Supplemental Testimony Exhibit 5.2 regarding power supply and reduced construction benefits (particularly regarding Reed's line No. 1) used to reconcile the differences between Reed's and Steinberg's testimonies. PP&L will send more detail on the Jim Bridger and Centralia modifications and reconciliation of inservice dates, including the analysis referred to in PP&L's November 13, 1987 memo in Exhibit No. 5.2.
- #106. PP&L will send workpapers documenting the basis of numbers used to calculate the increased sales due to economic development; assumptions regarding energy usage per employee and other important assumptions; the marginal cost assumptions used in determining the impact on resource needs; the base forecast for each sector; and what PP&L uses as a demand elasticity with respect to price for each sector. PP&L refused to provide the production costing and capacity addition analysis sensitivity cases that were requested until discovery is closed. (Refer to question #116 comment)

(916) 791-1212

Mr. Dennis Steinberg February 12, 1988 Page Two

#107. PP&L/UP&L agreed to supply the following:

- 1. UP&L "Early-out" study.
- 2. Listing of PP&L 1987 attrition by employee category.
- 3. Projection by utility by function of additional "merger induced" manpower cutbacks.
- 4. PP&L will check with UP&L for any other projections of manpower reductions without or before the merger.
- 5. FERC Data Request (DR\$) responses that detail the savings asserted due to reduced construction and "administrative combinations".
- 6. Another party's DR responses that address the issue of reduced thermal generation with the merger.
- 7. Support documentation on manpower savings due to reduced construction.
- #116. PP&L agreed to provide the requested runs after discovery is closed. SERA believes the runs requested reconcile inconsistencies between the Merged and Stand Alone cases and are not additional studies. Therefore, the runs requested should be conducted prior to the close of discovery.

Other

- 1. PP&L will provide a copy of the PP&L's comments to BPA on the LTIAP.
- 2. If and when available, PP&L will send a copy of BPA change in position on use of UP&L intertie space before getting intertie allocation.
- 3. PP&L will send new interchange rates between PNCA.
- PP&L will provide documentation of mining improvements that permit lower incremental costs at Hunter and Huntington Generating Stations.
- 5. PP&L will provide the study supporting the \$5.3 million savings at Centralia.

Mr. Dennis Steinberg February 12, 1988 Page Two

- 6. Documentation, both mathematically and by contract, for the assertion (made at the meeting) that ICP determined reserves can be no greater than PNCA determined reserves.
- 7. PP&L will document and explain the limits placed on the Hunter and Huntington capacity factors.
- PP&L will provide an updated version of Mr. Reed's Exhibit
 3.1 provided in FERC Testimony.

Please call either myself or Craig Conley if you have any questions regarding the above listed items.

Sincerely, Rn Int K.W.

Robert K. Weatherwax President

cc: Sandy Mooy Jeff Williams Thomas W. Forsgren Gregory B. Monson George M. Galloway Stephen Bernow

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PACIFIC POWER & LIGHT COMPANY Committee of Consumer Services

Request CCS 3-116.

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Perform the following sensitivity runs by modifying the base case PP&L Production Cost Model (and other models and calculations employed to support Mr. Steinberg's testimony and workpapers) analysis. Provide the inputs, outputs, summary results, workpapers and identify the differences between the merged and stand-alone results.

- A) Correct the differences between the inputs for the cases including the following between the merged and UP&L stand-alone cases.
 - 1. PSW Energy Sales Price
 - 2. PSW Market (Assumed zero in UP&L stand alone)
 - 3. Four Corner Market
 - 4. Four Corner Energy Price
 - 5. Four Corner Market Test Price
 - 6. Nevada Energy Market
 - 7. Nevada Energy Price
 - 8. Nevada Market Test Price
 - 9. PNW Energy Market
 - 10. PNW Market Price
 - 11. Nevada Market Test Price
 - 12. PSW Market Test Price
 - 13. Utah Hydro including Olmstead
 - 14. Naughton Price
 - 15. Hunter Price
 - 16. Block 4 Energy Price
- B) In addition to the changes in A) above, modify the PNW intertie capacity to reflect the AC intertie upgrade and the DC terminal upgrade.
- C) In addition to the changes in B) above, increase the PNW intertie capacity for the COTP.
- D) In addition to the changes in B) above, model UP&L stand-alone case with the same level of firm sales as the merged case and assume UP&L can purchase additional capacity and energy from the PNW if necessary to support the sale.
- E) In addition to the changes in B) above, assume the BPA settlement energy related to WPPSS is not effective during the 1988-1993 period.

- Response to CCS's Third Data Request, Case No. 87-035-27

PACIFIC POWER & LIGHT COMPANY Committee of Consumer Services

Request CCS TC-3-116.

PP&L agreed to provide the requested runs after discovery is closed. SERA believes the runs requested reconcile inconsistencies between the Merged and Stand-Alone cases and are not additional studies. Therefore, the runs requested should be conducted prior to the close of discovery.

Supplemental Response CCS 3-116.

All existing sensitivity runs requested have been provided. Study results that have not been provided do not exist. They will be provided when they are produced.

Dated this _____ day of _____, 1988.

STATE OF OREGON

) ss. County of Multnomah)

Dennis P. Steinberg, being duly sworn deposes and says:

That he is Power Planning Director of Pacific Power & Light Company, that he has read the foregoing response and knows the contents thereof, and that the same is true to the best of his knowledge and belief.

DENNIS P. STEINBERG

SUBSCRIBED AND SWORN TO before me this _____ day of _____, 1988.

Notary Public for Oregon My Commission Expires:

CCS-3.mva

- Response to CCS's Third Data Request, Case No. 87-035-27