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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE APPLICATION)
OF UTAH POWER & LIGHT COMPANY,)
AND PC/UP&L MERGING CORP. (TO BE)
RENAMED PACIFICORP) FOR AN ORDER)
AUTHORIZING THE MERGER OF UTAH)
POWER & LIGHT COMPANY AND)
PACIFICORP INTO PC/UP&L MERGING)
CORP. AND AUTHORIZING THE ISSUANCE)
OF SECURITIES, ADOPTION OF TARIFFS,)
AND TRANSFER OF CERTIFICATES OF)
PUBLIC CONVENIENCE AND NECESSITY)
AND AUTHORITIES IN CONNECTION)
THEREWITH.)

SUBMISSION

Case No. 87-035-27

Submitted herewith are replacement pages for Mr. R. M. Boucher's second supplemental testimony. Changes on pages 11, 24, 27, 28 and 29 are typographical. The new material starting on page 33 provides a response to questions that were previously inadvertently omitted.

DATED this 16th day of November, 1987.

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RENAMED PACIFICORP) FOR AN ORDER)	
AUTHORIZING THE MERGER OF UTAH)	
POWER & LIGHT COMPANY AND)	
PACIFICORP INTO PC/UP&L MERGING)	Case No. 87-035-27
CORP. AND AUTHORIZING THE ISSUANCE)	
OF SECURITIES, ADOPTION OF TARIFFS,)	
AND TRANSFER OF CERTIFICATES OF)	
PUBLIC CONVENIENCE AND NECESSITY)	
AND AUTHORITIES IN CONNECTION)	
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I hereby certify that I mailed a true and correct copy of the foregoing Submission to the following, by placing the same in the United States mail, postage prepaid, this 16th day of November, 1987:

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1 Southern California Edison Co., the exercise of options
2 on cogeneration at several of Pacific Power's in-
3 dustrial customers, optional conservation programs, and
4 purchases from BPA as provided for in section 7(f) of
5 PL 96-501 and in Pacific's Power Sales Contract with
6 BPA. As Exhibit 3.16 indicates, these energy resources
7 have relatively short lead times, and need not be com-
8 mitted to at this time. If more cost-effective pur-
9 chases were to be identified, they would, of course, be
10 employed before these resources.

11 QUESTION

12 How would you expect the merger to affect the
13 expected future capacity expansions summarized in Ex-
14 hibits 3.14 and 3.15?

15 ANSWER

16 The merger should affect both the type and
17 timing of future resource purchases and investments
18 depicted in Exhibits 3.14 and 3.15. An illustration of
19 the effects is provided in Exhibits 3.17 and 3.18. Ex-
20 hibit 3.17 summarizes the merged company's expected
21 future capacity requirements, and the type and timing
22 of resources that meet those requirements, for both
23 summer and winter peak periods, through winter 2006-7.
24 Similarly, Exhibit 3.18 summarizes the merged company's
25 expected future new energy requirements and resources
26 on an annual energy basis, through operating year 2006-

1 These lines sections and the necessary sub-
2 stations and terminations, combined with the 21-mile
3 section of 345 kV line between Newcastle and Central
4 that is currently under construction, will complete the
5 interconnection between Utah and Nevada. Utah Power's
6 cost for this project is \$72.6 million. The transmis-
7 sion line will have a capacity of 400 MW into South-
8 western Utah and 250 MW into Nevada Power.

9 QUESTION

10 What changes would be made to Pacific Power's
11 and Utah Power's transmission plan with the merger?

12 ANSWER

13 A staged transmission plan has been identi-
14 fied to integrate the two companies together with a
15 merger. The plan makes use of several elements
16 previously identified as needed for other reasons, and
17 outlines additional elements which could be added later
18 at such time that additional integrating capability is
19 required.

20 QUESTION

21 What elements are required for the first
22 stages of the plan, what are their costs, and what
23 capacity increases do they create between the Utah
24 Power and Pacific Power control areas?

25 ANSWER

26 The first elements would involve completing

1 west system. This could be a later stage addition, if
2 the combined system studies identify a need for addi-
3 tional interconnection capability.

4 QUESTION

5 Are there other additions which may be re-
6 quired?

7 ANSWER

8 The 230 kV line additions discussed above
9 provide substantial transfer capability increases. To
10 control loadings on the new lines and to control the
11 power split between the Bridger 345 kV system and these
12 230 kV lines, a phase shifter may be added in Pacific
13 Power's Granger line (Exhibit 3.20.b). This would con-
14 trol the loadings on both transfer paths. The cost of
15 this addition would be approximately \$7 million.

16 QUESTION

17 How is the level of investment in transmis-
18 sion and interconnection facilities affected by the
19 presence of a merger?

20 ANSWER

21 In that the first stage elements needed to
22 integrate the two companies were already budgeted for
23 other reasons, the level of investment initially will
24 change very little. If additional interconnection
25 capacity between the Pacific Power and Utah Power
26 systems is required, the 230 kV additions described

1 above are estimated to cost \$22 million.

2 QUESTION

3 To what extent does the merger provide an
4 opportunity to substitute new transmission facilities
5 for new generation resources in the planning of peak
6 capacity expansion?

7 ANSWER

8 The transmission facilities for the merged
9 system I have just described could allow capacity
10 requirements to be met without new generation invest-
11 ments over the planning horizon, as summarized in Ex-
12 hibits 3.17 and 3.18. The transmission investments al-
13 low the load diversity and reserve reduction benefits
14 of the merger to postpone or avoid new generation
15 resources, and can also support seasonal capacity ex-
16 changes that could reduce future purchases beyond the
17 savings shown in the exhibits.

18 QUESTION

19 With economic dispatch of the merged genera-
20 tion resources and resultant change in power flows on
21 the transmission network, won't there also be a change
22 in transmission losses?

23 ANSWER

24 Yes. In order to achieve the optimum
25 economic benefits of the merged resources, generation
26 schedules will change which will result in a change in

1 the losses on the transmission network.

2 QUESTION

3 What would you expect will be the net effect
4 of the change in transmission losses?

5 ANSWER

6 It is difficult to quantify system losses due
7 to system variables such as the status of units avail-
8 able for operation, transmission facilities in and out
9 of service, off-system economy sales and purchases,
10 loopflow conditions, changes to the transmission net-
11 work, load levels, and voltage regulation. While we
12 have not thoroughly analyzed the impact on losses, one
13 example is the case of summer loading patterns, where
14 it is likely that Pacific's thermal facilities would be
15 used to supply a portion of Utah's loads during the
16 summer. When Pacific's resources are scheduled at a
17 level equal to the improved transfer capability between
18 the two systems, studies indicate a net reduction in
19 losses as high as 9%. While there are many other load-
20 ing patterns to be analyzed, it should be noted that in
21 deriving the most economic operation of the system, the
22 change in losses are included in such an evaluation.
23 Thus, although for some changes in generation there may
24 result an increase in transmission losses, the overall
25 system effect is a net savings in energy production
26 costs.

1 flationary pressure that will tip the scales out of
2 balance. Therefore, extreme increases in oil prices
3 are to be feared as much as drastic price reductions
4 largely due to their restraining effect on the economy
5 as a whole.

6 The effect of an increase in oil and gas
7 prices on the merged company would not be significantly
8 different than it is for Pacific Power. However, a
9 larger, more diversified company should be able to bet-
10 ter withstand the major economic shocks that result
11 from significant changes in oil and gas prices.

12 QUESTION

13 Please discuss the opportunities for bulk
14 power sales and transfers, including source and
15 destination, that will be available to the merged com-
16 pany.

17 ANSWER

18 As previously discussed in my supplemental
19 testimony (pages 5 and 6), the opportunities for bulk
20 power sales will be most influenced by market access
21 developments related to the California and Nevada
22 markets. Utah Power's planned construction of the
23 Nevada Power Company interconnection in 1990, possible
24 access under BPA's proposed Long Term Intertie Access
25 Policy and availability of Arizona-California and In-
26 termountain Power Project transmission capability

1 present the most likely opportunities to be available
2 to the merged company for bulk power sales in addition
3 to the sales estimates set forth in Exhibit 3.5 of my
4 supplemental testimony. The source for such bulk power
5 sales in the near term will likely be the energy
6 identified in Exhibit 3.12 of my testimony which will
7 be available to the merged company for off-system sales
8 opportunities. Additionally, depending on the mag-
9 nitude and timing of such opportunities, the source for
10 a portion of such off-system bulk power sales could be
11 from other Northwest and Rocky Mountain utilities.

12 As previously indicated in my testimony, the
13 companies have not yet completed studies to determine
14 the additional interconnection requirements necessary
15 to realize the diversity and sales opportunities avail-
16 able to the merged systems. As such, it is not known
17 at this time what transfer capabilities will be avail-
18 able in excess of the needs of the merged systems to
19 facilitate third-party participation in such bulk power
20 sales opportunities.

21 QUESTION

22 Please discuss the merged company's wheeling
23 policy regarding access to transmission by other
24 utilities.

25 ANSWER

26 As discussed above, we have not yet completed

1 studies to determine the transmission capability that
2 may be available for use by other utilities. The
3 merged company intends to operate its transmission
4 facilities consistent with reliability and operational
5 requirements and in a way that assists us in providing
6 electric service to our customers at the lowest reason-
7 able cost. The merged system will analyze requests for
8 transmission service from other parties on a case-by-
9 case basis in order to insure that the use of those
10 facilities will not adversely affect the merged
11 system's electric customers. Because the merged system
12 will be operated and planned on a single-utility basis,
13 the merged system's use of its transmission facilities
14 to achieve the lowest reasonable cost of service to its
15 customers will have a priority over other uses.

16 QUESTION

17 Please discuss how the prices and terms of
18 wheeling services of the merged company will be
19 determined.

20 ANSWER

21 The prices and terms of service for transmis-
22 sion services provided by the merged company will be
23 designed to minimize prices to our electric customers
24 and will be consistent with the policies of the Federal
25 Energy Regulatory Commission (FERC). FERC policies
26 toward wheeling services clearly are evolving, and we

1 are unable to predict how a number of issues currently
2 under discussion will be ultimately resolved.

3 QUESTION

4 Do you believe that the FERC will treat the
5 merged company any differetly than the separate com-
6 panies?

7 ANSWER

8 No.

9 QUESTION

10 Does this conclude your further supplemental
11 testimony?

12 ANSWER

13 Yes.

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