

1 **Q. Please state your name and business address for the record.**

2 A. My name is Andrea Coon. My business address is 160 East 300 South, SLC  
3 Utah.

4 **Q. For which party will you be offering testimony in this case?**

5 A. I will be offering testimony on behalf of the Utah Division of Public Utilities.

6 **Q. What is your position and duties with the Division of Public Utilities?**

7 A. I am a Utility Analyst with the Division of Public Utilities. I am a member of  
8 the Energy section, whose responsibilities lie in regulating Utah's energy  
9 oriented utilities.

10 **Q. What will be the general area of your testimony?**

11 A. I will be offering testimony on:

- 12 1. Whether PacifiCorp is in need of new generating plant to meet  
13 current and future demand in a reliable manner.
- 14 2. Whether future demand is likely to continue and to lead to higher  
15 capacity needs.
- 16 3. If additional capacity is needed, whether the proposed Lake Side  
17 facility meets those needs.
- 18 4. Whether or not the proposed facility would provide benefits to Utah  
19 ratepayers.
- 20 5. Whether all necessary permits have been obtained.
- 21 6. Whether the proposed facility meets other terms for a Certificate of  
22 Convenience and Necessity such as: whether or not the proposed  
23 detrimentally competes with other Utah public utilities, whether the

1 construction is consistent with state policy on growth, whether the  
2 interests of the public were considered, and other issues as  
3 necessary.

4 **Needs Analysis**

5 **Q. How did you go about determining whether or not PacifiCorp is in need**  
6 **of new generating plant to meet its demand?**

7 A. Consistent with what I did in the last PacifiCorp CCN proceeding (Current  
8 Creek) in February of 2004, I started out by consulting PacifiCorp's 2003  
9 Integrated Resource Plan (IRP). I reviewed Chapter 2 of the IRP which gives  
10 both a general overview of what PacifiCorp's current load resource position  
11 was at the time of the writing as well as what was PacifiCorp expected to  
12 occur going forward. These expectations included continuing load growth and  
13 declining available resources. Taking into account both the expected changes  
14 in load and resources, PacifiCorp expected significant resource shortages over  
15 the planning horizon. These expectations appeared to be reasonable based  
16 upon historical load growth and supply contract expiration dates.

17 **Q. Why do you feel that the IRP is a good resource to consult in order to**  
18 **determine future capacity needs?**

19 A. PacifiCorp's 2003 IRP was acknowledged by the Utah Public Service  
20 Commission as being a reasonable plan going forward. As such the 2003 IRP  
21 is the best place to get a clear indication of what PacifiCorp believes its load  
22 and resource balance will be going forward.

1       **Q.    Do you have any concerns with using the 2003 IRP to check for need in**  
2       **this case?**

3       A.    Yes. The main concern that I have is that we are now at the end of another  
4       IRP cycle, with a new report due out by the end of the year. This means that  
5       the information contained in the acknowledged IRP is not quite as up to date  
6       as I would prefer to use. Therefore, it was necessary for me to consult other  
7       information sources, detailed below, to ensure that the numbers that I am  
8       using for this case are as accurate as possible.

9       **Q.    Why is understanding PacifiCorp’s load and resource balance important**  
10       **in determining need for future generating plant.**

11       A.    Understanding PacifiCorp’s load and resource balance is important in  
12       determining the need for new generating resources in a couple of ways. First,  
13       PacifiCorp is mandated as a regulated entity providing electrical service and  
14       consistent with other obligations that it has undertaken to supply reliable  
15       service to its Utah customers. A shortage of capacity on a going forward basis  
16       would put this reliable service at a greater risk than if the available capacity  
17       met the expected load with some excess, generally referred to as a reserve or  
18       planning margin. This margin could be called into use in case of plant failure,  
19       extreme weather, or other related circumstance. For the 2003 IRP, PacifiCorp  
20       compared its resources against its expected load and then added a 15% reserve  
21       margin to be used in case of one of the above contingencies. Therefore, the  
22       load and resource balance numbers in the IRP are aimed at providing reliable  
23       service.

1                   Second, PacifiCorp is also expected to supply this service at reasonable  
2 costs. As we witnessed in 2000, a shortage of capacity or an insufficient  
3 reserve margin, which forces an electric supplier to rely heavily on markets to  
4 fill the gap, also exposes ratepayers to enormous amounts of market risk. In  
5 order to supply service at reasonable costs and minimize the problem of  
6 market risk, it appears to be better to have a large part of the demand covered  
7 by existing resources, be it plant or long term contract, instead of relying on  
8 the short-term market for large blocks of power during particularly volatile  
9 time periods, such as summer daytime hours.

10       **Q.    The proposed Lake Side power plant would be scheduled to come online**  
11       **in the summer of 2007. Does the 2003 IRP give indications regarding the**  
12       **load/resource balance expected in the summer of 2007?**

13                   Yes. The 2003 IRP shows that there is a resource gap of 1579MW at peak  
14 when using a 15% planning margin. This means that at the single hour during  
15 which the PacifiCorp system reaches its highest usage level, the amount of  
16 resources available is forecasted to be 1579 MW lower than the system and a  
17 15% planning margin would require.

18       **Q.    Forecasts should show changes as conditions change through time. Has**  
19       **PacifiCorp updated the forecasts that showed a power shortage for the**  
20       **summer 2007 time frame?**

21       A.    Yes. PacifiCorp filed an IRP update with the Commission in October 2003  
22 that used a newer load forecast than had the acknowledged IRP. The newer  
23 forecast showed a slightly higher projected shortage of 1634 MW for the

1 PacifiCorp peak in 2007. In addition, PacifiCorp introduced a new load  
2 forecast for the 2004 IRP cycle in January 2004. According to PacifiCorp's  
3 response to DPU data request 2.4, after making changes that reflect updated  
4 capacity assumptions, not including the proposed Lakeside Power Project, the  
5 new deficit for 2007 would be just over 850 MW.

6 **Q. What alterations did you make to the information contained in the 2003**  
7 **IRP in order to help you determine need?**

8 A. I had to update the amount of resources to reflect resources recently procured  
9 by PacifiCorp including Current Creek and several forward market purchases  
10 as outlined in PacifiCorp's response to DPU data request 2.4. I also compared  
11 the results that I obtained upon making the changes to those of the IRP update  
12 (with the same changes made) and the load/resource information presented for  
13 the 2004 IRP (also with the aforementioned updates).

14 **Q. You mentioned that PacifiCorp had come almost to the end of another**  
15 **IRP cycle. Are the load/resource balance numbers to be used in the new**  
16 **IRP consistent with those that you have discussed above?**

17 A. Yes. As I discussed previously, the load/resource balance for the new IRP  
18 cycle is consistent with the previous numbers. In fact, making the same  
19 capacity adjustments to the 2003 IRP Load/Resource balance would show a  
20 deficit of approximately 790 MW for 2007. Therefore, I feel some comfort in  
21 using these numbers for a determination of need.

22 **Q. Which of the aforementioned load forecasts did you use to make your**  
23 **analysis of the merits of this application?**

1 A. I considered all of the forecasts mentioned above in reaching this  
2 recommendation. As I discussed above, the numbers in the 2003 IRP were the  
3 original focus, but were too outdated to be the only consideration. Thus, I used  
4 the more recent numbers to further examine the merits of this CCN  
5 application as it concerns PacifiCorp's need for more resources to serve loads  
6 into the future.

7 **Q. Does your analysis show a clear need for capacity additions through some**  
8 **means in the future?**

9 A. Yes.

10 **Q. Is it reasonable to expect load growth to continue on the PacifiCorp**  
11 **system in the future?**

12 A. Yes. Utah, for one, has been growing steadily for at least the last 10 years.  
13 The conditions feeding that growth, including increasing population and  
14 increasing air conditioner use, do not appear to be slowing. Growth forecasts  
15 from the Governor's Office of Planning and Budget as shown in the 2004  
16 Economic Report to the Governor also do not forecast a slowing of at least the  
17 population growth portion anytime soon.

18

## 19 **Plant Alternatives**

20 **Q. Does the proposed Lake Side project fill the needs as identified above?**

21 A. It does, at least in the short run. The PacifiCorp load duration curves presented  
22 to the IRP group in June show that with the addition of Lake Side, the system  
23 is within a small margin (less than 500 MW out of a system of over 11,000

1 MW) of meeting its projected peak loads. This margin, however, is only  
2 maintained for about one year before the gap again begins to grow. It is  
3 noteworthy, however, that the same load duration curves indicate that the  
4 addition of Lake Side will take care of off-peak needs in the system for at  
5 least four to five years, barring unexpected growth.

6 **Q. Was the Lake Side project or similar generic project identified as**  
7 **PacifiCorp's best alternative as the next plant to be built in the selected**  
8 **IRP portfolio?**

9 A. Yes and no. Diversified Portfolio I (DPI), which was the portfolio selected by  
10 PacifiCorp as the best choice shows that a base load plant is necessary by  
11 2007. The fuel choice of gas, however, was determined through the RFP, not  
12 the IRP.

13 **Q. In the Current Creek case, one of the benefits that you listed associated**  
14 **with the gas plant was that of fuel diversification. Do you believe that this**  
15 **is still a benefit to the Lake Side plant?**

16 A. Yes. Fuel diversity is still a benefit to this plant, not just because it lowers  
17 carbon and other environmental risks, but also because gas fired generators  
18 are generally more operationally flexible than coal fired plants. Carbon risk is  
19 lowered because natural gas fired generators reduce less CO<sub>2</sub> than coal fired  
20 generators, lowering the amount of emissions that would be subject to any  
21 carbon taxes that may be imposed on a state or federal level.

22 **Q. Are there risks that come with the increasing number of gas plants in the**  
23 **PacifiCorp fleet?**

1       A.     Definitely. As the number of gas fired plants in the PacifiCorp fleet increase,  
2           so too does the amount of fuel price risk faced by customers. The Division  
3           also realizes that natural gas is a finite resource, so any amount that is being  
4           used to produce electricity will be unavailable for other uses such as home  
5           heating. The Division also realizes that increased demand for a stable or  
6           declining supply could also cause price volatility for not only electric  
7           customers within the state, but home heating customers as well. This being  
8           said, the gas-fired plant was still chosen as a least cost resource from a  
9           competitive RFP. Despite some discussion, the Division has been unable to  
10          find a method to quantify the risk to home heating customers so that the risk  
11          could be accounted for in least cost modeling.

12       **Q.     What benefits would Utah customers obtain from the proposed Lake Side**  
13       **facility?**

14       A.     There are several benefits that the Division believes could accrue to Utah  
15           ratepayers from the proposed plant. First, the proposed plant is within the  
16           transmission-constrained Wasatch Front, decreasing the amount of electricity  
17           that must be moved from outside the area to serve load.

18                 Second, the 2003 IRP called for the addition of 1400 MW of wind  
19           generation into the PacifiCorp system over the next decade. Unfortunately,  
20           due to the fact that wind is a variable resource, it must be firmed up by some  
21           other resource. Gas-fired generation is a perfect fit for this purpose due to its  
22           ability to be quickly and easily ramped up and down. Using gas to firm up  
23           wind generation would also cut down on variable costs more than using coal



1 due to the operating characteristics of coal plants in general. The Division  
2 believes that given the increasing demand to add wind resources, gas-fired  
3 generation is a good way to firm up supply while discovering the actual  
4 operating characteristics of the added wind resources.

5 Third, as mentioned above, the Division believes that gas-fired generation  
6 is a good way to decrease environmental risk to PacifiCorp customers by  
7 providing portfolio diversification. If in the near future, carbon taxes or other  
8 related environmental regulations were put into effect, a diversified portfolio  
9 would decrease the price impact that PacifiCorp customers would be likely to  
10 feel.

11 Fourth, due to the fact that for at least the next five years, PacifiCorp will  
12 need additional power primarily during on peak hours, particularly on the east  
13 side of the system, a gas-fired plant would provide the ability to cycle the  
14 plant down if the power was not needed for a few hours or a few days. Coal  
15 resources are much less forgiving of frequent cycling.

16 Fifth, PacifiCorp customers would benefit by being exposed to a lower  
17 amount of gas-price risk for those hours in which the output from Lake Side  
18 could displace that from the less efficient plant among PacifiCorp's fleet. The  
19 proposed plant will have much better efficiency than either the Gadsby or  
20 West Valley peaking units or the Gadsby Steam units.

21 Finally, Utah ratepayers will benefit by an increased amount of protection  
22 from electrical spot market price risk. Even though costs for Utah ratepayers

1 do increase with new plant, the increase can be stable, not volatile as long as  
2 PacifiCorp manages the fuel price risk.

3 **Q. In the Current Creek case, the Division expressed that the air-cooled**  
4 **machines offered benefits to ratepayers. Does the Division therefore**  
5 **believe that Lake Side is a bad choice based upon the water usage?**

6 A. No. At this time there are no rules in place in Utah that would dictate  
7 preference being given to technologies that are water saving. The Division  
8 believes that given this lack of rules, building a higher cost plant based on  
9 water efficiencies would possibly have been inappropriate. The Division is  
10 very aware, however, of the risks associated with having sufficient water in a  
11 semi-arid state. We have been discussing the issue with PacifiCorp and will be  
12 working to quantify the water related risks during a future proceeding.

13

#### 14 **Permits**

15 **Q. Has PacifiCorp obtained all of the requisite permits for constructing the**  
16 **Lake Side plant?**

17 A. No. According to Summit Power's response to D.P.U. data requests S.1.5-  
18 1.7, the necessary water rights and permits as well as the air pollution credits  
19 and permits are being processed by various state agencies. The data responses  
20 also state that the permits are expected by the end of 2004.

21 **Q. Does this situation change your recommendations as to whether the**  
22 **Certificate should be awarded at this time?**

1 A. Not materially. According to Summit’s response to DPU data request S.1.10,  
2 construction on the Lake Side facility is not expected to commence until may  
3 of 2005. This time frame gives around five months of leeway in case the  
4 permits are granted later than anticipated. In addition, according to  
5 PacifiCorp’s answer to DPU data request 2.3, contractual terms, including  
6 liquidated damages, are in place to assure that ratepayers are protected in case  
7 of project delay. I would, however, recommend that similar to prior CCN  
8 proceedings such as Gadsby, the Commission order Summit and/or PacifiCorp  
9 to inform the Commission when the necessary permits are in place.

10

11 **Other Considerations**

12 **Q. In your opinion, will the Lake Side project compete detrimentally with**  
13 **other Utah public utilities?**

14 A. No. This plant is primarily intended to serve PacifiCorp’s loads. It should not  
15 materially affect the ability of other Utah public utilities to engage in their  
16 respective businesses.

17 **Q. Is the proposed construction consistent with state policy on growth?**

18 A. Yes. Former Governor Leavitt set specific policy that says Utah will have  
19 reliable, affordable, sustainable, and clean energy. The priorities relate very  
20 closely to the benefits to ratepayers outlined above. First, ratepayers must  
21 have access to an adequate supply of energy. The proposed plant will move  
22 PacifiCorp toward year round energy adequacy. Second, ratepayers must have  
23 reasonable prices associated with this supply of energy. The proposed plant

1 will decrease the amount of energy that PacifiCorp must purchase at market  
2 prices and will hopefully lead to lower purchased power costs to offset  
3 whatever costs of the plant that will be included in rates. The Division does  
4 note, however, that large amounts of natural gas fired electrical capacity will  
5 lead to increases in the amount of natural gas market price risk faced by  
6 PacifiCorp and its ratepayers. We will be looking carefully at this issue in  
7 future IRP dockets to ensure that this risk is properly accounted for. Third, the  
8 policy called for diversification and flexible supply. The proposed plant will  
9 lead to diversification of the PacifiCorp's coal-heavy east side portfolio of  
10 resources. As stated above, it will also provide flexibility to the system in the  
11 forms of flexible operation necessary for load following and enabling the  
12 system to absorb intermittent renewable resources such as wind.<sup>1</sup>

13 **Q. Were the interests of the public considered in this proceeding?**

14 A. Yes. The Division of Public Utilities has conducted its analysis with the  
15 interests of the Utah ratepayers in mind. In the form of a Commission  
16 acknowledged IRP, the Division utilized a tool in analyzing this issue that had  
17 previously been examined in depth by a variety of ratepayer groups and  
18 ratepayer advocates. The Division also took into account possible risks and  
19 benefits to Utah ratepayers that could arise from building this facility. We  
20 believe that it will reasonably serve the public interest.

21 **Q. Does this conclude your direct testimony in this case?**

22 A. Yes, it does.

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<sup>1</sup> Statement on Utah's Energy Policy by Governor Michael O. Leavitt, March 14, 2001