BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the petition of Desert Power, L.P. for approval of a contract for sale of capacity and energy from it's proposed QF facilities	))))	Docket No. 04-035-04

REBUTTAL TESTIMONY OF KENNETH T. HOUSTON

August 25, 2006

Q. Please state your name and business address.

A. My name is Kenneth T. Houston. My business address is 700 N.E. Multnomah, Suite 550, Portland, Oregon 97232.

Q. Please describe your educational background and work experience.

A. I received a Bachelor of Science Degree in Electrical Engineering from St. Mary's University in San Antonio in 1982. I received a Master of Science Degree in Management from Troy State University in 1996. I am a registered professional engineer in electrical engineering in the states of Texas, New Mexico, and Oregon. I have worked for three investor owned utilities over my 24 year career and joined PacifiCorp in 2003. I have held various engineering and management positions in operations, design, power supply, and transmission.

Q. For whom do you work?

A. I am Director, Transmission Services for PacifiCorp. I manage the group responsible for FERC Open Access Transmission Tariff ("OATT") compliance, including responding to customer requests for interconnection to the Company's transmission system. My

department also reviews and responds to customer requests for transmission service on the Company's transmission system.

Q. What is the purpose of your testimony?

A. The purpose of this rebuttal testimony is to respond to direct testimony filed on August 18, 2006 by Charles Darling and Roger J. Swenson on behalf of Desert Power, L.P.

Q. Please summarize your rebuttal testimony.

A. My testimony clarifies and corrects many of the assertions made by Desert Power regarding the interconnection studies conducted by PacifiCorp on behalf of Desert Power. I briefly summarize the interconnection procedures used by PacifiCorp including the current FERC OATT procedure. I also discuss the various steps and actions taken by PacifiCorp in an effort to expedite the studies and interconnection of the Desert Power project. I explain that those efforts were only required because of the sixteen and one half months delay caused by Desert Power's actions, including:

- A six month delay in application for interconnection service calculated from the date the PPA was signed, and nine months from when PPA negotiations began in earnest, to the actual date the interconnection request was made;

- A three and one half month delay during the interconnection study process calculated from the date the interconnection application was submitted until the generator technical data was finally provided to PacifiCorp; and
- A four month delay during the interconnection study process calculated from the date PacifiCorp provided an executable interconnection agreement until the date comments were received back from Desert Power.

Q. On Page 2, Line 24 of Mr. Swenson's Direct Testimony, he asserts that PacifiCorp "has made it impossible for Desert Power to perform under the contract…." Is that statement accurate?

A. No.

Q. Does PacifiCorp Transmission Services have any interest in preventing Desert Power's interconnection of its new steam turbine generator?

A. No. PacifiCorp Transmission Services manages PacifiCorp's Transmission System as a separate function from PacifiCorp's Commercial & Trading, Trading & Origination business unit, also know as the Merchant function. In 1996, FERC issued Order No. 888, directing the functional separation of transmission

responsibilities from marketing and trading responsibilities within vertically integrated electric utilities that owned transmission systems. Because of this functional separation mandated by FERC, interconnection and power purchase agreements are handled by different functions within the Company. Interconnection to the Company's transmission system is coordinated by PacifiCorp Transmission Services, as the transmission function. Power purchase agreements are handled by the Merchant function. FERC regulations require that PacifiCorp Transmission Services employees function independently of PacifiCorp's Merchant function employees. Additionally, PacifiCorp Transmission is obligated to treat all customers requesting service in priority order and give no preference to any one customer over another.

Q. Is Mr. Swenson completely accurate in his summary of the interconnection process on Page 2, line 37 of his Direct Testimony?

A. No. The current OATT process requires developers to submit an application and deposit to hold a place in queue. The application requires the developer to provide project details including generator technical data and site control. PacifiCorp must acknowledge receipt

of the request within five business days. Once a developer's application is deemed complete a scoping meeting will be scheduled with the parties within ten business days. PacifiCorp must coordinate studies and study results with input from other transmission providers who may be impacted. A feasibility study agreement is submitted to the customer within thirty days of their completed application. Once the feasibility study agreement is signed and the study costs are funded by the developer, PacifiCorp has forty five calendar days to complete the study. Once the feasibility study is completed, both parties review the study results within 10 days after which time PacifiCorp issues a final feasibility study report. If the time frame for completing the study cannot be met by PacifiCorp, notice is provided to the customer with an updated delivery date and the reason for the study delay.

A similar process is used to complete the next step, which is the system impact study, however PacifiCorp has 90 days to complete the study work after a system impact study agreement is signed.

The final step in the process is the facility study, where PacifiCorp and the customer finalize the full scope of both parties work, the final cost estimates and enter into an interconnection agreement. The study

procedure allows either ninety or one hundred eighty days for this study depending upon the cost estimate accuracy selected by the customer. Negotiations over the interconnection agreement can add up to 60 additional days.

Q. Did PacifiCorp follow its Open Access Transmission Tariff study process to the letter in the case of Desert Power?

A. No. PacifiCorp agreed to accelerate the OATT interconnection process for Desert Power's Qualifying Facility in an attempt to help Desert Power meet its very aggressive schedule.

Q. How and why did PacifiCorp deviate from the standard OATT requirement?

A. The standard requirement for studies in the OATT procedure is a 45 day feasibility study, a 90 day system impact study, and then typically, a 90 day facility study. This does not include additional time for meetings, agreement development and review, or report reviews. Each step in the process has a specific time frame and the process defines the various communications, steps, deposits, and agreements that are required. If the maximum allotted time for each step as defined in PacifiCorp's OATT is taken, the entire process,

from application until an interconnection agreement is signed, can take up to up to 480 days to complete. This can increase to 570 days if the customer requests greater specificity in the cost of facilities estimate in the facilities study. This is just the study process. Typically engineering, procurement, and construction does not begin on a project before an interconnection agreement is signed after the study process is completed. Due to the Desert Power schedule, it was clear early on that the standard OATT procedure would not be completed in time to meet Desert Power's requested in-service date. As a service to Desert, PacifiCorp agreed to attempt a 120 day combined system impact and facility study in an effort to meet Desert Power's requirements. By combining the system impact study and facility study it eliminates the need to execute separate study agreements and the associated time consuming steps in between. PacifiCorp believes the results from the expedited study process used in this case saved Desert Power at least nine months over the standard OATT procedure.

Q. What would be the result if PacifiCorp had used the standard OATT requirement?

A. First, Desert Power would have been removed from the queue at some point between February and June of 2005 for not providing the required generator technical data in a timely fashion. The OATT procedure defines the requirements, response times of the parties, and a cure period. The OATT procedure is structured to remove parties who fail to provide the required technical data in order to eliminate the ability for developers who are not fully committed to a project to hold a queue position and block others. Second, a 45 day feasibility study would have been completed. Third, once the feasibility study was completed a 90 day system impact study would have been conducted. Fourth, a separate 90 or 180 day facility study would have been completed.

If PacifiCorp had followed the OATT procedure to the letter and both parties took the full allotted time, the Desert Power facility study would have been delivered around the end of September 2006 at which time an interconnection agreement and/or an engineering and procurement agreement would have been offered to Desert Power. However, normal delays in review, which are very typical in PacifiCorp's experience, may have extended this date. Using standard

OATT procedures, construction of the interconnection facilities would begin once the interconnection agreement is signed.

Q. What additional steps did PacifiCorp take to expedite the Desert Power study schedule ?

A. In addition to offering a combined system impact and facility study, PacifiCorp did not perform a feasibility study. This is an option under the OATT. Additionally, PacifiCorp offered and executed an engineering and procurement agreement with Desert Power allowing detailed engineering to start prior to execution of a large generator interconnection agreement.

As the study process went on, PacifiCorp agreed to allow Desert Power to buy steel poles and switches because Desert Power believed it could achieve a better delivery date than PacifiCorp. By Desert Power's own admission (Page 7: Lines 153-160) "PacifiCorp did exert much effort to try to come up with means to track down the needed long lead time items."

Q. Mr. Swenson states that Desert Power began the interconnection process in enough time to meet their in-service dates. Do you agree?

A. Based on Desert Power's performance during this process, it is apparent that this isn't an accurate statement. Desert Power began the process by failing to make a timely interconnection request. PacifiCorp's Utah Rate Schedule 38 encourages potential Qualifying Facility developers to initiate a request for interconnection as early in the planning process as possible to ensure that necessary interconnection arrangements proceed in a timely manner on a parallel track with negotiation of the power purchase agreement. Desert Power waited nine months from when PPA negotiations began in earnest, six months after executing the PPA and four months after the Effective Date of the PPA before submitting its interconnection request. This left PacifiCorp with only ten months until Desert Power's requested in service date to study the interconnection request, execute an interconnection agreement, and construct the interconnection facilities. Following that, Desert Power failed to provide the generator data required to perform the interconnection study until June 2005, reducing that window another four months. Desert Power also failed during the process to provide timely document review and comments, which resulted in further delays.

Q. Mr. Darling claims that Desert Power's delay in submitting the request for interconnection was beyond its control because it was difficult to locate a generator that met its timing, size, and heat rate requirements. Do you agree?

A. No. Desert Power did not have to execute the PPA with PacifiCorp promising a fixed online date based on a non-existent generator. Mr. Darling admits that Desert Power signed the PPA then went looking for the specific generator to meet its needs. This is not the experience PacifiCorp Transmission Services has with other interconnection requests. Other developers plan their facility, request interconnection with an identified generator, and begin to, separately, negotiate power sales. In fact, most developers choose to enter the interconnection queue prior to having a signed PPA so they have a good idea of the interconnection costs, construction schedule, and requirements before negotiating a sales price for their product.

Q. How much time have other interconnection projects in PacifiCorp's queue taken to process from the initial interconnect request to completion of construction under the new OATT procedures?

A. PacifiCorp Transmission Services is currently coordinating and studying the impacts of thirty eight requests for interconnection and another thirty five requests for transmission service. On top of those requests, PacifiCorp Transmission Services is coordinating for PacifiCorp's service to its native load in Utah and other transmission providers' interconnection requests to the PacifiCorp system. Based on that experience, actual similar projects that PacifiCorp has completed have averaged 633 days from start of the study process to the project being in service.

Q. Mr. Swenson notes that the prior Desert Power facility was studied and installed in six months. In your opinion, does that experience provide a reasonable gauge for estimating the time and requirements for its 2005 interconnection request?

A. No. Desert Power's previous interconnection was completed prior to FERC issuing Order 2003 and before recent emphasis on system reliability following the Northeast Blackout. Minimal research by Desert Power would have indicated that the continued assumption of a six month interconnection process was improbable. Even a perfectly executed process without reliability or safety issues would take 480 days according to the current OATT procedure. Construction would

only follow the execution of an interconnection agreement. Desert Power, as a developer, should be aware of the additional material delivery and construction requirements for projects of this nature and the potential delays driven by market conditions.

Q. Mr. Darling claims that Desert Power merely wanted to amend its preexisting interconnection agreement (Page 5: Lines 92-94). Do additions of generators near an existing interconnection take less time to study?

A. It depends on the size of the generator, other load and generation in the vicinity, and the local transmission facilities. Desert Power stated in its request that the expanded plant will be a Qualifying Facility under the Public Utilities Regulatory Policy Act. PacifiCorp took this statement to mean that Desert Power was requesting interconnection as a Qualifying Facility. All interconnection requests, no matter whether they are from a Qualifying Facility or an independent power producer, must submit a new application for the entire capacity of the facility. That new request is studied for the entire impact to the transmission system. Desert Power may think that a 40% increase is small, but it could have significant impacts on radial lines with significant load and other generation. PacifiCorp also had to

coordinate with U.S. Magnesium Corporation as an affected system because of its ownership of the Rowley Substation.

Q. Did Desert Power cooperate with PacifiCorp in an effort to expedite the study process.

A. No. Desert Power has been consistently slow to respond to PacifiCorp's requests for generator data and in its review of draft documents.

For example, it took Desert Power almost four additional months, despite repeated requests, to provide the technical data necessary to initiate the study.

In addition, it took Desert Power six weeks to review and sign the Engineering and Procurement Agreement. Finally, Desert Power did not show any urgency in the interconnection agreement drafting process.

Q. Can you elaborate on each delay?

A. Yes. The generator technical data should have been provided with the interconnection application submitted in February 2005. The data was finally provided in enough detail for PacifiCorp to initiate studies in June 2005. In order to begin design and procurement of long lead time materials, PacifiCorp offered an engineering and procurement

agreement to Desert Power on November 29, 2005 and it was finally signed, funded, and returned by Desert Power on January 13, 2006. The first draft of an interconnection agreement was provided to Desert Power on April 11, 2006, with a second draft provided on May 22, 2005. Desert Power did not provide comments until June 28, 2006.

Q. Mr. Darling claims that the delay in the project was due to the redesign of the interconnection. Do you agree?

A. Not at all. The redesign caused a one month delay, at the most. Desert Power's failure to plan for the interconnection process and purchase a generator before committing to the PPA caused the largest delay in the process.

Q. Would you please discuss the reasons for and timing of the redesign.

A. On September 23, 2005, PacifiCorp provided a draft version of the system impact portion of the study. It contained a sketch of the proposed configuration of the interconnection as originally requested by Desert Power. That configuration was reviewed by operations' personnel. Based on past knowledge of employee safety issues and the lack of disconnect switches necessary for operational control and to perform routine maintenance at the site, operations' personnel

strongly recommended a redesign of the interconnection. There were also concerns regarding the operation of the system when there were three customers at the end of the same line and the operations of two of those customers could cause operational and unplanned outages for the other customers. Additionally, there were concerns regarding the proposed metering scheme that would require three additional metering stations and a complicated communications scheme. The proposed re-design of the interconnection layout resolved each of these issues.

PacifiCorp informed Desert Power of the proposed redesign during a conference call on October 20, 2005. On November 8, 2005, Desert Power proposed a slightly different configuration and during a subsequent conference call on November 15, 2005 PacifiCorp accepted Desert Power's proposed reconfiguration. Therefore, the redesigned configuration delayed the project by, at the very most, no more than one month.

Q. What were PacifiCorp safety concerns exactly?

A. PacifiCorp has had employees injured due to contamination in the area. The contamination also caused increased maintenance requirements because of corrosion. That maintenance had to be done

at great expense due to the need for extended outages to allow specially trained personnel time to clean the equipment. Those earlier problems were resolved with the sale of the Rowley Substation to U.S. Magnesium Corporation. However, the original proposed configuration for the Desert Power project would have required the installation of a PacifiCorp owned in-line breaker at the Rowley Substation, raising the same safety and maintenance issues resolved by the sale of the Rowley Substation.

Q. Did Desert Power raise the issue of a redesign related project delay when PacifiCorp provided the proposed redesign in October 2005?

A. No. Desert Power commented on the design and provided an alternative that PacifiCorp accepted**.**

Q. Mr. Darling testifies that the interconnection redesign required PacifiCorp to start over with interconnection studies, do you agree?

A. No. The redesign involved the physical arrangement of the transmission connection to the facility and did not impact the study work done to date. The changes required some design analysis and modification to the scope of work which were completed in the next

draft of the Impact and Facilities Study Report. Power flow and short circuit studies were not redone. As I noted, the redesign process, including reaching agreement on changes with Desert Power, took only one month.

Q. Mr. Swenson states that he was frustrated that PacifiCorp had not thought through many of the issues related to Desert Power's interconnection request and the procurement of necessary equipment and licenses. What is your reaction to this?

A. This statement doesn't reflect, as Mr. Swenson should know, industry practice and experience. PacifiCorp studies multiple interconnection requests each year and the studies conducted by our staff identify the issues and requirements for each interconnection. Mr. Swenson's statement indicates an expectation that PacifiCorp anticipate all the issues and have developed plans to resolve them before even conducting the studies. Procurement of equipment and defining the requirements for communications sites, including license requirements, cannot be fully known until the analysis is completed. Even if PacifiCorp could anticipate all the issues and take action to procure equipment ahead of the customer committing to the project,

this puts the customer, PacifiCorp, and PacifiCorp's retail customers at risk if Desert Power decided to cancel or defer its project.

Q. Was the redesign of the interconnection configuration consistent with standard practice and the OATT procedures?

A. Yes. OATT section 39.4 on Modifications specifically provides that: "during the course of the interconnection studies, either interconnection customer or transmission provider may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the interconnection request. To the extent the identified changes are acceptable to transmission provider and interconnection customer, such acceptance to not be unreasonably withheld, transmission provider shall modify the point of interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary".

Q. Mr. Swenson agrees that it is not reasonable to expect PacifiCorp to order equipment or complete design work before executing an interconnection agreement and receipt of pre-payment or a deposit (P7: Line 148), but suggests that PacifiCorp should have

identified all long-lead items to Desert Power up front. Is he correct?

A. No. PacifiCorp does not identify what equipment is required for an interconnection until it completes its studies. Defining the requirements, including material requirements, is a key product of the studies themselves. If PacifiCorp were to make assumptions on required equipment before completing its studies, customers and PacifiCorp have a high risk of procuring items that may not be required following the final design.

Q. Mr. Darling describes the post-agreement search process Desert Power went through to find a steam turbine for their project. Did that delay the interconnection process?

A. Yes. Since Desert Power had not chosen the turbine and generator for its project, it could not timely provide the information required for the interconnection study.

Generator technical data is required as part of the interconnection application. PacifiCorp cannot conduct a meaningful interconnection study without it.

Q. Could Desert Power have taken interim steps to correct that deficiency and enable the study to begin?

A. Past developers have provided typical generator data to PacifiCorp and interconnection studies have been initiated using typical data. If a developer later purchases a different design, re-study may be required. Desert Power could have initiated the study at the time the PPA was signed, but would have been required to provide typical data and run the risk of conducting new studies if a different generator was ultimately purchased. Even with some risk of re-study, an earlier interconnection request would have provided Desert Power with vital information about interconnection requirements, scope, costs, and a reasonable schedule.

Q. Describe the efforts of the parties to reach agreement on the scope of work during the facility study phase of the project?

A. A key step in the facility study is to define the duties and obligations of each party during the construction phase of the project, which include design, procurement, and construction of key components of the interconnection. The first discussion regarding scope of work took place during a scoping workshop held on October 6, 2005. A first draft of the scope of work, which included PacifiCorp's configuration change and Desert Power's request to design and construct the three-way switch and corresponding structure, was sent

to Desert Power on January 18, 2006. On March 9, 2006 and March 17, 2006, Desert Power requested additional scope revisions which transferred responsibility for the communications structure at the generating facility to Desert Power and transferred responsibility to design and procure revenue metering to PacifiCorp, with Desert power installing the revenue metering. As PacifiCorp witness Doug Bennion discusses in his testimony, subsequent scope changes, including temporary revenue metering and communications work-arounds, were proposed to shorten the schedule. However, they were not pursued when Desert Power determined it would not meet its commercial operation date.

Q. Has an interconnection agreement been signed?

A. No. Under the OATT, there is a 60 day timeline, including an optional 30 day negotiation period, for the execution of an interconnection agreement. The process has taken longer with Desert Power. PacifiCorp provided Desert Power with a generic QF version of the Large Generation Interconnection Agreement ("LGIA") on December 12, 2005. A first draft of the LGIA, with Desert Power attachments, was sent to Desert Power on April 11, 2006. On May 22, 2006, PacifiCorp sent a second draft and requested comments. On

June 28, 2006, Desert Power sent a host of comments to PacifiCorp, including proposed new dates for commercial operation. On July 12, 2006, PacifiCorp held a conference call with Desert Power to discuss Desert Power's comments. Desert Power filed its Emergency Petition while PacifiCorp was preparing written responses to those comments.

Q. Do you have any concluding statements?

A. PacifiCorp completed its work on behalf of Desert Power in an expedited manner, including deviating from the standard OATT process, and the results, including the time frame, were reasonable and foreseeable. While Messrs. Swenson and Darling both assert that the interconnection re-design of their facility was the sole cause of the Desert Power non-performance, in reality this re-design was required to ensure employee safety, reliability, and long term operational needs and resulted, at the most, in a one month delay in the project. The interconnection process for Desert Power included typical issues that are addressed as part of the normal interconnection process. It was Desert Power's own actions, not those of PacifiCorp, that caused the project delay. For example, Desert Power was responsible for nearly sixteen and one half months of delay in the project as a result of actions which include:

- A six month delay in application for interconnection service calculated from the date the PPA was signed, and nine months from when PPA negotiations began in earnest, to the actual date the interconnection request was made.
- A three and one half month delay during the interconnection study process calculated from the date the interconnection application was submitted until the generator technical data was finally provided to PacifiCorp.
- A four month delay during the interconnection study process calculated from the date PacifiCorp provided an executable interconnection agreement until the date comments were received back from Desert Power.

The reason for the project delays was, in reality, Desert Power's failure to plan adequately for the requirements of the project, including signing a PPA without having, as Mr. Swenson states, the "critical information" on the steam turbine.

Q. Does this conclude your testimony?

A. Yes it does.