BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

IN THE MATTER OF THE PETITION OF DESERT POWER, L.P. FOR APPROVAL OF A CONTRACT FOR THE SALE OF CAPACITY AND ENERGY FROM ITS PROPOSED QF FACILITIES DOCKET NO. 04-035-04

PREFILED DIRECT TESTIMONY OF ROGER J. SWENSON ON BEHALF OF DESERT POWER, L.P.

DESERT POWER EXHIBIT 2

August 18, 2006

1		Background
2	Q.	Please state your name and business address.
3	A.	Roger J. Swenson, 1592 East 3350 South, Salt Lake City, Utah 84106.
4	Q.	By whom are you employed and in what capacity?
5	A.	I am an independent utility and energy consultant.
6	Q.	Please summarize your educational and professional experience.
7	A.	I have a BS degree in Physics and a MS degree in Industrial Engineering from the
8		University of Utah. I have worked in the energy industry for over 20 years. Prior to
9		working as a consultant I was the Vice President of Energy Marketing for an oil and gas
10		production company that was affiliated with a cogeneration development company.
11		Prior to that I worked for Questar Corporation in various positions including some time
12		spent on rate making matters. I have also testified before this Commission on various
13		matters including maters involving QF rates.
14	Q.	What is the purpose of your testimony?
15	A.	My testimony is to provide evidence as to the basis for extending the Desert Power
16		contract effective dates one year from the original dates that are in the approved contract.
17		It is also to address issues surrounding the gas supply arrangements that are being made

by Desert Power to improve the fuel supply surety for the plant in order to reduce the possibility of non-performance penalties from being assessed by PacifiCorp as the contract allows.

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Q. Why is this matter being put before the Commission?

A. The agreement that was approved by this commission now needs to be amended to change the commercial operation date and all other associated dates back one year.

Discussions between the parties in that light have stalled, PacifiCorp has made it impossible for Desert Power to perform under the contract, and the only way the project can move forward is for the Commission to address this circumstance.

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Q. What is the basis for making such a request?

The contract has provisions for relieving duties to perform under circumstances that were A. 28 not reasonably within Desert Power's ability to perform. In this instance the circumstance 29 leading to the delay was the interconnection redesign that PacifiCorp required. This was 30 the cause of Desert Power not being able to meet the May 9, 2006 commercial operation 31 date required under the agreement. As set out in the testimony of Mr. Charles Darling, 32 given the uncertainty raised by the delay, financing arrangements were frozen, and the 33 project is at a standstill until such time as this circumstance can be worked out and 34 approved by this commission. 35

36 Q. Can you provide an explanation of the interconnection process?

A. Yes, the process is described in the approved Tariff UP&L PSCU Sheets 38.6 and 38.7. The process involves (1) initiating a request for interconnection, (in this case it was a request to increase its maximum delivery from 80 MWs to 110 MWs), (2) having an impact and facilities study done, (3) entering into an engineering and procurement and facilities construction agreement, and (4) finalizing an Interconnection Agreement.

42 Q. What does the tariff say will be the procedures followed by the company for such
43 studies and process?

- A. The Schedule 38 tariff sheet says that the process will follow the procedure as described
 in the PacifiCorp Open Access Transmission Tariff or OATT.
- 46 Q. What does that process say is the timeline to have a completed Facilities study?

A. The procedure says that there will be a completed Impact study done within 90 days and
a Facility study done within 90 after it is initiated. The Impact study addresses how the
interconnection entity will interact with other generation and users. The Facility study
determines the necessary design modifications so that safe and reliable service can be
provided.

Q. The description of the process suggests that an interconnection customer start this process as early as possible. Did Desert Power do that?

A. Yes. The critical information to begin the required studies was the size of the steam turbine. Once that was known, then the interconnection request was made. The initial interconnection upgrade request was sent to PacifiCorp in February, 2005 and a kick off Impact Study meeting was held in Portland on April 27, 2005. A copy of the agenda that Desert Power provided to PacifiCorp is attached as Exhibit 2.1.

59 Q. Did Desert Power explain the schedule required to meet the operational 60 commitments in that meeting?

A. Yes. Desert Power put that down as an item that it wanted to make sure got discussed. It
was listed as item 4 on the General Project Discussion item list.

Q. What was the expectation of Desert Power in regards to this request in terms of timing and complexity?

A. The experience that Desert Power had when it initially constructed the plant, installing the two simple-cycle combustion turbines was that the process was straight forward and took less than 6 months to finish all studies and complete the interconnection process, and that included a complete negotiation of the interconnection agreement that was ultimately executed. The interconnection took place within the existing Rowley

substation that serves US Magnesium, LLC. Desert Power had no expectation that
adding roughly 30 MWs of additional load, an increase of 40%, in the authorized
quantities under the Interconnection Agreement would effectively take 18 months
because of new design requirements demanded by PacifiCorp. Desert Power had no idea
that what had taken less than 6 months for a new service could turn into 18 months to
increase an existing service.

Q. What were the new design requirements that were added to the Rowley delivery
 configuration?

The new design elements were put forth late in October of 2005. On October 19th we 78 A. received an email from PacifiCorp indicating that they had decided to make a change to 79 the configuration that had been planned, Exhibit 2.2. Up until that point, we had a final 80 design that worked off the existing transmission line configuration. PacifiCorp's 81 operational personnel had reviewed the configurations for the interconnection that had 82 come out of the initial Impact Study and wanted to modify them. The changes to the 83 design required a new switch pole roughly 370 feet from the existing termination point to 84 Desert Power that exists within the Rowley substation and the addition of 370 feet of new 85 transmission line along with all required new support towers plus the addition of three 86 new circuit switches. Exhibit 2.3. PacifiCorp was apologetic concerning the changes, 87 explaining that it was just getting the feedback from the operations personnel at that time 88 89 and that this was the configuration that the operations personnel wanted.

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Q. What was the explanation for the new design?

A. PacifiCorp's representatives at the meeting explained that operational personnel would
 prefer to not get into the Rowley substation because of its proximity to the US

Magnesium plant. With the new design, PacifiCorp would set the terminus for service to 93 US Magnesium and Desert Power at the point where the three switches were installed. 94 With the addition of the switches at that point, PacifiCorp would transfer the ownership 95 of the existing 370 feet of line to Desert Power and have Desert Power construct 370 feet 96 of new line along with all support structures for that new line and new tie-in point to US 97 Magnesium. The initial idea proposed by PacifiCorp was that the new line would be 98 transferred to US Magnesium. With the changes PacifiCorp would extend itself away 99 from US Magnesium. Also, PacifiCorp wanted to have a better means to isolate each of 100 the generators from the transmission line. With the new design, there would be a 101 mechanism to either disconnect US Magnesium alone, Desert Power alone, or to 102 disconnect both from the transmission line. 103

- 104 Q. Did PacifiCorp express concerns over the timing in the fall of 2005?
- 105 A. Yes.
- 106 **Q.** Can you explain their concerns?

can you explain their concerns.

A. PacifiCorp suggested that the design engineering required for the work that PacifiCorp
 would need to do for the new string of line and the support structures could take many
 months before we could even go out for procurement.

110 **Q.** What would cause the delays?

A. With the general design in hand, PacifiCorp would then need to engineer the support structures and switch supports. When asked how much time this would take, we were told it would take several months depending on the engineering backlog.

- 114 Q. Did this cause Desert Power to stop trying to meet a summer of 2006 on line date?
- 115 A. No. At that time Desert Power asked if we could turn to outside engineering for the new

transmission line to help move the process along. (See Exhibit 2.4 email R. Swenson 116 dated 12/9/2005 requesting approved outside engineering firms.) PacifiCorp said they 117 would allow that subject to their oversight and full approval for any design work. 118 Subsequently Sargent & Lundy, an electrical engineering company, provided engineering 119 work that was put forward to PacifiCorp for their approval. However, with the approvals 120 required, that work was not able to be commenced until February 2006. Effectively, the 121 redesign of the interconnection configuration, substituting an entirely new design for 122 what had been proposed as simply an addition to the existing configuration, along with its 123 engineering and long lead time procurement for specialized steel poles and other 124 equipment, made it impossible to meet the June 1st 2006 on line date. 125

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Q. What other elements created delays in the process?

A. Certain parts of the remaining design, such as communications and metering, were to be 127 completed by PacifiCorp. When PacifiCorp began to assess the equipment needs for 128 those areas of the interconnection that it would be responsible for, it notified Desert 129 Power that the lead times for specialized current transformers would not allow deliveries 130 until late summer. Also, there were issues associated with required communications links 131 that in order to obtain FCC licenses would also push the on line date that PacifiCorp 132 would allow energizing the interconnection into mid October 2006. (See Exhibit 2.5 133 email dated March 21, 2006 L. Soderquist.) 134

135 Q. What was your reaction to this event?

A. It was frustrating to find that PacifiCorp had not thought through many of the issues that were going to be needed no matter what before they impacted the critical path for the project on line date. It is especially frustrating considering that some of the items were associated with communications and metering. These are required elements that would
have come up no matter what the final design needs were going to be. PacifiCorp should
have known that current transformers would be required for new metering and that they
had 6 month lead times. PacifiCorp also should have known that since it would require a
microwave communication system an FCC license would need to be contemplated and
applied for and that it would have a 6 month lead time.

Q. Would you have expected PacifiCorp to have acquired these items without being reimbursed or without enough design to clearly specify the long lead time equipment?

A. No. That is not how the process works. PacifiCorp always gets paid before it orders
equipment or does design work. We would not have expected PacifiCorp to be at risk for
any of the monies required for the project and we always provided funds when asked.
We were very clear in the timing required and those elements that had long lead time
pieces of equipment should have been called out in the schedule and discussed.

Q. Did PacifiCorp and Desert Power try to find equipment outside of the normal procurement process?

A. Yes, to its credit PacifiCorp did exert much effort to try to come up with means to track down the needed long lead time items such as specialized current transformers and the required communications equipment. In the end the specialized nature of the steel poles that required much engineering and design, along with the PacifiCorp approval of those designs, followed by long lead time acquisition, made it impossible to complete the project by the existing contractual operation dates.

161 Q. When did it become very apparent that there were going to be delays in the project

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on line date?

In the February email from Larry Soderquist shown as Exhibit 2.6 where he states: "3. It 163 Α. now appears that PacifiCorp will require the rest of the month of February to complete 164 the combined impact / facilities report. Please acknowledge that Desert Power accepts 165 this report delay. PacifiCorp hopes that Desert will agree that this draft scope and the 166 beginning of design will keep the project from being delayed, due to the delayed report." 167 It was becoming clear that there were going to be timing issues and it was not apparent 168 what if anything Desert Power could do about it. If there was anything that could have 169 170 been pursued, it would have been as it was in Desert Powers interest to do so.

171 Q. What do you think should be done in this instance?

Desert Power should be allowed to amend its contract to extend the operational date by A. 172 one year. This will allow Desert Power to move forward and meet the on line date 173 requirement of June 1, 2007 in the stipulation in Docket 03-035-14. The delays were not 174 caused by actions of Desert Power but were based on new interconnection design 175 requirements demanded by PacifiCorp. Such requirements could not have been 176 reasonably foreseen by Desert Power. I would note, however, that Desert Power has 177 now been frozen in place by this dispute and PacifiCorp's response to it for some 6 178 months. It has lost valuable construction time, since it has lost the summer months. With 179 that time passage, the June 1 date becomes more and more problematic. Thus, I would 180 181 ask the Commission to act expeditiously on this matter.

182 Q. What other matter has come to light in recent discussions?

A. There have been discussions of the issue that Desert Power is dealing with concerning the
firming of the gas transportation on Questar Gas.

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Q. What are the issues that Desert Power has been dealing with?

Desert Power has been in discussions with Questar Gas concerning installing gas 186 A. compressors at a site in Tooele that has been identified. Questar has stated that Desert 187 Power can have firm gas transport on their system if the compressor station is built. The 188 discussions have revolved around using gas fired reciprocating engines or electric 189 variable speed drive compressors. Desert Power has suggested that electric drive 190 compressors are quicker to install and more appropriate for this type of low volume, 191 episodic compressor application. We have also been involved in discussions concerning 192 193 ownership of the compressors either by Desert Power or some other entity or by Questar.

194 Q. A question has arisen over gas supply for Desert Power. Does it have a gas supply?

A. Yes, it does. It has entered into a firm contract with IGI Resources for its gas supply
delivered to the Questar citygate.

197 Q. Is there a specific delivery point on the citygate?

A. No, there is not. But an important feature of the contract is that Desert Power has the right to nominate volumes into the Riverton delivery point if requested by Questar to maintain pressure on the system to facilitate deliveries to Desert Power.

Q. There have been discussions of additional compression on the line delivering gas to
 Desert Power. Can you tell us about that?

A. Yes, I can. Since inception of the original project in 2001, Desert Power and Questar have discussed installing a compressor some 40 miles upstream of the plant. At that time, a site in Tooele County was identified, and full engineering was performed by Questar, at Desert Power's cost. However, Desert Power determined at that time that it was quicker to install compressors itself at the end of the line, so Desert Power installed 208 2200 horsepower of compression at its site. Desert Power was able to operate reliably on209 that basis.

When Desert Power began the process of upgrading its facility, it again looked at 210 the upstream compression option simply to provide itself a long-term security of supply. 211 There is no effective increase in gas usage since the same two combustion turbines are 212 213 being utilized and the heat recovery steam generator (HRSG) is unfired, but with Tooele growing rapidly, having firm service that would cover the 20-year life of the contract 214 would guarantee that Desert Power did not suddenly have its gas supply rendered 215 unreliable at some point in the future. To assure the availability of that option for the 216 future, Desert Power has already acquired the site identified as the optimum location for 217 that upstream compression. 218

Q. Did you receive a cost update for installing the gas compressors at the Questar proposed site near Tooele?

A. Yes we did. The cost comparison from the original 2001 study and the 2005 study shows that the cost of the compression system had doubled. The projections show that the cost of the facility, prior to any tax gross-up, had increased from roughly \$3,000,000 to roughly \$6,000,000. Desert Power was stunned. We have been working through the cost differences and looking toward means to reduce this cost with Questar.

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Q. What are the ownership questions?

A. In order to move ahead faster, Desert Power suggested it would engineer, build, own and maintain the compressor and allow full control of its operation by Questar. This type of circumstance has been allowed in the past with the ownership of the gas line to Alta. The gas transmission line up to Alta was owned by the Little Cottonwood Gas Improvement

District, but any service off the line was done by Questar. Desert Power believed this approach would be quicker and more cost effective since there would not be a transfer of ownership that would cause a contribution in aid of construction tax burden to be thrust on the project.

235 Q. What have the discussions with Questar led to?

A. Questar has indicated that they will not allow the compressor to be owned by any entity but Questar. Recently, Questar has indicated that they are willing to use the electric compressor that Desert Power has identified. Desert Power has identified new upgraded electronic controls as suggested by the engineering firm that Questar has involved in the project. Desert Power has acquired the site for the compressor station and has a timetable for delivery of the engine compressors. We are working on establishing a timeline for the completion of engineering work so that final completion dates can be identified.

243 Q. Why is Desert Power looking at installing the compressors?

Because it is exposed to risk of non-performance penalties if it does not generate when 244 A. called on. The existing agreement only asks for commercially reasonable means to 245 provide for gas deliveries to the plant. While the contract itself does not call out that firm 246 247 deliveries of gas supplies are required, Desert Power has been moving toward upgrading its service to do just that. In historical operations of the plant in the past, there have been 248 no instances where performance has been affected from the issues surrounding the gas 249 250 line capability. US Magnesium is at the same site, has interruptible transportation, and has had minimal hours of interruption in the past 3 years. But with additional growth in 251 the area and the ability of Questar to provide firm service with the compressor station 252 253 operating, Desert Power believes it is prudent to do so.

Q. Does the existing contract require that firm gas transportation be used?

- A. No, the agreement states in section 7:
- 256 <u>SECTION 7: FUEL</u>

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- 258 Seller shall use commercial reasonable efforts to obtain all natural gas supplies necessary to make 259 Scheduled Deliveries from the general gas market, and to maintain transportation arrangements to effect 260 delivery of such natural gas supplies, and shall promptly notify PacifiCorp if its ability to obtain such 261 supplies appears uncertain.
- The contract itself calls out the use of "commercially reasonable efforts" for gas deliveries.
- Q. Did you make sure that the gas transportation deliveries would be provided by
- using at least "commercially reasonable efforts"?
- A. Yes. I met with Susan Davis and Bruce Rickenback of Questar on February 15, 2006 to
 discuss the gas supply arrangements.
- 269 Q. What did those discussion lead to?

A. I sent a memo laying out the Questar business arrangements to Charles Darling on February 21, 2006, (Exhibit 2.7). I copied Susan Davis and Bruce Rickenback on that memo and asked them to correct me if I misstated any part of the proposed arrangement (Exhibit 2.8). I did not hear anything back from Mrs. Davis, so I must assume that I portrayed the business arrangement correctly.

Q. What were the arrangements associated with the degree of firmness of the gas
 supply deliveries?

A. I discussed what I understood as how firm the gas supplies would be near the end of the memo. What I heard from Mrs. Davis was that the firm deliveries of gas would be contingent on that compressor being operational, and if the compressor was not operational then deliveries would be based on "commercially reasonable efforts." In that, 281 we believed we were living up to the letter of the agreement, but to avoid risks of non-282 performance penalties, we continued to explore firming options.

283 Q. What should the Commission do in this instance?

A. As a result of PacifiCorp's delays, Desert Power has been brought to a standstill that has not allowed it to continue with construction to be on line as soon as possible. At this time, Desert Power cannot resume construction or initiate full engineering towards the gas compressor station until the agreement extension has been put in place. Desert Power must have this standstill lifted as quickly as possible so that it can move towards being on line on or before June 1, 2007. The Commission should order that the existing agreement be extended for 1 year for all dates and milestones related to performance.

291 Q. Does this conclude your testimony?

A. Yes it does.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing was emailed and/or mailed, postage prepaid, this 18th day of August, 2006, to the following:

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