

October 16, 2007

Public Service Commission of Utah
 Heber M. Wells Building
 160 East 300 South
 Salt Lake City, Utah 84145

Re: **Follow-up to October 2, 2007 Quarterly Meeting**

Commissioners:

At the Rocky Mountain Power Quarterly Meeting with the Utah Commission on October 2, 2007, Rocky Mountain Power agreed to provide additional information in several areas. That information is provided below:

1. TQS scores for Pacific Power?

TQS: Electric reliability (percent of “very satisfied” customers who give ratings of 8-10 on the 1-10 satisfaction scale)

	2004	2005	2006	2007
Rocky Mountain Power	84%	87%	92%	86%
Pacific Power	89%	90%	87%	90%

TQS: Power quality (percent of “very satisfied” customers who give ratings of 8-10 on the 1-10 satisfaction scale)

	2004	2005	2006	2007
Rocky Mountain Power	80%	87%	91%	84%
Pacific Power	92%	83%	87%	89%

2. Copies of new customer welcome kit

Copies of the new customer welcome kit have been provided to the Commission, Division of Public Utilities, and Committee of Consumer Services.

3. JD Power satisfaction scores for DSM and energy efficiency efforts

J.D. Power business customers: Power quality and reliability
 (scores based on 1000 point scale)

	2004	2005	2006	2007
Rocky Mountain Power	619	636	663	712
Pacific Power	673	707	715	728

J.D. Power residential customers: Power quality and reliability
(scores based on 1000 point scale)

	2004	2005	2006	2007
Rocky Mountain Power	685	701	697	712
Pacific Power	767	787	760	735

J.D. Power business customers: Effort of utility to help customers manage their monthly usage (scores are average ratings based on the 1-10 satisfaction scale)

	2004	2005	2006	2007
Rocky Mountain Power	5.7	5.6	5.9	6.2
Pacific Power	6.2	6.5	6.2	6.5

J.D. Power residential customers: Ability of utility to help customers reduce their monthly bill (scores are average ratings based on the 1-10 satisfaction scale)

	2004	2005	2006	2007
Rocky Mountain Power	5.8	5.5	5.3	5.6
Pacific Power	6.1	6.2	6.1	5.6

4. Utah Blue Sky statistics

Year	Utah Customers Participating	Participation Rate
2000	1,222	0.16%
2001	2,858	0.37%
2002	5,116	0.67%
2003	6,510	0.85%
2004	13,932	1.82%
2005	16,667	2.18%
2006	20,112	2.63%
2007 (September)	22,343	2.92%
<i>note: Participation rate calculation based on assumption that RMP serves 766,025 Utah customers.</i>		

5. 2007 system peak and Utah peak data

The jurisdictional loads for the summer of 2007 are still being compiled. Preliminary load data will be available the end of October and will be provided at that time. Please note that this data is preliminary and subject to change. Final 2007 jurisdictional peak load data will not be complete until the first quarter of 2008.

6. Peak load capacity of the Wasatch Front transmission and distribution facilities

Number of Substation Transformers along the Wasatch Front = 195
Number of Distribution Feeders along the Wasatch Front = 567
MVA capacity of Substation Transformers along the Wasatch Front = 4637 MVA

7. PacifiCorp hedged natural gas prices expressed in \$/MWH

The company has hedged its Utah natural gas fired plants at the following costs, as of October 3, 2007:

2008	\$60.07/MWh
2009	\$58.29/MWh
2010	\$57.39/MWh
2011	\$56.24/MWh

These costs do not include the fixed price gas contract for Hermiston

8. Company perspective on potential geothermal leases near Cove Fort

The company is currently developing an expansion project at our Blundell site under very favorable geothermal development conditions and are still struggling with issues that may make it uneconomical. We are watching activities in the Cove Fort area and would be interested in looking at projects in the area in further stages of development that do not have the speculative risk associated with proving the geothermal resource.

9. Other potential utility scale geothermal fields in Utah

There are several potential geothermal resources in Utah. The report *Geothermal Development Needs in Utah* by Daniel J. Fleischmann, M.P.P. and published by the Geothermal Energy Association for the U.S. Department of Energy on June 26, 2006, identifies nine promising geothermal resource areas in Utah. They are:

1) Roosevelt Hot Springs

The Roosevelt Hot Springs KGRA is located in Southwest Utah in Beaver County. The KGRA is on a mixture of private, Utah State Trust, and BLM land, with a majority of the land managed by the BLM. It is the hottest known geothermal resource identified in the state. In 1984, the Blundell power plant at Roosevelt Hot Springs became the first geothermal power plant in Utah (and remains the only plant still producing power in Utah today). The production zone depths range generally between 382 and 2,232 m (1,253 and 7,321 ft). Reservoir temperatures are typically between 240°C and 268°C (464°F and 514°F). PacifiCorp may incrementally expand the facility up to 100 MW. As of now there are plans to expand the Blundell Plant by 11MW before 2008, by adding a bottoming cycle using an ORMAT Energy Converter¹⁰. Estimates for the ultimate recoverable potential for the entire resource area have varied since the Blundell Plant was completed in 1984; ranging from 120 MW to 500 MW.

2) Cove Fort-Sulphurdale (aka Cove Fort)

The Cove Fort-Sulphurdale KGRA is located in Southwest Utah about 50 miles east of Roosevelt Hot Springs. Amp Resources is developing a new power plant on the site that will initially be 36.6 MW, and could be expanded to 69 MW. Estimates for the ultimate recoverable potential for the entire resource area have varied since the original Cove Fort facilities were completed in 1990. These estimates have ranged from 105 MW to 500 MW¹². The reason for this wide range is that the resource has not been clearly defined throughout the KGRA. Over 90% of the Cove Fort-Sulphurdale area is located on federal land – split about evenly between BLM and the U.S. Forest Service (USFS). Native American land and some Utah State Trust Land are also located within the KGRA. Amp Resources plans to build the new plant on private land. Dry steam at about 150°C (302°F) is produced from relatively shallow production wells at 180-400m (600 to 1,300 ft) deep. However, new production wells for the new plant will likely tap a deeper, liquid-dominated resource.

3) Thermo Hot Springs

The Thermo Hot Springs KGRA is located in Beaver County southwest of Roosevelt Hot Springs. The area of the KGRA (640 acres) is small compared to the extent of the suggested thermal anomaly. Thermal gradient holes were drilled in the KGRA in 1973 and 1977, only two of which were deeper than 1,000 feet (305 meters)¹³. A deep test well was drilled in 1978. While sufficient temperatures were found, there was a lack of permeability and fluids were not sufficient for production in the wells. Although the exploratory well did not find a producible resource, additional exploration is warranted. The maximum temperature found was 160°C (320°F) at a depth of 2,221 m (7,287 ft). Data shows significant temperatures in several areas throughout the KGRA with potential for development. The majority of the land is managed by BLM, but there are tracts of private and Utah State Trust land in the KGRA. Thermo Hot Springs is located relatively close to transmission lines.

4) Newcastle

Newcastle is a small farming community located in Iron County in Utah's southwest corner. The Newcastle geothermal system was discovered serendipitously in 1975 as a result of water well drilling. Seven production wells are currently used for space heating in three commercial greenhouses that cover an area of 25-acres (the second largest geothermal-heated greenhouse in the United States). The wells are approximately 500 – 600 ft deep and produce geothermal water at temperatures in the range of 82 – 93°C (180 – 200°F). An LDS (Mormon) Chapel is also heated by geothermal water. While most of the area is on private land, it is thought that the source zone for the geothermal fluid lies beneath nearby BLM land. Newcastle has had wells drilled that could be utilized for electrical production. A well drilled in 1981 to a depth of 913m (2995ft) encountered a maximum temperature of 130°C (266°F). A more recent thermal gradient exploration hole, located nearby, found a maximum temperature of 117°C (243°F) at similar depths, and a small power facility was considered on the site. Newcastle may have the potential for a small power facility at the existing site, although the areas around Newcastle may have potential for larger electrical production, and should be considered for further exploration.

5 & 6) Wasatch Front (Ogden Hot Springs and Utah Hot Springs)

There is likely geothermal potential along the Wasatch Front as the Wasatch Fault Zone forms the western boundary of the Wasatch Range for over 100 miles from the Idaho border southward to Nephi along Interstate 15. Two resource areas of particular interest along the Wasatch Front are located in the vicinity of Ogden, Utah (Ogden Hot Springs and Utah Hot Springs).

Ogden Hot Springs is located on private land at the mouth of Ogden Canyon in Weber County. Surface temperatures at the hot springs average 57°C (135°F). Geothermometers have suggested resource temperatures of up to 190°C (374°F) at depth. No geothermal exploration beyond the surface springs has been reported and there is no direct-use heating facility on the site (although the hot springs have been used for local recreation). Ogden Hot Springs is located near transmission lines; however its proximity to residential neighborhoods could make new exploration drilling complicated.

Utah Hot Springs is located on private land near Pleasant View on the Weber-Box Elder County line, less than 10 miles northwest of Ogden Hot Springs. Temperatures at the surface of the springs have been measured at 59°C (138°F). Geothermometers have suggested that temperatures of the resource fluids at depth may exceed 192°C (377°F). The springs were used for a time at a now-defunct resort, and are now used to heat a small commercial greenhouse operation. While minor geothermal exploration was conducted in the early 1980s, the resource is poorly defined and more exploration is warranted.

7) Crystal-Madsen Hot Springs

Crystal-Madsen Hot Springs is located on private land, north of Brigham City, near Honeyville. The Crystal (Madsen) Hot Springs Resort uses direct heat from the springs at roughly 60°C (140°F) to fill therapeutic hot tubs, mineral pools, and flows into the swimming pool. Beyond the direct-use heating facility, drilling has been limited. Geothermometers have suggested temperatures of near 150°C (302°F) at depth. While the hot springs are on private land, they are located within two miles of a USFS designated wilderness area.

8) Hooper Hot Springs

Hooper hot springs is located on the eastern shore of the Great Salt Lake about 10 miles southwest of Ogden on Utah State Sovereign Lands and Utah Division of Wildlife Resources lands. The resource temperature at the surface is 57°C (135°F). Geothermometers have suggested temperatures of up to 135°C (275°F) at depth. While the area has potential for geothermal development, environmental and wildlife concerns in the area may restrict exploration. Hooper Hot Springs is not the only potential resource in this region. Bottom-hole temperatures measured in wildcat oil and gas wells have indicated that potential for high-temperature geothermal resources may extend beneath the Great Salt Lake.

9) Drum Mountains

The Drum Mountain-Whirlwind Valley area is located in Western Utah in Juab and Millard counties. The area was explored during the late 1970s and early 1980s. There was no developable geothermal resource identified from this exploration, although measured temperatures as high as 70°C (158°F) were found in a shallow borehole at 150m (492 ft). The UGS Open File Report has suggested that this area be subject to deeper drilling, and may have potential for electric production. The land is located in close proximity to the Crater Hot Springs KGRA and is mostly on BLM land with a scattering of Utah State Trust lands.

If you have additional questions on these or other issues please give me a call.

Sincerely,

David L. Taylor
Manager, Utah Regulatory Affairs

Cc: Division of Public Utilities
Committee of Consumer Services