May 10, 2002

MEMORANDUM

TO:	Stephen F. Mecham, Chair Utah Public Service Commission
FROM:	Jeff Burks, Energy Policy Coordinator Utah Energy Office
SUBJECT:	Amended Comments of the Utah Energy Office on PacifiCorp's Response to Commission's Order on Reconsideration of DSM Issues, Docket No. 01-035-01.

Background

In the original order *In the Matter of the Application of PacifiCorp for an Increase in its Rates and Charges, Docket No. 01-035-01*, the Utah Public Service Commission ("Commission") directed PacifiCorp ("the Company") to evaluate the DSM programs discussed in the Tellus Report and incorporate demand-side resources that were shown to be cost-effective in the next interim update of the IRP, i.e., RAMPP-7. They expressed a particular interest in load control measures that could cut peak demand.¹

In the October 29, 2001, *Order on Reconsideration of DSM Issues, Docket No.* 01-035-01, the Commission concluded that "[t]he current RAMPP process appears to be deficient in that the full range of DSM projects was not effectively evaluated." It further clarified the original order by stating that:

"Our original order specified that the Company would evaluate each program and incorporate cost-effective demand-side resources in the next interim report. We intended the Company to evaluate the DSM programs discussed in the Tellus Report and we expected that the Company would file and interim report before the filing of the biennial report of RAMPP 7, due December 31, 2002.²

¹Public Service Commission, Report and Order, In the Matter of the Application of PacifiCorp for an Increase in its Rates and Charges, Docket No. 01-035-01, page 39, September 10, 2001.

²Public Service Commission, Order on Reconsideration of DSM Issues, Docket No. 01-035-01, October 29, 2001, page 3.

Page 2 Memorandum - Stephen F. Mecham, Chair May 10, 2002

The Commission ordered the Company to begin quarterly IRP updates "as soon as possible so that it can analyze the DSM scenario suggested by the Tellus report," and directed the Company to "...invite the members of the Energy Efficiency Task Force to participate in these meetings" and "attempt to gain consensus on which programs should be studied for possible implementation for the coming summer as well as a plan on how the resources are best evaluated, either with a revised RAMPP-6 or a preliminary RAMPP-7 model."³

The Order further required the Company to file an advisory memo with the Commission by December 31, 2001, on how it intends to proceed with the implementation of the October 29, 2001, Order. It then ordered the Company to "develop an implementation plan for its most promising resources to help meet the Summer peak of 2002 and present it to the Commission by April 1, 2002."

In the *Report and Order In the Matter of the Acknowledgment of PACIFICORP Integrated Resource Plan (RAMPP 6)*, the Commission reinforced its two previous orders related to the issue of the Company's inadequate evaluation of DSM resources by ordering the Company to "...comply with the requirements and filing dates set forth in the October 29, 2001, Order on Reconsideration of DSM Issues, Docket No. 01-035-01, calling for better evaluation of demand-side management opportunities." It also ordered the Company to file an updated RAMPP-6 Planning Report and Action Plan by June 1, 2002, "...which meets current guideline requirements, is based on integrated, single-system, least-cost operation and evaluates demandside management opportunities equally with supply-side options...."⁴

On April 1, 2002, the Company filed it's Implementation Plan ("Plan") with the Commission. The Utah Energy Office ("UEO") submits the following comments on the Company's Plan.

Discussion of the Plan

It is apparent from the Plan filed with the Commission an effort is underway by the Company to improve its performance in acquiring cost-effective demand side resources. In June 2001, the Company filed tariffs for an enhanced suite of energy efficiency programs that were designed to capture long term energy savings. The programs included a residential CFL

³Ib., page 4.

⁴Public Service Commission, Report and Order, In the Matter of the Acknowledgement of PACIFICORP Integrated Resource Plan (RAMPP 6), Docket No. 98-2035-05, February 28, 2002, page 13.

Page 3 Memorandum - Stephen F. Mecham, Chair May 10, 2002

bulb program; small and large retrofit incentive programs for the commercial buildings market; and an enhanced Energy Finanswer program offering energy engineering studies and financial incentives for investments in energy savings and demand reductions.

The Company also offered a number of demand reduction programs during the spring and summer of 2001. As indicated in the Plan, these programs were offered in response to specific market conditions and, except for the Energy Exchange program, expired at the end of last summer. In order to provide the Energy Exchange program to smaller customers the Company is currently evaluating the costs, kW impacts and customer participation rates of lowering the threshold below 1 MW.

A new residential and small commercial load control pilot program focusing on air conditioning is expected to be designed, evaluated and implemented beginning this fall. As currently designed the program will be a multi-year program that will be installed and operated by a third party vendor.

The Plan anticipates a continuation of a customer information campaign that will include "Do the Bright Thing" energy efficiency and conservation messaging to remind people to use energy wisely and make smart energy choices such as avoiding unnecessary electricity use during peak demand periods. The Company will also be communicating through bill inserts two rate changes designed to provide customers with better price signals. The new tariffs include a residential inverted block rate and redesigned residential time of use rate. In addition, the Company intends to partner with the Utah Energy Office, public power, the media and end-use customers on the re-introduction of the PowerFoward energy conservation campaign this summer.

The Plan concludes that "[T]the company believes that it has a sufficiently robust foundation to address its summer 2002 needs" and it does not "...feel that aggressively introducing new DSM programs in advance of summer 2002 is warranted." Disappointingly, no new DSM programs are proposed for the summer of 2002.

UEO Comments

The Company's June 2001 DSM tariff filing, demand reduction programs, and last summer's public energy conservation information and education campaign represented important first steps toward reinvigorating a moribund DSM program in the Company's Utah service territory. The Utah Energy Office would like to commend the Company for maintaining a

Page 4 Memorandum - Stephen F. Mecham, Chair May 10, 2002

substantial portion of the commitment it made to DSM in 2001 in the current Plan. This is for the better. However, the issue before the Commission is whether or not the Company complied with the Commission Orders in Docket 01-035-01, dated September 10 and October 29, 2001. On this account, it is the opinion of UEO that the Company has come up short. The April 1, 2002, Plan the Company filed does not meet with the Commission's Orders because the Company failed to conduct an evaluation of the DSM programs in the Tellus Report and incorporate these evaluations into a revised RAMPP 6 or a preliminary RAMPP-7 model as requested by the Commission.

In previous dockets and technical conferences over the last two years the Company has explained that during the 1997 through 2000 period alone, PacifiCorp's peak load along the Utah Wasatch Front grew from 2,864 megawatts to 3,515 megawatts, an increase of approximately 650 megawatts. Moreover, it expects to be resource short in Utah in the summer of 2002 and beyond, particularly during the super peak hours in the month of July. As a result of the load growth, the Company needs additional resources to meet the peak load requirements of its retail customers. In the Gadsby docket, Janet Morrison testified to this effect when she observed that "[B]based on the PacifiCorp Position Report dated 08-02-01, it was shown that a shortage of resources occurs each year in Utah during July Super-Peak hours. This shortage continues to grow over time from 439 Mwa in July 2002 to 1,262 Mwa by July 2009."⁵

Testimony filed in Docket # 01-035-01 by the Utah Energy Office's expert witness Dr. Nichols, and supported by the Tellus Institute report, *An Economic Analysis of Achievable New Demand-Side Management Opportunities in Utah* ("Tellus Report"), established a compelling case for the existence of a cost-effective DSM that provide significant energy and peak demand reductions in the Company's Utah service territory. The Tellus report identified programs that included residential high-efficiency central air conditioners and evaporative cooling systems, appliance recycling program, residential air conditioning load control, commercial air conditioning load control, industrial load management, and commercial and institutional load management. The Tellus Report concluded that funding sufficient to vigorously promote these DSM measures and budgeted over a five year period, would lead to both energy savings and an estimated reduction in summer peak in excess of 188 MW in PacifiCorp's Utah service territory. Total estimated costs of implementing these program measures was \$44.2 million, a cost of \$244 per kW.⁶ Moreover, the evaluation undertaken in the Tellus Report projected these programs would pass the Ratepayer Impact Measure (RIM) test indicating investments in these programs reduce average system costs per kWh.

⁵J. Morrison, Direct Testimony at page 3, Lines 5-8., Docket 01-035-37.

⁶Estimates derived from Tables on pages 37 and 39, Economic Analysis of Achievable New Demand-Side Management Opportunities in Utah, Tellus Institute, March 2001.

Page 5 Memorandum - Stephen F. Mecham, Chair May 10, 2002

By comparison, the Company will add Gadsby to its portfolio as a peaking resource at a cost of \$667 per kW of installed capacity.

The Plan filed by the Company offers some evidence that an evaluation is underway for a residential and small commercial load control pilot program. However, this was the only program in the Tellus Report that appears to be under evaluation. As such the Company's Plan cannot possibly provide the necessary information that would allow it to conduct an adequate evaluation of both supply-side and demand-side resources. Accordingly, the Plan does not meet the threshold established the Commission's October 29, 2001, Order directing the Company to "develop an implementation plan for its most promising resources to meet Summer peak of 2002." The UEO finds the Company's reluctance to conduct a more thorough evaluation of DSM programs contained in the Tellus Report perplexing in light of its summer resource needs in Utah.

The Company has had ample time to identify, evaluate, design and even implement cost-effective DSM measures that can reduce peak demand in the Utah service territory. In addition to the Tellus report that has been available since March 2001, an October 1993 study undertaken by the Company to identify options for reducing peak demand in the Utah service territory recommended the Company should pursue a "sustained and orderly development of the acquisition of peak management resources...."⁷ Earlier this year a company witness in Docket 01-035-37, J. Rand Thurgood, testified in that the Company has been aware of the need to acquire both new "generation resources and *economic large-scale demand-side resources*" since the last quarter of 2000.⁸

The Company's apparent lack of enthusiasm for acquiring demand side resources to meet peak demand is in sharp contrast to the way it has gone about acquiring potentially more expensive supply-side peak resources. Since the Commission's original Order and Report was issued for Docket No. 01-035-01, the Company has evaluated and filed application of an expedited review and issuance for a *Certificate of Convenience and Necessity* for a 120 MW peaking plant at Gadsby. It is currently proceeding with procurement of equipment and construction of the plant. The Company has also issued an RFP for supply-side resources to meet its summer short position in Utah. It has already evaluated 52 proposals responding to the RFP, selected a short list of qualified bidders, began negotiations with the selected bidders and signed agreements with a number of the finalists, including Pacific Power Marketing.

⁷PacifiCorp Peak Management, October 29, 1993, p. 49

⁸PacifiCorp Prefiled Direct Testimony of J. Rand Thurgood, p. 5, Docket 01-35-37.

Page 6 Memorandum - Stephen F. Mecham, Chair May 10, 2002

Conclusions

IRP guidelines adopted by this Commission in Docket No. 90-2035-01, call for the "evaluation" and "the selection of the optimal set of resources." of "least-cost operation".⁹

In the Commission's *Order on Reconsideration of DSM Issues* in Docket No. 01-035-01, October 29, 2001, the Commission reiterated that the resource "planning process requires the evaluation of both supply-side and demand-side resources." Moreover, in the first Order in this Docket the Commission also expressed that it was particularly interested in DSM programs that "can cut peak demand" and that "[L]load control measures may prove particularly promising at cutting costs."¹⁰ The Commission clarified its Order of September 10, 2001, in its *Order on Reconsideration of DSM Issues* by directing the Company to "...to evaluate the DSM programs discussed in the Tellus Report," and "develop an implementation plan for its most promising resources to help meet the 2002 summer peak and present it to the Commission by April 1, 2002."

The Company has demonstrated it is in a short position meeting its summer resource needs in the Utah service territory. It has testified of the need for both "generation and economic large scale demand side resources" in the Gadsby docket. A 1993 Company report identified the opportunity and recommended the Company pursue "orderly development" of load management resources to meet peak demand.

The record in Docket # 01-035-01 identified numerous opportunities for the Company to acquire peak demand resources to address 2002 summer peak demand and beyond through DSM. The Tellus Report identified a suite of new DSM programs that could save energy and provide significant reductions in summer peak demand at what appears to be a significantly lower cost than the Gadsby120 MW resource addition and other like resources it is considering in its RFP.

⁹Public Service Commission, Report and Order on Standards and Guidelines, Integrated Resource Plan for PacifiCo

> rp, Docket No, 90-2035-01, June 18, 1992, p. 41.

¹⁰Public Service Commission, Report and Order, Docket No. 01-035-01, p. 39.

The Company's failure to evaluate energy efficiency and load management programs from the Tellus Report and include them in either a revised RAMPP 6 Report and Action Plan or an interim IRP evaluation prior to the RAMPP 7 Action Plan prevents the Company from identifying the "optimal set of resources" of "least-cost operation" for the Summer of 2002 or beyond. Absent this type of evaluation, the filed Plan cannot identify the "most promising resources" and as such, serves as little more than a summary of the status quo.

Page 7 Memorandum - Stephen F. Mecham, Chair May 10, 2002

The Commission's Orders provided an opportunity for the Company to build upon the work of the Tellus Institute and evaluate and identify the most cost-effective portfolio of resources that could contribute to meeting its most critical resources needs. The Company failed to conduct a comprehensive evaluation of the DSM programs contained in the Tellus Report as requested by the Commission. This has prevented it from undertaking a more comprehensive IRP modeling assessment that explicitly analyzes the role that new load management and energy efficiency can realistically play in reducing the size, urgency and cost of new supply resources such as the Gadsby facility and others like it. In light of the Company's failure to adequately evaluate new DSM programs and subsequent omission of any new energy efficiency or load management measures in either a revised RAMPP-6 Report and Action Plan or interim modeling update of RAMPP-7, it is hard to see how the Company's April 1 Plan responds to the Commission's earlier Orders or could represent "the most promising resources" to address 2002 and future summer peak demand.

Recommendations

In the absence of the evaluation of DSM programs the Commission requested in its Orders of September 10, 2001, and October 29, 2001, the UEO implores the Commission to order the Company to immediately comply with its previous Orders. The Company should be directed to work through the Energy Efficiency Advisory Work Group to evaluate residential, commercial and industrial load management and energy efficiency programs that reduce peak demand and have been identified in the Tellus Report or by members of the Advisory Group. Based on the evaluation, the Company and Advisory Group should select programs for inclusion in an interim IRP evaluation using a revised RAMPP-6 model or a preliminary RAMPP-7 model. DSM programs that prove to be cost- effective in the RAMPP modeling process, and in particular serve to reduce summer peak demand for 2003, should then be included in an amended Implementation Plan and filed with the Commission by no later than July 17, 2002. Specifically:

1. The Commission should make it clear to the Company that it is expected to evaluate, develop and implement new DSM on a more strategic and sustained basis to address its resources needs.

To underscore this point the Commission should direct the Company to amend the April 1 Implementation Plan filing to comply with the Commission's original Orders. The Company states in its April 1 Plan that it is actively considering a range of new DSM Page 8 Memorandum - Stephen F. Mecham, Chair May 10, 2002

initiatives. Therefore, it should be reasonable for the Company to develop an amended Plan, following the Commission's Orders of September 10 and October 29, 2001, and file the Plan with the Energy Efficiency Advisory Work Group and the Commission by July 17, 2002.

2. To shift to a sustainable DSM perspective, PacifiCorp needs to develop DSM milestones for both existing and new DSM programs and include these as part of the amended Implementation Plan.

In June 2001 PacifiCorp proposed, and the Commission approved, new tariffs for enhanced DSM programs in Utah, with deferred accounting of the estimated cost of \$13.5 million. As a one-time proposal, the Company's new DSM program provided no timetable. Implementation milestones of the DSM activities approved by the Commission in 2001, as well as additional DSM initiatives which are described in the following section of the UEO's recommendations, need to be developed and included in the amended Plan to bring clarity to the Company's business plan for acquiring demand side resources to meet its most critical resource needs.

3. The amended Plan should include explicit implementation milestones, as follows:

- A roll-out schedule for the elements of a comprehensive public education program.
- An update of the roll-out schedule for the pilot air conditioner control program.
- Explicit quantitative activity and impact forecasts for ongoing DSM programs in (a) the commercial market and (b) the industrial market.
- A plan for a comprehensive residential cooling efficiency initiative, with a roll-out schedule for program elements before the cooling season of 2003.
- An RFP for residential appliance recycling, Fall 2002.
- A plan and roll-out schedule for the development of new load management programs, including a bidding program for curtailable load.
- A timetable for a request for proposals (RFP) to survey the combined heat and power market.
- Cost-effectiveness assessment of new DSM programs.
- A plan, including organizational chart, identifying PacifiCorp's lead DSM person, staff working on DSM program evaluation and implementation and financial resources committed to existing and new DSM program development and implementation.

Page 9 Memorandum - Stephen F. Mecham, Chair May 10, 2002

4. The Commission should require the Company's amended Implementation Plan to include the following DSM initiatives:

- Programs to reduce the contribution to peak demand from each of the three major customer sectors by 2 percent as a result of DSM in 2002-2003.
- A campaign of public education and information about conservation and efficiency in the use of energy, and conduct it on an ongoing, open-ended basis.
- A comprehensive residential cooling efficiency initiative to promote use of fans, evaporative cooling, and high-efficiency air conditioning.
- Bid for delivery of a blitz program of residential appliance recycling to achieve a demand reduction of 4 MW as a result of program activity in 2002 and 2003.
- New load management (LM) resources from among commercial and industrial customers to help reduce the costs of meeting increasing peak demand.
- Survey the combined heat and power (CHP) market to identify sites where CHP is feasible and could reduce electric system demand by 25 MW in all.

Each of these initiatives listed under recommendation 4 is feasible based on the Tellus Report¹¹ and/or has been discussed at meetings of the Energy Efficiency Task Force. Absent a more aggressive initiative from the Company, the UEO offers the following more detailed discussion of each DSM initiative listed above and requests the Commission to direct the Company to specifically evaluate these programs in collaboration with the Advisory Group and, if shown to be cost-effective, design a program and tariff for implementation in the Utah service territory. A discussion of each initiative follows.

New DSM Program Initiatives

1. Reduce the contribution to peak demand from each major customer sector as a result of new DSR in 2002-2003.

A 2 percent reduction in the contribution to peak demand from each major sector is feasible and attainable. A reduction of this magnitude is needed to develop a critical mass of DSR capabilities at the Company and synergies among DSM programs. The reduction can be attained with a mix of load management initiatives plus energy efficiency programs that also contribute to peak demand reductions. A reduction of this size is less than what the Tellus study² found was achievable and cost-effective for Utah.

¹¹ An Economic Analysis of Achievable Demand-Side Management Opportunities in Utah, Prepared for the System Benefits Charge Stakeholder Advisory Group to the Utah Public Service Commission, May 2001.

Page 10 Memorandum - Stephen F. Mecham, Chair May 10, 2002

Residential sector: PacifiCorp should aim for a demand reduction of 2 percent or 15-20 MW from this sector, obtained as follows:

- Continue to roll out the pilot residential air conditioner load control program designed to obtain 10 MW of reduction.
- Conduct the public information, cooling efficiency, and appliance recycling programs (see below).
- To save energy cost-effectively as well as to contribute to additional demand reduction, launch a program to promote Energy Star appliances which includes incentives for efficient clothes washers that save energy and water.

Commercial sector: PacifiCorp should aim for a reduction of about 20 MW or more from DSR in 2002-2003, obtained as follows:

- Make explicit quantitative activity and impact forecasts for the overall FinAnswer programs in the commercial market.
- Establish a stronger re-commissioning component of the FinAnswer program. Recommissioning for larger buildings, to "tune up" their complex lighting, cooling, and other electric systems, as well as energy management and control systems, improves efficiency. Re-commissioning involves training commissioning agents, promoting the program among building owners/managers, and paying some or all of the cost of the service.
- Obtain additional curtailable power from customers (program no. 5).

Industrial sector: The Company should aim for a demand reduction of about 15 MW or more as a result of DSR in 2002-2003, obtained as follows:

- Make explicit quantitative activity and impact forecasts for the overall FinAnswer programs in the commercial market.
- Bid for curtailable power from customers not now served on interruptible or special rates (program no. 5).

2. Prepare a campaign of public education and information on efficiency in the use of energy, and conduct it on an ongoing basis.

Communicating with the public on a sustained basis provides critical short- and long-term benefits. It can:

- Communicate the financial benefits of efficiency in the use of electricity, pointing out the existence of inclining block rates and time of use rates.
- Educate both school children and adults in the basic techniques and benefits of energy efficiency.

Page 11 Memorandum - Stephen F. Mecham, Chair May 10, 2002

- Promote participation in DSM programs as well as other voluntary actions.
- Lay a foundation for transforming markets for energy efficient products and services by raising the consciousness of consumers.

At the February 25, 2002, meeting of the Energy Efficiency Advisory Work Group, the Company stated that they are developing such a program, but insufficient details were offered either then or in the April 1 Plan. There was uniform support for such an initiative among the parties at that meeting. This program needs to be comprehensive and multi-faceted, and to support an on-going effort for the long term.

3. Comprehensive cooling efficiency program.

Electricity usage for residential air conditioning has been increasing with surprising rapidity in Utah. Residential AC is a significant contributor to summer peak loads. The Company's pilot AC cycling program will clip AC-related peak load by about 10 MW. Additionally, much more can be done. Needed is a comprehensive residential cooling efficiency program to address the underlying surge in electricity demand from AC by combining the following elements:

- Strong educational efforts to promote cooling that makes use of Utah's natural dryness. From an economic and environmental perspective, the consumers' first priority should be to rely on air flow, assisted as needed by fans and shading. Should further cooling be required, the second priority should be to employ evaporative cooling, a technology used throughout the Southwest and in dry regions around the world. Finally, if the consumer desires refrigerated AC, the highest-efficiency models should be considered, and their proper installation is critical.
- **Financial incentives to encourage the selection or retention of evaporative cooling.** Rebate incentives can be employed in new construction applications or as an inducement to retire central AC systems. Market research should be conducted to determine how to craft incentives and technical assistance to cause existing evaporative cooling customers to retain and renew their equipment, rather than switch to central AC.

Page 12 Memorandum - Stephen F. Mecham, Chair May 10, 2002

• Financial incentives to encourage selection and proper installation of the highest efficiency central AC systems. Recent experience in California and the Northeast has shown that high efficiency AC programs are more successful in reducing demand if they focus on training contractors on proper AC sizing and installation and conduct spot checks on proper installation, in addition to providing consumers with rebates for high efficiency models. Those elements need to be included in this program component.

4. Bid for delivery of a blitz program of appliance recycling.

An appliance recycling program involves a contractor offering to pick-up and recycle old but still functioning refrigerators and freezers. Appliances that are six or more years older use far more electricity than any comparable new model available today. Thus, demand savings result from this program whether the old appliance is replaced by the consumer or whether it is a second unit that is not replaced.

Appliance recycling is a DSM program that has proven cost-effective based on experience in California and elsewhere. The contractor provides marketing, administration, pick-up and recycling.

PacifiCorp's Plan should schedule an RFP to select a delivery contractor. A number of contractors offer this service. The utility pays the contractor a fee per appliance recycled. An incentive to induce customer participation is also typically employed.

For economy of delivery, a full-scale one-time program is proposed. If the program is launched in the Fall 2002, it can achieve a demand reduction of 4 MW as a result of program activity in 2002-2003.

5. Develop new load management (LM) resources from among commercial and industrial customers to help reduce the costs of meeting increasing peak demand.

LM programs for medium and large sized commercial and industrial electricity take the form of rate credits in exchange for customer agreements to shed load under conditions specified in interruptible or curtailable rate contracts. New LM should be marketed to sufficient customers to yield an additional 25 MW of interruptible load within two years.¹² To develop new LM resources from customer segments not now providing them, PacifiCorp should analyze the following:

¹² The new LM program will co-exist with other load response programs of the Company, as it is common for utilities to offer a mix of voluntary load-management products.

Page 13 Memorandum - Stephen F. Mecham, Chair May 10, 2002

- Bid for curtailable power from customers not now served on interruptible or special rates. This would focus on customers whose annual demands fall in the 1 to 10 MW range, and who could offer at least 200 kW of non-firm load. Participating customers would receive a rate credit derived from an incentive for each kW-year of non-firm (*i.e.*, interruptible) load. This incentive will be based on the value to the Company of long run firm capacity. The Company could use a tender procedure whereby it establishes a block of interruptibility to be procured, and fills it with bids received in the order of ascending price. This approach would assure that the cost of the program to the Company is less than the avoided cost of capacity resources.
- A cooperative interruptible program to facilitate enrollment of groupings of medium sized commercial facilities.
- Other new LM offerings tied to capacity value (not short-term market price fluctuations).

6. Survey the combined heat and power (CHP) market and identify sites where CHP is feasible and could reduce electric system demand by 25 MW in all.

CHP systems, also known as co-generation systems, make use of heat that in conventional electric generating plants is wasted. Electricity is generated and the heat that would otherwise be wasted is used for process heating requirements, water heating, or other fairly continuous thermal loads. There is little CHP in any sector in Utah at present. Moreover, there are major market barriers to the development of new CHP systems that are sized to meet electricity requirements at their host facilities.

There is, thus, an opportunity for the Company to develop a sustained initiative to identify potential sites, evaluate the steps needed to overcome barriers to development, and act to cause new CHP to come on-line in Utah. Because CHP is a major system reconfiguration, institutional or owner-occupied facilities that expect long tenancy are good targets.

Though CHP has not played a significant role in its DSM in the past, Company staff now favor considering CHP. The Company should conduct a market survey that has the objective of identifying concrete sites where it appears that CHP is technically

Page 14 Memorandum - Stephen F. Mecham, Chair May 10, 2002

feasible. In essence, pre-feasibility studies of promising sites should be done within the 2002-2003 time frame. The sites identified should be capable of reducing electric system demand by at least 25 MW in all. This CHP survey is needed to provide a firm foundation for a CHP program that can result in additional of CHP capacity after 2003.

cc: Commissioner White Commissioner Campbell Rebecca Wilson, PSC Service List