**Date:** January 14, 2009

**To:** Bill Marek, PacifiCorp

**From:** Allen Lee, Steve Chamberlin

**Re:** Utah Irrigation Load Control Program Cost Effectiveness – 2008

**Preliminary Estimates** 

This memo provides the results of a cost-effectiveness analysis of Rocky Mountain Power's preliminary estimates for an Irrigation Load Control Program in Utah. The Irrigation Load Control Program is designed to reduce peak load by allowing Rocky Mountain Power to install equipment to dispatch irrigation load reductions during periods of peak demand. This memo provides updated results using the primary line losses.

Tables 1A and 1B present the program cost-effectiveness analysis costs and benefits. Cost effectiveness parameters for line losses were provided by Rocky Mountain Power's regulation department.

**Table 1A: Program Costs** 

Costs	Value	
Administrative support	\$800.00	
Program evaluation	\$2,000.00	
Field expenses	\$650,000.00	
Participation credits	\$690,000.00	
Program management	\$50,000.00	
Total program costs	\$1,392,800.00	

**Table 1B: Program Benefits** 

Avoided Cost Benefits	Value
Total avoided avg. kW all days	30,000
Value- \$/kW	\$59.43
Value with 6.33% line loss	\$63.45
Total value of Avoided kW	\$1,903,384

The costs, benefits, and net benefits are shown in Table 2, along with the benefit-cost ratio. The demand savings are adjusted by the primary line losses (6.33%) to estimate the change in capacity at the utility. These initial estimates indicate the program will be cost effective under the TRC and Utility Cost Tests. The program is also beneficial to participants based on the Participant Cost Test; the benefit-cost ratio for this test was not calculated because participants have no costs. The program also passes the Utah

Ratepayer Impact Measure (URIM) test. In this case, the URIM test is identical to the UCT because there is no change in utility revenues.

**Table 2: Program Cost-Effectiveness Test Results** 

Test (Base)	Benefits	Costs	Net Benefits	Benefit/Cost Ratio
TRC	\$ 1,903,384	\$ 702,800	\$ 1,200,584	2.71
Utility	\$ 1,903,384	\$ 1,392,800	\$ 510,584	1.37
Ratepayer	\$ 1,903,384	\$ 1,392,800	\$ 510,584	1.37
Participant	\$ 690,000	-	\$ 690,000	