Mona – Oquirrh Project Customer Benefit Measures

TABLE I

Net Present Value Variable Production Cost Savings: Full Energy Gateway

Net Present Value Variable Production Cost Savings (50 Year Period)				
Scenario	Low Gas Price Low CO2 ($8/ton)	High Gas Price Low CO2 ($8/ton)	Low Gas Price High CO2 ($45/ton)	High Gas Price High CO2 ($45/ton)
Total Energy Gateway (1)	$4,152m	$5,662m	$6,110m	$6,887m
Mona – Oquirrh (2)	$331m	$451m	$487m	$549m

Notes:

1) Net present value variable production cost savings for total Energy Gateway calculated through IRP Production and Resource Model (PaR) with and without entire the Energy Gateway project for 50-year period
2) Portion of variable production cost savings were allocated to Mona – Oquirrh based on timing of incremental capacity added

TABLE II

Least Cost Alternative Between Recommended Construction and Two Phased 345 kV Transmission Lines

Total Capital Costs			
Scenario	500/345 kV Line (Recommended)	345 kV Line Phase 1 & 2(Next Best Alternative)	Difference
Mona - Oquirrh	$438m	$619m	($181m)

Notes:

1) The least cost alternative focused on delivering the minimum 1400 MW requirement for the least cost between 500 single circuit/345 double circuit kV line or two single circuit 345 kV lines
2) Total capital costs includes allowance for funds used during construction, capitalized property tax, cost inflation, capital surcharge and contingency for entire project

TABLE III

Mona – Oquirrh Transmission Segment Present Value Revenue Requirement and Net Present Value					
500 kV Line (Recommended)		345 kV Line Phase 1 & 2 (Next Best Alternative)		Difference 500 kV vs 345 kV Phased	
PVRR (1)	NPV (2)	PVRR (1)	NPV (2)	PVRR (3)	NPV (4)
$481m	($292m)	$622m	($372m)	($141m)	$80m

Notes:

1) PVRR is the present value of revenue requirements. It is the sum of annual revenue requirements, discounted by 7.1 percent per year. A 50 year planning horizon is used.

2) NPV is the net present value of after-tax cash flow. In order to analyze the underlying economics of the alternative investments, the cash flows used in these calculations are before regulatory recovery of the investment and associated expenses. A 7.1 percent discount rate and 50 planning horizon are used.

3) PVRR (D) is the difference between the present value of revenue requirements of the 500 kilovolt option and the phased 345 kilovolt option.

4) NPV (D) is the difference between the present value of revenue requirements of the 500 kilovolt option and the phased 345 kilovolt option.

TABLE IV

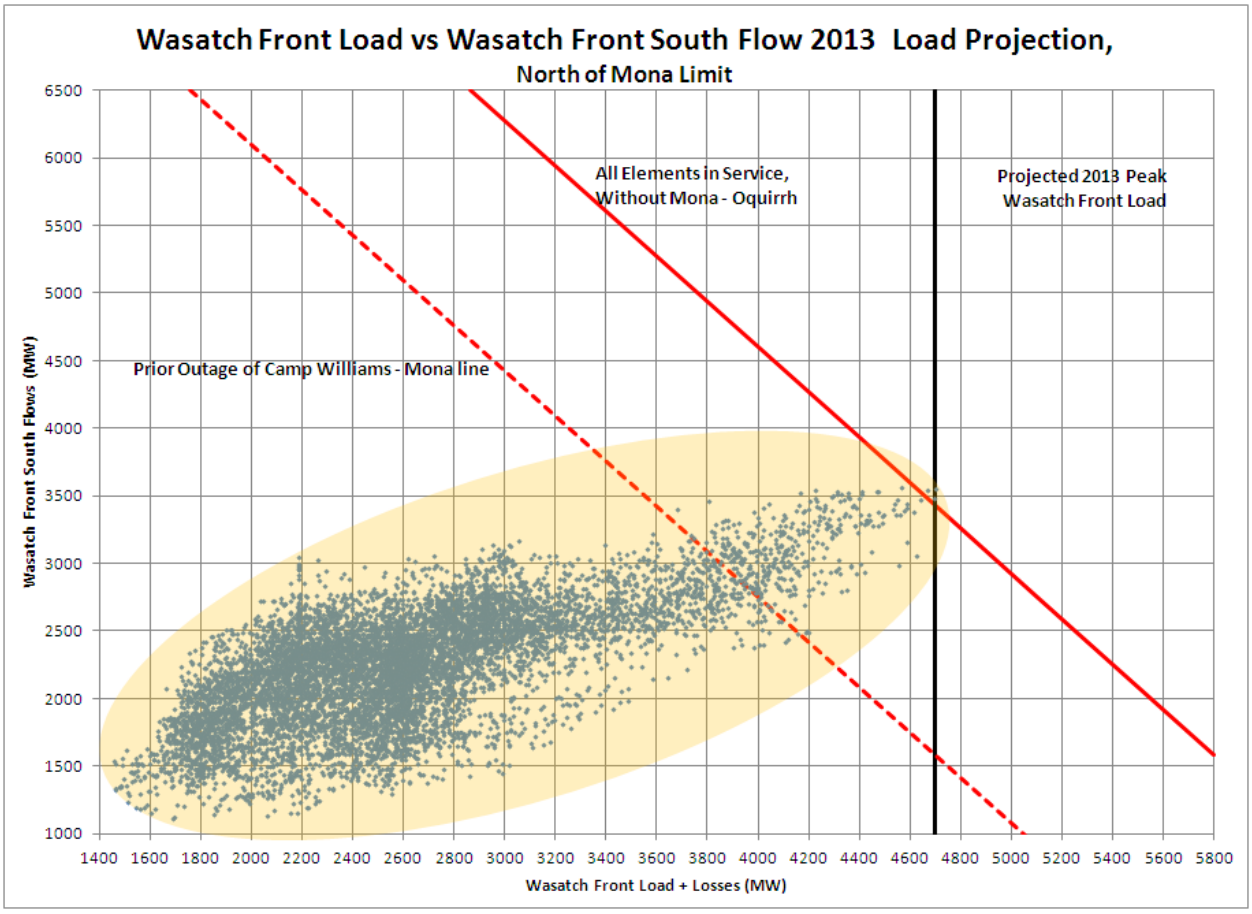
Wasatch Front Load at Risk Costs Due to Loss of Transmission Segment

Load at Risk Outage Costs Without Mona – Oquirrh Transmission Segment			
2013 Load Projection Forced Outage Exposure (1)		2020 Load Projection Forced Outage Exposure (1)	
Tiered ENS Pricing @ $400 MWh	FERC Cap Pricing @ $1,000 MWh	Tiered ENS Pricing @ $400 MWh (2)	FERC Cap Pricing @ $1,000 MWh (2)
$29m	$210m	$214m	$1,765m

Notes:

1) Number of MWhs exposed come from 2013 and 2020 Load at Risk calculations
2) Energy not served (ENS) pricing is escalated for 2020
3) Maximum outage costs are MWhs multiplied by energy not served costs
4) The derivation of ENS pricing is discussed in PacifiCorp's 2011 IRP (page 199)

Data points for the 2014 Forced Outage Exposure are shown below:



Data points for the 2020 Forced Outage Exposure are shown below: