

Appendix A

PacifiCorp Avoided Cost (GRID and Differential Revenue Requirement) Model Updates through October 2010 Case No. 03-035-14

GRID Scenario Study Period

January 1, 2011 through December 31, 2030 (20-year study)
Avoided Cost prices starting in January 2011

Official Forward Price Curve (Gas and Market Prices)

Updated to PacifiCorp's September 2010 official forward price curve (0910 OFPC)

Short-Term Firm (STF) Transactions

STF transactions have been updated to include executed STF contracts as of November 2010; Extract 577

Market Capacity

48 Months ended June 2010
Market cap HLH-LLH sales limited to 48 month average of all STF sales, less monthly STF from Extract 577

Inflation Rates

The Company updated inflation rates consistent with the Company's most recent inflation rate study dated September 2010

Load Forecast (Retail)

20-year load forecast dated October 2010

Fuel Prices (Coal)

Average and incremental coal cost study
2011 through 2020 – 10 Year forecast dated October 2010
Thereafter escalated at 2.5%

Potential Environmental Costs

Costs included in incremental fuel costs for plant commitment and dispatch decisions starting in 2013
Environmental costs starting in 2013 for sulfur dioxide and 2015 carbon dioxide
Costs are consistent with the company's forecast dated September 2010
Costs are excluded from fuel costing and are excluded from avoided costs

Proxy Resource (Next Deferrable Resource)

2011 No deferrable resources are available
2012 through 2014 - Mona, West Main and COB Third Quarter (Q3) High Load Hour (HLH) Front Office Trade (FOT) - 2008 IRP Update Table ES.1
2015 and thereafter – 607 MW Combined Cycle Combustion Turbine (CCCT)
Wet "F" 2x1 - East Side Resource (4500') - 2008 IRP Update Table ES.1

IRP Resources

IRP Resources transmission, thermal, DSM, front office trades and wind resources - 2008 IRP Update Dated March 31, 2010

IRP Partial Displacements (this filing)

Thermal and Market Purchase Resources

Base Case - thermal partial displacement was 251.8 MW. Included are QFs that are actively negotiating for or who have executed new power purchase agreements as shown below.

Queue	Thermal Resource	Capacity MW	Energy – Capacity Factor
1	Klamath Falls Biomass	38.5	85.0%
2	Tesoro	25.0	85.0
3	Kennecott Smelter	31.8	85.0
4	US Magnesium	36.0	85.0
5	Eastern Idaho Waste Disposal	15.0	89.5
6	Kennecott Refinery	7.5	72.0
7	ExxonMobil	98.0	75.0
Displacement in Base Case MW		251.8 MW	

In the base case, 2012 front office trades in the Mona bubble are fully displaced and additional displacements are made in the West Main and California Oregon Border (COB) bubbles. In 2013 and 2014 front office trades are displaced in the Mona bubble.

Displacement in Base Case - 251.8 MW				
Year	Displaced Resource	IRP Update	Displacement	Remaining MW
2012	Market FOT – Mona 3Q	200	200.0	0.0
	Market FOT – West Main 3Q	15	15.0	0.0
	Market FOT – COB 3Q	389	36.8	352.2
2013	Market FOT – Mona 3Q	300	251.8	48.2
2014	Market FOT – Mona 3Q	300	251.8	48.2
2015	Proxy Resource (see above)	607	251.8	355.2

Avoided Cost Case – a 100 MW 85% capacity factor (CF) avoided cost resource is added to the thermal resource queue.

Queue	Thermal Resource	Capacity MW	Energy – Capacity Factor
1	Klamath Falls Biomass	38.5	85.0%
2	Tesoro	25.0	85.0
3	Kennecott Smelter	31.8	85.0
4	US Magnesium	36.0	85.0
5	Eastern Idaho Waste Disposal	15.0	89.5
6	Kennecott Refinery	7.5	72.0
7	ExxonMobil	98.0	75.0
8	Avoided Cost Resource	<u>100.0</u>	85.0
Displacement in Avoided Cost Case MW		351.8 MW	

In the avoided cost case, front office trades in the Mona and West Main bubbles are fully displaced and additional displacements are made in the California Oregon Border (COB) bubble.

Displacement in Avoided Cost Case - 351.8 MW				
Year	Displaced Resource	IRP Update	Displacement	Remaining MW
2012	Market FOT – Mona 3Q	200	200.0	0.0
	Market FOT – West Main 3Q	15	15.0	0.0
	Market FOT – COB 3Q	389	136.8	252.2
2013	Market FOT – Mona 3Q	300	300.0	0.0
	Market FOT – West Main 3Q	50	50.0	0.0
	Market FOT – COB 3Q	115	1.8	113.2
2014	Market FOT – Mona 3Q	300	300.0	0.0
	Market FOT – West Main 3Q	50	50.0	0.0
	Market FOT – COB 3Q	265	1.8	263.2
2015	Proxy Resource (see above)	607	351.8	255.2

Wind Resources

A total of 887 MW of wind is included in the 2008 IRP Update by 2019 of which 427 MW was under construction or contract at the time of the IRP study. The remaining 460 MW of planned wind resources is scheduled to be available starting in 2017 (Table ES.1). The Company has added potential wind QF resources which partially displace 275.2 MW of the 460 MW remaining total.

Potential QF Wind Resource		
Year	Displaced Resource	MW
2011	Windland Power County Wind	43.2
2012	QF - Cedar Creek Wind I through V	133.0
2012	Pioneer Wind Park I QF	49.5
2013	Pioneer Wind Park II QF	<u>49.5</u>
Wind Resource Partial Displacement of IRP Wind		275.2

IRP Partial Displacements (last filing)

Thermal and Market Purchase Resources

Base Case - thermal partial displacement was 168.7 MW. The potential thermal resource Scatec Solar has a proposed nameplate capacity of 40.0 MW and was modeled assuming to a 65% capacity contribution. The capacity contribution recognizes that the resource is intermittent in nature. Other QFs that are actively negotiating for power purchase agreements are shown below.

Queue	Thermal Resource	Capacity MW	Energy – Capacity Factor
1	Scatec Solar	26.0	31.0%
2	Ormat Douglas	4.2	80.5
3	Ormat Veyo	7.2	80.5
4	Klamath Falls Biomass	38.5	85.0
5	Tesoro	25.0	85.0
6	Kennecott	31.8	85.0
7	US Magnesium	<u>36.0</u>	85.0
Displacement in Base Case MW		168.7	

Displacement in Base Case - 168.7 MW				
Year	Displaced Resource	IRP Update	Displacement	Remaining MW
2012	Market FOT – Mona 3Q	200	168.7	31.3
2013	Market FOT – Mona 3Q	300	168.7	131.3
2014	Market FOT – Mona 3Q	300	168.7	131.3
2015	Proxy Resource (see above)	607	168.7	438.3

The 2008 IRP Update does not have front office trades in 2011 and as such no deferrable resource is available for partial displacement during this period.

Avoided Cost Case – a 100 MW 85% capacity factor (CF) avoided cost resource is added to the thermal resource queue.

Queue	Thermal Resource	Capacity MW	Energy – Capacity Factor
1	Scatec Solar	26.0	31.0%
2	Ormat Douglas	4.2	80.5
3	Ormat Veyo	7.2	80.5
4	Klamath Falls Biomass	38.5	85.0
5	Tesoro	25.0	85.0
6	Kennecott	31.8	85.0
7	US Magnesium	36.0	85.0
8	Avoided Cost Resource	<u>100.0</u>	85.0
Displacement in Avoided Cost Case MW		268.7 MW	

In the base case, 2012 front office trades in the Mona bubble are fully displaced and additional displacements are made in the West Main and California Oregon Border (COB) bubbles. In 2013 and 2014 front office trades are only displaced in the Mona bubble.

Displacement in Avoided Cost Case - 268.7 MW				
Year	Displaced Resource	IRP Update	Displacement	Remaining MW
2012	Market FOT – Mona 3Q	200	200.0	0.0
	Market FOT – West Main 3Q	15	15.0	0.0
	Market FOT – COB 3Q	389	53.7	335.3
2013	Market FOT – Mona 3Q	300	268.7	31.3
2014	Market FOT – Mona 3Q	300	268.7	31.3
2015	Proxy Resource (see above)	607	268.7	338.3

Wind Resources

A total of 887 MW of wind is included in the 2008 IRP Update by 2019 of which 427 MW is under construction or contract. The remaining 460 MW of planned wind resources is scheduled to be available starting in 2017 (Table ES.1). The Company has added potential wind QF resources which partially displace 266.3 MW of the 460 MW remaining total.

Potential QF Wind Resource		
Year	Displaced Resource	MW
2011	Windland Power County Wind	53.2
2012	QF - Cedar Creek Wind I through V	126.5
2012	QF - Wasatch Wind Wyo I	48.3
2013	QF - Wasatch Wind Wyo II	48.3
Wind Resource Partial Displacement of IRP Wind		266.3

Size of the Avoided Cost Resource

The avoided cost resource is assumed to be a 100 MW 85% CF thermal resource. The size of the avoided cost resource has not been changed.

Topology

The Tri-State bubble was removed.

The company has no contracts or transmission right in this bubble

Transmission (Firm Transmission Rights)

Transmission updated to reflect current transmission right

Transmission (Non-Firm and Short Term Firm)

Non-firm transmission - 48 months ended June 2010

Short term firm transmission – 48 months ended June 2010

STF and non-firm combined and modeled as a single transmission link

Modeled without incremental wheeling costs

Thermal Resources

Thermal resources operating characteristics were updated to reflect expected operations. Forced Outage, Planned Outage and Heat rate levels updated to 48 months ended June 2010

Long-Term Contracts

Long-term contracts which have prices that are indexed to market were updated to be consistent with the September 2010 Official Forward Price Curve (0910 OFPC).

Modeling updates include APS Supplemental, BPA South Idaho Exchange, Cowlitz Swift, SCL State Line, SMUD, Sunnyside and Threemile Canyon Wind. Small potential QFs are included in the study but were not included in partial displacement because of size or non-firm delivery.

Hydro Resources

No Change from the prior filing.

Discount Rate

7.17% which is consistent with the Company's most recent discount rate dated September 2010. This assumption has not changed from the last filing.

Wind Integration

Wind integration costs incorporated into GRID Modeling.
Regulating Margin increased to 260 MW East side and 105 MW West side.
Currant Creek and Gadsby Combustion Turbine modeled as must run.