

Utah Schedule 38 Pricing Queue Management and PPA Milestones December 2, 2014



Pacific Power | Rocky Mountain Power

## Background

- Schedule 38 prices calculated using the Proxy/Partial Displacement Differential Revenue Requirement (PDDRR) method
  - Combined differential revenue requirement and displacement of a proxy plant
  - Differentiated into two periods: resource sufficiency and resource deficiency
  - Resource deficiency period begins with next deferrable resource in the 2013 IRP Update

Year	IRP Resource	Cumulative Capacity	Location
2027	423 MW CCCT	423 MW	East – Clover
2028	423 MW CCCT	846 MW	East – Clover
2028	411 MW CCCT	1,257 MW	East – Wyoming NE
2030	661 MW CCCT	1,918 MW	East – Clover
2030	368 MW CCCT	2,286 MW	East – Goshen
2031	420 MW CCCT	2,706 MW	West - Yakima

Signed and potential QFs contribute to displacement of deferrable resources



#### Q3.2014 Compliance Filing Signed QFs

#### Displacement from signed QFs exceeds 468 MW

Contracts not included in the latest IRP or IRP Update

		QF Quei	Je			
		Partial	Name		Capacity	
No.	QF	Displacement	plate	CF	Contribution	Start Date
1	Utah Red Hills Solar	67.20	80.00	29.1%	84.0%	2017 01 01
2	Pavant Solar	42.00	50.00	28.7%	84.0%	2016 01 01
3	Mariah Wind	2.05	10.00	27.0%	20.5%	2015 12 31
4	Orem Family Wind	2.05	10.00	27.0%	20.5%	2015 12 31
5	Chopin Wind	2.05	10.00	38.6%	20.5%	2016 06 01
6	Warm Springs Hydro	2.70	2.70	24.9%	100.0%	2016 12 31
7	Pioneer Wind	16.40	80.00	40.7%	20.5%	2016 06 30
8	Milford 2 Solar	2.49	2.97	30.8%	84.0%	2015 10 15
9	Foote Creek II Wind	0.37	1.80	34.4%	20.6%	2014 06 18
10	Enterprise Solar I	67.20	80.00	30.7%	84.0%	2016 01 01
11	Escalante Solar I	67.20	80.00	29.7%	84.0%	2016 01 01
12	Escalante Solar II	67.20	80.00	29.7%	84.0%	2016 01 01
13	Escalante Solar III	67.20	80.00	29.6%	84.0%	2016 10 01
14	Foote Creek III Wind	5.07	24.75	34.4%	20.5%	2014 08 01
15	Oregon Solar b/4 July 2016	0.00	0.00	25.8%	84.0%	2016 07 01
16	Oregon Solar b/4 July 2017	57.54	68.50	25.8%	84.0%	2017 07 01
	Total Signed MW	468.72	660.72			



# Q3.2014 Compliance Filing Potential QFs

- Displacement from potential QFs exceeds 1,600 MW
- Signed and potential displacement over 2,070 MW
- Cumulative capacity of all QFs in the pricing queue displaces IRP resources
  - Determines type and timing of deferred capacity included in prices for last QF

QF Queue Partial Name Capacity							
No.	QF	Displacement	plate	CF	Contribution	Start Date	
				-			
1	QF - 82 - UT - Wind	16.24	79.20	33.8%	20.5%	2015 10 0	
2	QF - 108 - UT - Solar	60.48	72.00	25.6%	84.0%	2016 12 3	
3	QF - 109 - UT - Solar	42.34	50.40	31.4%	84.0%	2016 08 0	
4	QF - 110 - UT - Solar	67.20	80.00	31.1%	84.0%	2016 09 0	
5	QF - 114 - WY - Wind	12.30	60.00	45.2%	20.5%	2015 12 0	
6	QF - 116 - UT - Solar	67.20	80.00	31.4%	84.0%	2016 08 1	
7	QF - 118 - WY - Wind	16.40	80.00	45.4%	20.5%	2015 11 0	
8	QF - 120 - UT - Solar	50.40	60.00	26.8%	84.0%	2017 01 0	
9	QF - 122 - UT - Solar	34.00	50.00	20.2%	68.0%	2015 08 3	
10	QF - 125 - UT - Wind	9.23	45.00	28.1%	20.5%	2015 11 0	
11	QF - 127 - UT - Solar	67.20	80.00	25.6%	84.0%	2016 12 3	
12	QF - 131 - UT - Solar	42.00	50.00	29.7%	84.0%	2016 12 0	
13	QF - 132 - UT - Solar	67.20	80.00	32.4%	84.0%	2016 01 0	
14	QF - 133 - UT - Solar	17.81	21.20	32.8%	84.0%	2016 01 0	
15	QF - 136 - UT - Solar	33.60	40.00	29.0%	84.0%	2016 12 3	
16	QF - 137 - UT - Solar	16.80	20.00	29.2%	84.0%	2016 12 3	
17	QF - 138 - UT - Solar	6.80	10.00	25.2%	68.0%	2016 01 0	
18	QF - 139 - WY - Wind	16.40	80.00	45.4%	20.5%	2015 11 0	
19	QF - 140 - WY - Wind	16.40	80.00	45.4%	20.5%	2015 11 0	
20	QF - 141 - UT - Solar	16.80	20.00	30.7%	84.0%	2016 10 0	
21	QF - 142 - UT - Solar	67.20	80.00	31.3%	84.0%	2016 10 0	
22	QF - 144 - UT - Solar	67.20	80.00	30.6%	84.0%	2016 11 0	
23	QF - 145 - UT - Solar	67.20	80.00	30.1%	84.0%	2016 11 0	
24	QF - 149 - UT - Solar	67.20	80.00	31.0%	84.0%	2018 01 0	
25	QF - 150 - UT - Solar	67.20	80.00	31.0%	84.0%	2018 01 0	
26	QF - 151 - UT - Solar	16.80	20.00	27.4%	84.0%	2016 12 3	
27	QF - 152 - WY - Hydro	2.90	2.90	38.3%	100.0%	2015 04 0	
28	QF - 153 - UT - Solar	54.40	80.00	28.2%	68.0%	2015 12 3	
29	QF - 154 - UT - Solar	54.40	80.00	28.2%	68.0%	2015 12 3	
30	QF - 155 - UT - Solar	27.20	40.00	26.4%	68.0%	2015 12 3	
31	QF - 156 - UT - Solar	54.40	80.00	26.4%	68.0%	2015 12 3	
32	QF - 157 - UT - Solar	27.20	40.00	25.3%	68.0%	2015 12 3	
33	QF - 158 - UT - Solar	27.20	40.00	28.0%	68.0%	2015 12 3	
34	QF - 159 - UT - Solar	27.20	40.00	28.0%	68.0%	2015 12 3	
35	QF - 160 - UT - Wind	16.40	80.00	39.3%	20.5%	2016 07 3	
36	QF - 161 - UT - Solar	67.20	80.00	30.1%	84.0%	2016 11 0	
37	QF - 162 - UT - Solar	67.20	80.00	30.6%	84.0%	2016 11 0	
38	QF - 163 - UT - Solar	16.80	20.00	32.6%	84.0%	2016 04 0	
39	QF - 164 - UT - Solar	34.00	50.00	25.2%	68.0%	2016 12 3	
40	QF - 166 - UT - Solar	54.40	80.00	25.2%	68.0%	2016 12 3	
41	QF - 167 - UT - Wind	16.40	80.00	26.4%	20.5%	2018 01 0	
42	QF - 168 - UT - Wind	16.40	80.00	27.5%	20.5%	2018 01 0	
43	QF - 169 - UT - Solar	4.20	5.00	29.5%	84.0%	2015 12 3	
44	QF - 170 - UT - Solar	4.08	6.00	25.0%	68.0%	2016 12 3	
	Total Potential MW	1601.58	2521.70				



### **Pricing Queue Management**

- Pricing queue is independent of PacifiCorp Transmission interconnection or transmission services queue maintained on OASIS website
- Origination maintains list of project contacts, requests and status of negotiations
- Net power costs maintains the order of projects in the pricing queue
- New project requests placed in the pricing queue on a first-come, first-served basis
  - Eligible to be placed in the pricing queue once all information in Paragraph B.2 of Schedule 38 is provided and validated by the Company
    - Origination verifies that written information submitted by developer meets the Schedule 38 requirements.
    - Frequently origination works with developer to receive clarification or additional information. Matrix used to document Company review and follow up comments from developer.
    - Origination confirms all required information has been provided by developer. Multiple requests by same developer are prioritized (i.e., five 80.0 MW project sites requesting both wind and solar indicative prices).
    - Origination notifies the net power cost group that a new project requires indicative prices and the clock has started to provide indicative prices within 30 days. Net power cost confirms data is sufficient or identifies inaccurate information from developer (i.e., generation profile does not match expected production)



# Pricing Queue Management (cont.)

- Price updates
  - If no changes are made to the project, the QF retains its original place in the queue
  - If project specifications change, the QF is treated as a new project and is placed at the bottom of the queue
    - Typical changes: Resource type, nameplate capacity, generation profile, commercial operation date
- Projects removed from the pricing queue when no longer actively negotiating with the Company or project withdrawn by developer if the following occurs
  - Project notifies Company that it is withdrawing project
  - Project provides no communication to Company for nine months
- Review of projects done every week.
  - Projects over three months of inactivity are contacted to determine status.
  - If project requests to remain in the pricing queue, project notified by the Company that indicative prices need to be updated
- Dropped projects may come back and request prices
  - Treated as new project and placed at the bottom of the queue



# **Power Purchase Agreement (PPA) Milestones**

- PPA milestones created to eliminate ambiguity during the development, construction and operation of the project
- PPA milestones:
  - Define known steps to ensure developer and Company progress toward commercial operation of the project
  - Document actions and deliverables by both parties before and after commercial operations
  - Provide for consequences if milestones not met
- PPA contains remedial actions in the event a milestone is not met including cure period, liquidated damages, and possible termination of the PPA
- Company has basic set of PPA milestones included in the Schedule 38 template PPA however they may vary slightly by technology type i.e., wind versus geothermal or if project is an existing or new project.
- Milestones are not meant to be onerous or punitive but establish a reasonable schedule and deliverable consistent with Company business practice, commission orders, and industry practices.
- Not all PPA milestones are negotiable. For example, to be deemed commercial, the project must complete multiple tasks and provide specific documentation to allow commercial operation for power delivery and begin receiving the full contract price.

