

#### Utah Schedule 37 Update June 25, 2014



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## Schedule 37 Background

- Schedule 37 Published rates for standard power purchase agreements with qualifying facilities (QFs)
  - Available to wind and solar projects up to 3 MW; cogeneration projects up to 1 MW
  - Prices updated annually, after filing integrated resource plan (IRP) or IRP Update
  - Participation subject to a 25 MW cap
- The methodology used for current Schedule 37 prices was originally ordered in Docket No. 94-2035-03
  - Revisited in Docket Nos. 03-035-T10, 03-035-T14, 06-035-T06, 09-035-T14, 11-035-T06, and 12-035-T10
  - Prices during resource sufficiency period determined using GRID model
    - Current method also includes capacity payment based on a SCCT during months GRID is capacity deficit
  - Resource deficiency period begins with next deferrable resource in the IRP portfolio
    - Avoided costs are the all-in cost of next deferrable resource 2013 IRP Update = CCCT in 2027
- The currently effective Schedule 37 rates were approved by the Commission effective July 29, 2013
  - The Company indicated in its May 2013 filing that it would request that the relevant conclusions reached in Docket No. 12-035-100 be incorporated into Schedule 37 in a future filing



# 2014 Update Filing

- Company filed May 7, 2014, to update Schedule 37
  - Annual price update following filing of 2013 IRP Update
  - Company proposed changes to address issues decided in Docket No. 12-035-100
    - Integration costs
    - Capacity contribution
    - Capacity value during sufficiency period
    - Carbon costs in forward price curve
  - Proposed separate rates for base load, wind, fixed solar, and tracking solar
  - Proposed change to rate structure, providing only seasonal volumetric rates
  - Identified potential issue regarding transmission constraints



#### **Integration Costs**

- Current Schedule 37 prices do not include integration costs for wind and solar projects
- Docket No. 12-035-100: Commission approved continued recognition of integration costs for wind and solar
  - Approved the method of computing wind integration costs by using GRID to determine the cost of 20 MW of additional reserves
    - \$5.32/MWh levelized from 2015 2034, source: 2013.Q2 Schedule 38 compliance filing filed July 2013
  - Set the cost of solar integration until the company develops a solar integration study
    - Differentiated by fixed, \$2.83/MWh, and tracking solar, \$2.18/MWh
- Proposed Schedule 37: Include integration costs for wind and solar (differentiated by fixed and tracking)



## **Capacity Contribution**

- Current Schedule 37 prices recognize capacity contribution for wind only
  - Capacity payments to wind QFs are equal to 20% of stated rate
  - Ordered in Docket No. 03-035-T10 (July 2004 order)
- Docket No. 12-035-100: Commission determined capacity contribution for wind and solar
  - Adopted interim values of 20.5% for wind, 68% for fixed solar, and 84% for tracking solar
  - Directed Company to calculate capacity contribution using either the effective load carrying capability (ELCC) method or the capacity factor allocation (CF) method
- Proposed Schedule 37: Use approved values for capacity contribution for wind and solar (differentiated by fixed and tracking)



## **Capacity Value During Sufficiency Period**

- Current Schedule 37 prices include capacity value during sufficiency based on a simple cycle combustion turbine (SCCT)
  - GRID load and resource balance used to determine number of months each year the Company is 'capacity deficient'
  - Cost of a SCCT added to avoided costs based on the number of deficit months
    - For example, if capacity deficient for 6 out of 12 months, 50% of the SCCT cost is included in avoided costs
- Docket No. 12-035-100: Commission determined that sufficiency period should not include capacity value for deferring new resources
  - Commission ruled that "the inclusion of additional capacity value when a FOT is displaced would overcompensate the QF and violate the ratepayer neutrality objective"
- Proposed Schedule 37: Sufficiency period avoided costs based on GRID run, no deferral of SCCT included



#### **Carbon Costs**

- Current Schedule 37 prices calculated using Company's official forward price curve (OFPC) which assumes a carbon tax is implemented in 2022
  - No discrete carbon cost adders are included in avoided costs, consistent with Commission's order in Docket No. 09-035-T14
  - OFPC has traditionally reflected the impact of an assumed carbon tax
- Docket No. 12-035-100: Commission affirmed that no specific adjustments should be made for environmental costs
  - Commission ruled that avoided costs for non-standard QFs should not include "specific adjustments to value fuel price hedging, fuel price volatility or environmental risk."
- Proposed Schedule 37: Utilize OFPC adjusted to remove the impact of a carbon tax
  - Reduces forward market prices if assumed carbon tax beginning in 2022 is removed



#### **Volumetric Rates**

- Current Schedule 37 allows QF to choose separate capacity and energy payments or seasonally differentiated volumetric (on- and off-peak) prices
  - Capacity payment determined using the maximum 15-minute generation during peak hours
  - Solar projects choosing this option get full capacity payment based on highest 15-minute output
- Proposed Schedule 37: Provide only volumetric rates for all QFs, differentiated by summer/winter and peak/off-peak periods
  - Avoided capacity costs are included in on-peak volumetric rates, based on the proxy resource capacity factor
  - Addresses concern of overpayment to low capacity factor, intermittent QFs



## **Pricing Considerations**

	Current Schedule 37 (1)	Proposed Schedule 37 (2)	Current Schedule 38 (3)
Avoided Energy Costs	Sufficiency period - GRID incremental cost Deficiency period - CCCT fuel price	Sufficiency period - GRID incremental cost Deficiency period - CCCT fuel price	GRID incremental cost for entire term
Avoided Capacity Costs	Sufficiency period - SCCT, partial year Deficiency period - CCCT	Sufficiency period - None Deficiency period - CCCT	Sufficiency period - None Deficiency period - CCCT
Capacity Contribution	Wind (20%) Solar (100%)	Wind (20.5%) Solar (68% energy oriented, 84% peak oriented)	Wind (20.5%) Solar (68% energy oriented, 84% peak oriented)
Integration Costs	None recognized	Wind and solar	Wind and solar
Treatment of Carbon	No explicit carbon adders allowed, but impact of carbon tax has been included in forward market prices	-	Impact of carbon tax removed from forward market prices
Pricing Structure	QF can choose: - Volumetric (\$/MWh, seasonal on/off peak), or - Fixed capacity payment (\$/KW- month) plus flat energy rate (\$/MWh)	Volumetric (\$/MWh, seasonal on/off peak)	Negotiated, typically volumetric (\$/MWh, monthly on/off peak)
Levelized Prices Allowed	Yes	Yes	Yes

Docket 13-035-T09, effective July 29, 2013
Docket 14-035-T04, filed May 7, 2014
Docket 13-035-100, effective August 16, 2013



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#### **Transmission Constraint**

- On April 29, 2014, PacifiCorp Transmission identified Utah transmission constraint on OASIS
  - No remaining south to north capacity across the Huntington/Sigurd cutplane
  - Most potential QFs are south of the cutplane and most of the Company's Utah load is north of the cutplane
  - QFs located south of the cutplane must be integrated along with other network resources and may cause backdown of existing thermal resources
  - GRID model has been updated to model Utah as three bubbles: Utah North, Clover, and Utah South
  - Schedule 37 rates traditionally calculated with potential resource added to GRID in Utah North

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