



# AR 610

Calculating Cost of Compliance with  
the RPS Mandate

**June 9, 2020**



# Agenda



- 1. Introductions*
- 2. Docket Overview*
- 3. Timing of Calculation*
- 4. Proxy Resource*
- 5. Next Steps*

# Applicable Statutes



- ORS 469A.100- RPS guidance
- ORS 469A.100(1) –Cost Cap
- ORS 469A.025 & 469A.020-Qualifying energy defined & reqs.
- ORS 469A.140(3)-REC banking
- ORS 469A.140; ORS 469A.145- Restrictions on use of RECs for compliance
- ORS 469A.052 (Senate Bill 1547)- raises the percentage of required qualifying energy

# AR 610: Cost of Compliance

Cost  
Categories:

Timing:

Proxy Resource:

Cost Cap:

Firming,  
Shaping,  
Integrating

Fuel Price  
Hedging

Generation  
v.  
Retirement

Qualifying  
electricity &  
unbundled  
RECs

Thermal  
Resource

Renewable  
Resource

Calculations  
from the  
IRPs

What  
happens  
when  
reached

What  
happens  
when  
projected  
to be  
reached

# Docket Overview

Stakeholder Comments to Staff's 3/27/20 Question & Discussion Topics

How might regulatory or policy changes affect how we think about incremental costs under the following scenarios?

- If the RPS obligation is increased to 100%
- If cap-and-trade is adopted
- If Utilities make large green energy commitments
- If renewables are needed to serve load in cities/communities with renewable energy commitments
- If renewables remain the least/cost least risk resource

Are there any additional options for calculating incremental cost that Staff should consider?

- 100% said 'No'
- 

Should AR 610 include rules or standards for assessing REC bank management?

- 100% said 'No'
- 

Are there any RECs that should not be included in the compliance calculation?

- 80 % said 'Yes'
- 20% said 'No'

How should we distinguish RECs acquired for RPS compliance from other RECs for purposes of the total cost calculation?

- Choose not to include in incremental cost calculation
- Include these RECs but assign them zero incremental cost
- Other options?



## Comparison of Options for Cost of Compliance Calculation

Option	Calculations	Cost of Compliance as Percentage of RR
A) Cost calculated at REC retirement	$=(\text{Levelized Cost of Bundled RECs Retired} + \text{Levelized Cost of Unbundled RECs Retired}) / \text{Revenue Req.}$	1.5%
B) Cost calculated at REC generation	$=(\text{Levelized Cost of Bundled RECs Generated}) / \text{Revenue Req.}$	2.62%
C) Cost of generation not including incremental cost of RECs sold	$=(\text{Levelized Cost of Bundled RECs Generated \& not sold}) / \text{Revenue Req.}$	0.86%
D) Cost of generation minus any revenue from REC sales	$=(\text{Levelized Cost of Bundled RECs Generated} - \text{Revenue from Bundled REC sales}) / \text{Revenue Req.}$	2.18%
E) Cost of generation minus any revenue from REC sales, assuming 20% unbundled RECs and sale of unused bundled RECs	$=(\text{Levelized Cost of Bundled RECs Generated} + \text{Acquired Unbundled REC Cost} - \text{Revenue from Bundled REC Sales}) / \text{Revenue Req.}$	1.85%

\*Hypothetical for discussion purposes only

# Timing

When to calculate the Incremental Cost of Compliance

# Timing of Calculation

## At Time of REC Generation

To protect customers and contain costs, the calculation should be aligned with rate impacts.

The cost of compliance should include generation, acquired RECs delivered to WREGIS, and alternative compliance payments. Value should be based on the year the REC is acquired, not some future predicted value.

[AWEC Comments, Aug. 2018]

## At Time of REC Retirement

Utilities achieve RPS compliance by *retiring* RECs, not by generating or otherwise acquiring RECs.

It therefore seems illogical to calculate the incremental cost of compliance in a given year by accounting for the cost of RECs that have been generated or acquired in that year but that will be retired for RPS compliance in some future year.

[Renewable NW Comments, March 2020]

## ORS 469A.100

“For the purposes of this section, the incremental cost of compliance with a renewable portfolio standard is the difference between the levelized annual **delivered cost of the qualifying electricity** and the levelized annual delivered cost of an equivalent amount of reasonably available electricity that is not qualifying electricity. For the purpose of this subsection, the commission or the governing body of a consumer-owned utility shall use the net present value of delivered cost [. . .]”

# Calculation at the time of Retirement

## Pros:

- Reflects cost of RECs actually used (retired) for compliance with RPS
- Established Process
  - clear expectations
  - relative administrative ease

## Cons:

- Timing between customers paying for REC generation in rates and REC retirement
- Does not provide ratepayer protection from cost increases above 4% *relative to what customers would have incurred absent the RPS*

# Calculation at the time of Generation

## Pros:

- Better reflects the “delivered cost of qualifying electricity”
- Resolves gap between customers paying for REC generation in rates and REC retirement

## Cons:

- Difficulties of establishing a new methodology
  - what to do with current REC bank
  - how to treat unbundled RECs
  - if/how to account for REC sales

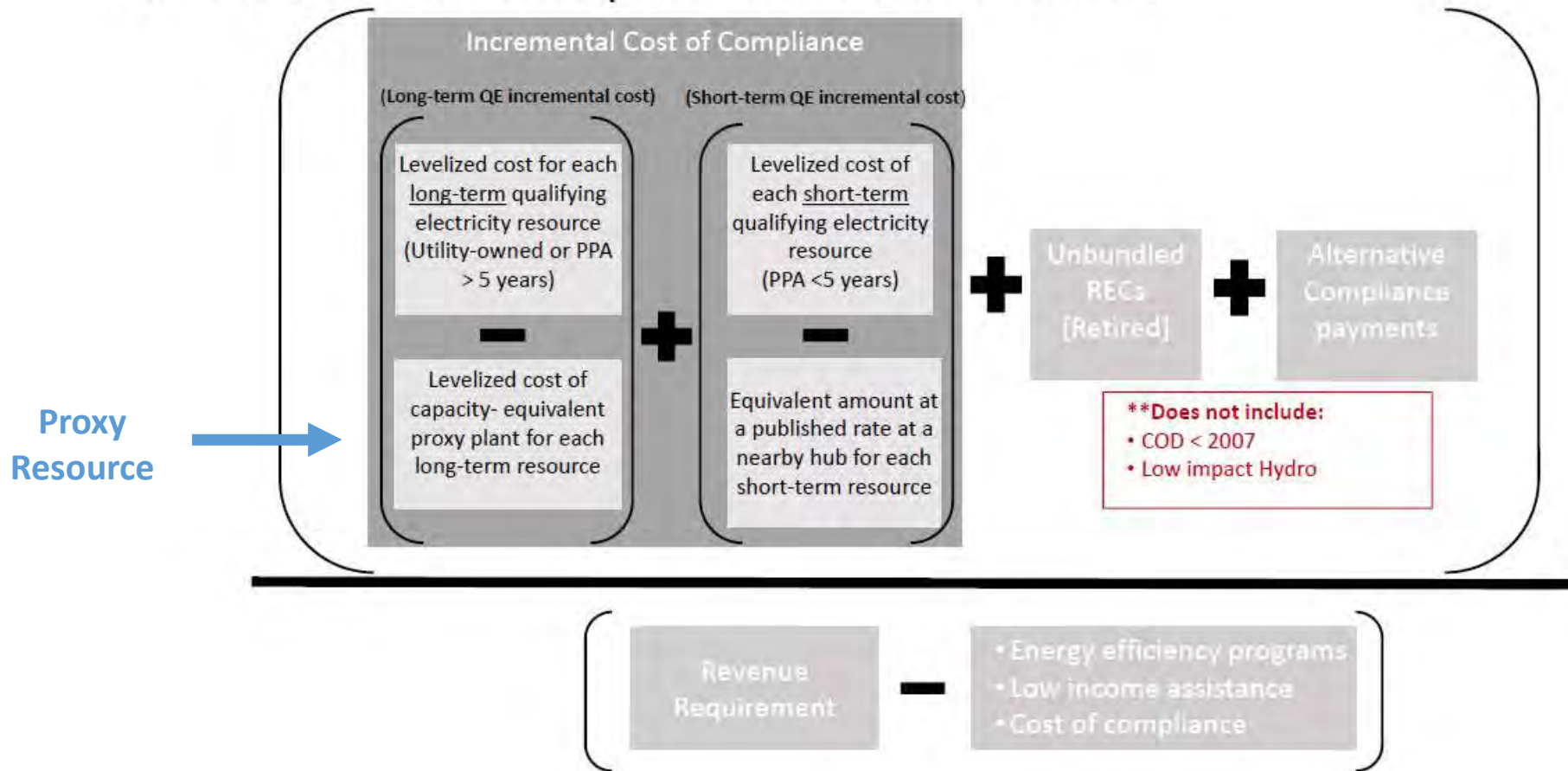
# Discussion

# Proxy Resource

Setting the Baseline for Calculating Incremental Cost



# RPS Cost of Compliance Calculation



## ORS 469A.100

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# Current Proxy Resource

- The proxy plant CCCTs are sized to have the equal amount of annual energy output as the qualifying renewable resource.
  - *Proxy nameplate capacity = (RPS Resource nameplate capacity) X (RPS Resource capacity factor/Proxy CCCT capacity factor)* [Order No. 14-034]
- When a proxy plant is assigned to a long-term contract or generation facility, its initial capital, and operation & maintenance costs are based on the most recently filed or updated IRP [Order No. 09-299]
- Transaction costs associated with fuel purchases are added to the proxy resource costs [Order No. 12-272]
- For qualifying renewable resources supplying *intermittent generation*, the fixed cost of a SCCT is added to the qualifying resource in order to create a capacity equivalent proxy resource for comparison. The SCCT is sized to equal the difference between the respective capacity contribution of the proxy CCCT and the qualifying renewable resource. [Order No. 12-272]

# Proxy Resource Calculation

- Should the proxy resource assumptions be static, set at the time the resource is acquired, or should assumptions be updated to reflect current conditions?
- Is it permissible/advisable for incremental cost to remain static over the life of a resource?

# Setting the Proxy Resource

## Option 1:

use the same resource with a hypothetical REC sale representing the opportunity cost of retiring instead of selling the RECs.

- The definition of in 469A.100 looks not at whether a resource produces RECs eligible for compliance with the RPS but rather if the facility produces “qualifying electricity” as defined in ORA 469A.020
- Since the facility generates electricity that meets the requirements of ORS 469A.020, it is a qualifying resource and cannot be used as a proxy.

[AR 610-CUB Comments]

# Setting the Proxy Resource

Option 2:  
use SCCT in addition to  
CCCT to establish capacity  
equivalence

[AR 610-Stakeholder Comments]

- To create a capacity-equivalent Proxy CCCT, the fixed costs of a SCCT would be subtracted from the cost of the Proxy CCCT. The SCCT would be sized to equal the difference between the Proxy CCCT's and the RPS Resources' contribution to system reliability.
- This Proxy CCCT will be calculated with a capacity factor equal to a representative CCCT as provided in the utility's latest IRP or IRP Update
- Same as “Capacity Equivalence” [Order No 14-034]

# Setting the Proxy Resource

## Option 3:

use the least-cost, non-qualifying resource from the relevant IRP at the time of resource acquisition.

- Meets requirements for proxy resource to be non-qualifying
- Changes the baseline for proxy resource calculations

[AR 610- PAC Comments]

# Setting the Proxy Resource

## Option 4:

use a proxy resource mix which reflects that reasonably available, non-qualifying electricity is either market purchases or an appropriate mix of market purchases and thermal resources

- Both the IRP and avoided cost approaches assume that the Utilities are planning to acquire both thermal and market resources, and that any acquisition of power from an alternative source would not replace only thermal generation.
- The Commission could use the resource sufficiency/deficiency demarcation already used for avoided costs and IRPs, or the actual resource mix in the last approved IRP.

[UM 1570]



# Discussion

# Next Steps



- July 7- Webinar

# Thank you!



For questions or comments please contact:

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