

Pay for Performance Regulation Design Changes

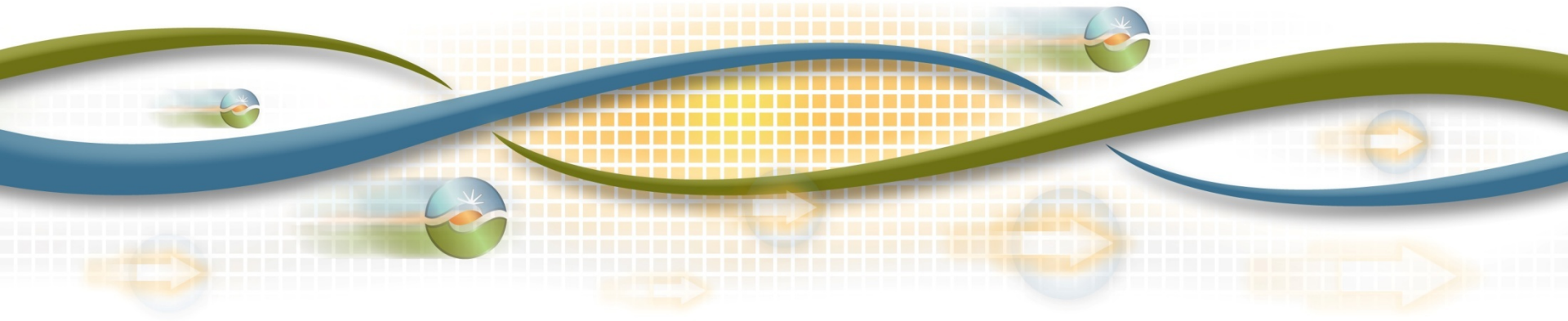
Greg Cook

Director, Market and Infrastructure Policy

Board of Governors Meeting

General Session

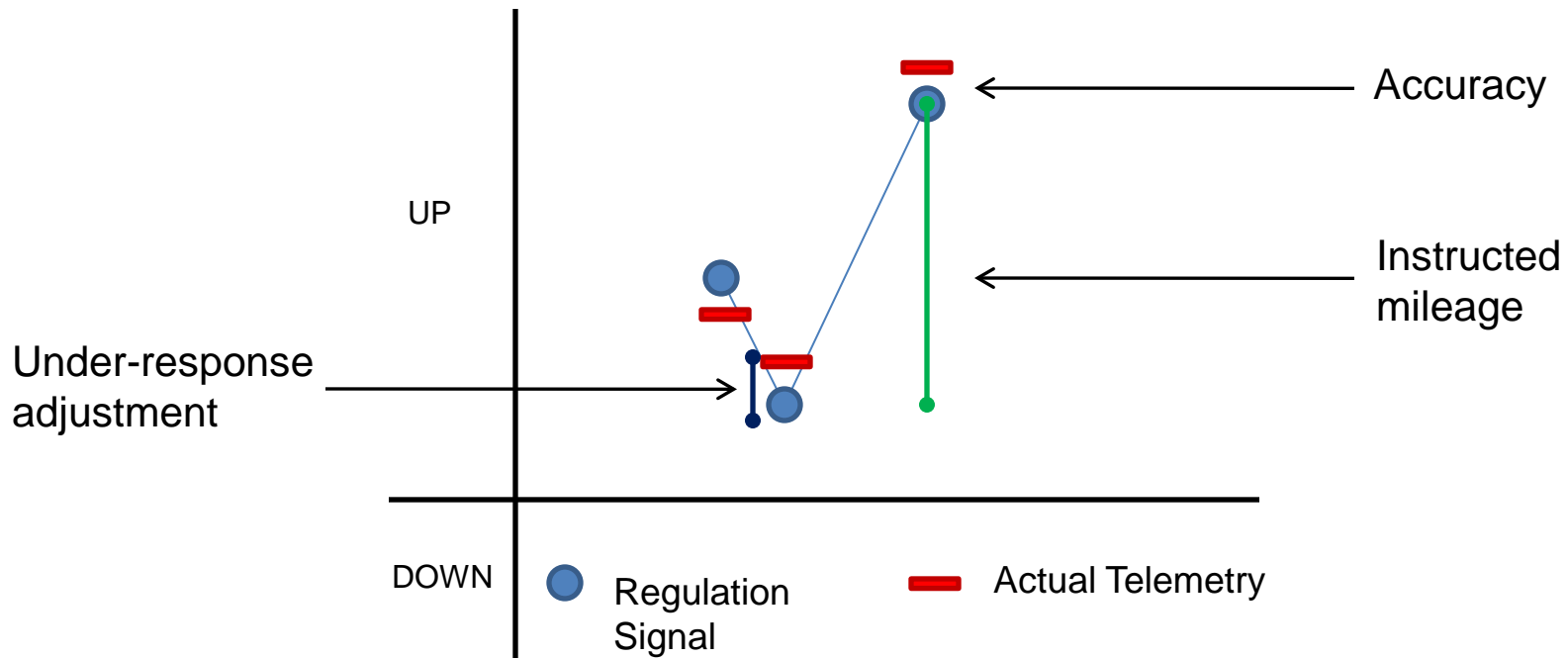
November 13, 2014



ISO implemented pay for performance regulation in June 2013 as required by FERC Order 755

- ISO uses frequency regulation to balance supply and load within 5-minute periods
- Pay for performance regulation includes two-part-payment for regulation:
 1. A payment for regulation capacity and
 2. A payment for performance of the resource in response to a regulation signal
- Intended to incent fast and accurate regulation resources

PFP regulation design pays resources for mileage with an adjustment for accuracy and includes a minimum performance threshold.



1. Under-response adjustment reduces mileage payment
2. Accuracy measured by actual telemetry versus regulation signal

Why are we evaluating the PFP regulation design?

- In original stakeholder process, we committed to a one-year review of the pay for performance regulation design.
- Large portion of current regulation fleet unable to meet minimum performance threshold.
 - In January 2014, FERC granted ISO's request for one-year waiver of the regulation pay for performance threshold.

FERC approved waiver of minimum performance threshold until December 31, 2014

- Performance of resources providing 78% of ISO's regulation

Regulation Up/Down total Quantities (MWh) May and June 2014	Regulation Down 12 Month Average Monthly Performance	Regulation Up 12 Month Average Monthly Performance	Resource Fuel Type
1,052,407	0.5300	0.4009	Hydro
346,741	0.4081	0.3343	Hydro
230,214	0.6341	0.5036	Hydro
171,916	0.5440	0.3701	Combined cycle
93,832	0.4078	0.3691	Hydro
50,583	0.5422	0.3352	Hydro

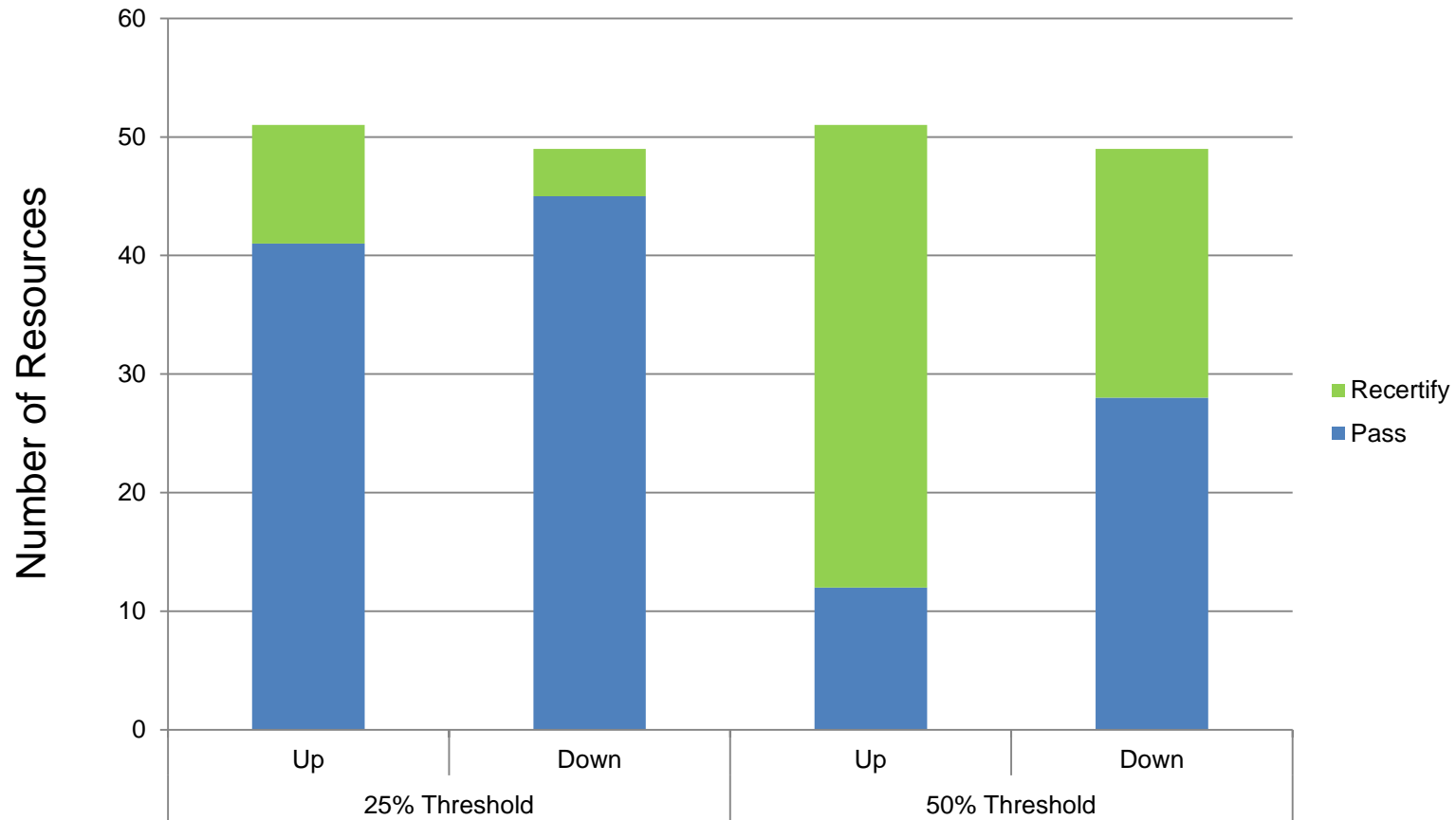
- Reliability concerns if significant portion of the regulation fleet would have to re-certify because monthly accuracy < 50%

ISO proposes two changes to minimum performance threshold

1. Change monthly performance calculation from simple average to weighted average based on mileage
2. Lower minimum performance threshold to 25% from 50% for next 3 years

25% monthly performance threshold results in manageable number resources subject to recertification

June 2014



Stakeholders support only making minor changes at this time

- Reliability concerns if ISO decertified majority of current regulation resources.
 - Very few resources currently meet the 50% performance threshold
- Appropriate to revisit when regulation fleet changes to resources that prioritize mileage payments over capacity payments, but no later than three years from today.

In summary, Management recommends approval of the PFP regulation design changes:

- Narrowly addresses reliability concern from broad decertification of existing resources providing regulation capacity.
- As new resources begin to provide regulation over next three years, evaluation of accuracy calculation can consider operational experience of new resources.