

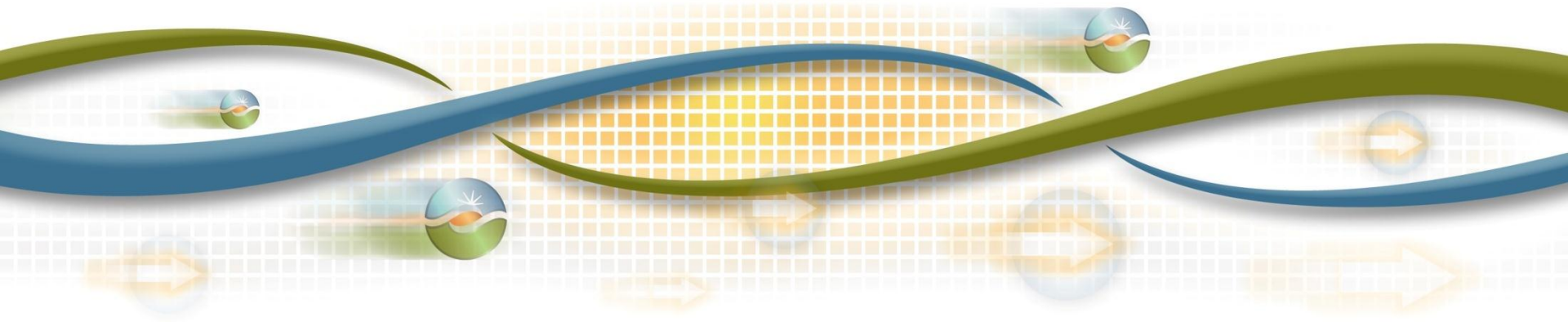
# Commitment Costs Enhancements

Issue paper/straw proposal discussion

May 7, 2014

Delphine Hou

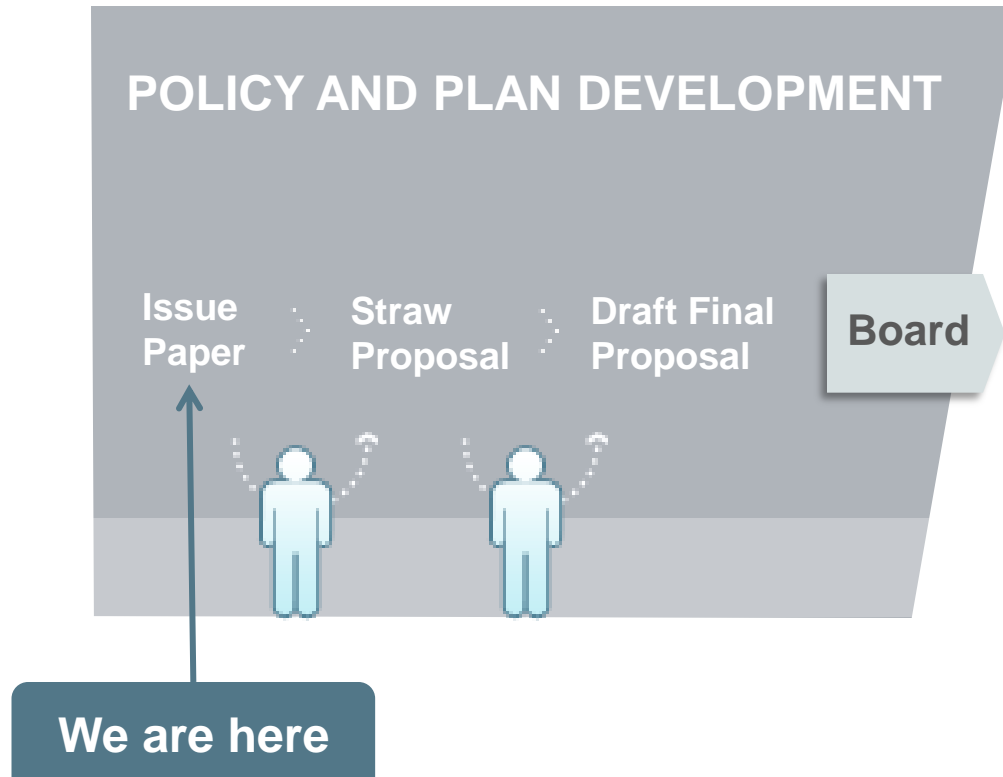
Senior Market Design and Policy Specialist



# Agenda

Time	Topic	Presenter
10:00 – 10:05	Introduction	Kristina Osborne
10:05 – 11:45	Proposal and discussion	Delphine Hou
11:45 – 12:00	Next Steps	Kristina Osborne

# ISO Policy Initiative Stakeholder Process



# Background

- The ISO market experienced abnormally volatile and high natural gas price spikes during the winter season of 2013-2014.
- **Problem:** The ISO's existing registered and proxy cost options could not reflect more up-to-date natural gas prices leading to inefficient dispatch of resources to minimum load.
- To avoid this scenario for the remainder of the winter season, the ISO filed and the FERC approved a temporary tariff waiver until April 30, 2014 to provide a manual process to update natural gas prices.

# Temporary tariff waiver

- In the event of price spike (day-over-day increase of 150% or more):
  - Manual process to update gas price using only one index
  - Allowed resources to switch back to registered after price spike

	Proxy Cost	Registered Cost
Gas price	Updated daily based on <b>2 indices</b>	Updated monthly based on forward projection
Bidding, cap	Daily, up to 100% of calculated costs	30-day hold ( <b>can switch to proxy for rest of 30 days if those costs are higher</b> ), up to 150% of calculated costs
Applies to	Minimum load and start-up separately	Minimum load and start-up separately
Costs explicitly accounted for	Same between options (fuel, major maintenance, GHG, GMC)	

## Temporary tariff waiver (con't)

- The waiver therefore addressed the time lag when using multiple indices in the day-ahead market.
- The ISO committed to start a stakeholder initiative to develop a more comprehensive interim solution that could be feasibly implemented in time for the 2014-2015 winter season

## Related items

- Operational flow order penalties – at tariff level to be submitted to FERC. Will be addressed concurrent with this initiative.
- FERC NOPR - addresses coordination and scheduling practices of interstate gas and electric industry aims to lead to a reduction in imbalance and/or penalty costs and increased reliability. Issues in NOPR may overlap with this initiative.
- Bidding rules initiative – more comprehensive stakeholder process to review energy and commitment cost bidding. Scheduled to start Q3 2014.

# Current commitment cost options

- The ISO seeks to improve dispatch of resources and ensure on the whole that resources are appropriately compensated for their costs
- The current options try to balance flexibility with potential market power and manipulation safe guards

Cost option	Allows:	Balanced against:
Proxy	<ul style="list-style-type: none"><li>• Daily bidding</li><li>• Daily gas price update</li><li>• No <i>ex post</i> cost verification</li><li>• No mitigation</li></ul>	<ul style="list-style-type: none"><li>• Bid cap of 100%</li></ul>
Registered	<ul style="list-style-type: none"><li>• Costs up to 150% of calculated</li><li>• No <i>ex post</i> cost verification</li><li>• No mitigation</li></ul>	<ul style="list-style-type: none"><li>• 30-day hold in registered (with option to switch to proxy)</li><li>• Fixed monthly gas price</li></ul>



## Lessons learned

- Gas price spike revealed two important lessons:
  - Proxy cost option has a time lag that prevented incorporation of more up-to-date gas prices leading to inefficient dispatch
  - Registered cost option relies on a fixed natural gas price for a month and there was no automatic procedure to switch resources to proxy
    - Majority of gas-fired resources are under this cost option

# Consideration for proxy cost: day-over-day change in gas prices

- Increases greater than 120% are rare

## Day-over-day gas prices increases over 120% (April 2009 - April 2014)

Trade Date	CISO	PGE2	SCE1	SCE2	SDG1	SDG2
10/6/2009	119%	119%	124%	126%	124%	126%
10/8/2009	123%	123%	121%	123%	121%	123%
11/1/2009	198%	198%	200%	200%	200%	200%
11/18/2009	127%	127%	127%	129%	127%	129%
11/24/2009	125%	125%	120%	121%	120%	121%
12/1/2009	122%	122%	134%	136%	134%	136%
11/7/2010	200%	200%	200%	200%	200%	200%
2/3/2011	102%	102%	120%	122%	120%	121%
12/10/2013	120%	120%	156%	159%	156%	159%
2/5/2014	126%	126%	118%	119%	118%	119%
2/6/2014	274%	274%	159%	121%	159%	121%
3/1/2014	105%	105%	121%	122%	121%	122%
3/4/2014	130%	130%	125%	126%	125%	126%

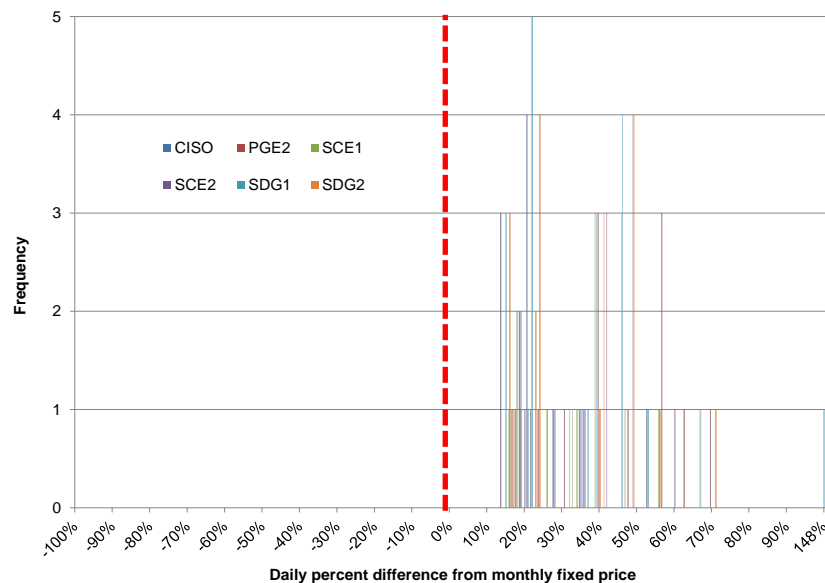
Instances:

>=125%	7	7	7	7	7	7
>=150%	3	3	4	3	4	3
>=200%	2	2	2	2	2	2

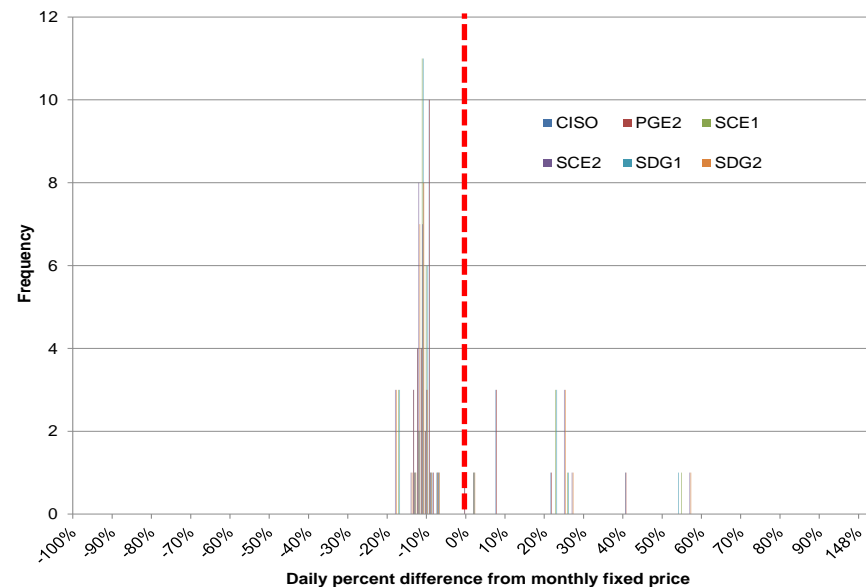
# Consideration for registered costs: gas prices based on monthly futures may use old data

- Monthly gas prices in February were “too low” but in March were “too high” as compared to the daily gas price

Frequency of percentage deviations for February 2014



Frequency of percentage deviations for March 2014



# Options and implementation

- Make registered more like proxy – greater implementation impact
- Make proxy more like registered – potentially limited impact

	Proxy Cost	Registered Cost
Gas price	Updated daily based on 2 indices	Updated monthly based on forward projection
Bidding, cap	Daily, up to 100% of calculated costs	30-day hold (can switch to proxy for rest of 30 days if those costs are higher), up to 150% of calculated costs
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# Proposal

- Proposal balances increased flexibility, implementation impact, and monitoring/mitigation burden for efficient ISO dispatch
  - Increase proxy cost cap to 125%
  - Eliminate registered cost option
  - Retain manual process for updating gas price index (automate as much as possible including updating default energy bids)
- Proposal is an improvement to the status quo and creates a “bridge” to a long-term solution while addressing potential price spikes for next winter

## Commitment costs in context

- 2012 initiative decreased registered cost cap percentage but did not necessarily decrease overall costs
  - At the time was considering GHG market volatility, BCR mitigation measures, and increased costs in cost calculation
- Separation of day-ahead and real-time bid cost recovery will allow for greater cost recovery

# Next steps



Date	Event
Wed 4/30/14	Issue paper/straw proposal posted
Wed 5/7/14	Stakeholder call
Wed 5/21/14	Stakeholder comments due
Tue 6/10/14	Revised straw proposal posted
Tue 6/17/14	Stakeholder call
Tue 7/1/14	Stakeholder comments due on revised straw proposal
Wed 7/23/14	Draft final proposal posted
Wed 7/30/14	Stakeholder call
Wed 8/13/14	Stakeholder comments due on draft final proposal

Please submit comments to [ComCosts2@caiso.com](mailto:ComCosts2@caiso.com)