Briefing on contingency modeling enhancements

Lin Xu

Sr. Advisor Engineering Specialist
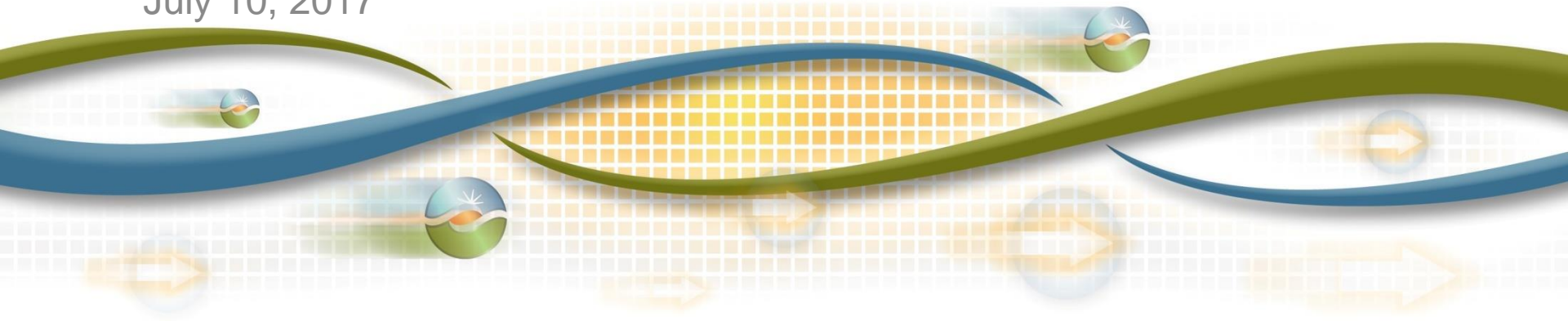
Perry Servedio

Sr. Market Design Policy Developer

Market Surveillance Committee Meeting

General Session

July 10, 2017

Agenda

1. Finalized results from technical analysis scenarios

2. Results from parallel operations

3. Policy impacts

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Finalized technical analysis

TECHNICAL ANALYSIS: STRESSED SCENARIOS

Technical analysis: stressed scenarios

- At the February 2017 MSC meeting, the ISO presented results from 9 of 12 stressed system scenarios

- The ISO re-ran the unreported 3 scenarios and again found no binding CME constraints, as expected

Scenario	Date:hour (GMT)	CME case	Path	Path Flow	Post-Contingency Rating	Capacity Required	Unloaded Capacity
N0S1	02FEB2015:02	CME_PACI	PACI_MSL	2523	1834	689	1282
N0S2	30MAR2015:22	CME_PACI	PACI_MSL	3288	1834	1454	3846
N1S1	31MAY2015:03	CME_PATH26	PATH26_BG	1301	1000	301	714
N1S2	04OCT2015:01	CME_PATH26	PATH26_BG	3343	1000	2343	4481
N2S1	02JUN2015:14	CME_PATH15	PATH15_BG	2008	2650	0	1267
N2S2	30MAR2015:07	CME_PATH15	PATH15_BG	3079	2650	429	1404
N3S1	05DEC2014:04	CME_PACI	PACI_MSL	2175	1633	542	2435
N3S2	06OCT2015:16	CME_PACI	PACI_MSL	2382	1333	1049	1552
N4S1	04MAY2015:16	CME_SCIT	SCIT_BG	8722	13750	0	3870
N4S2	09OCT2015:23	CME_SCIT	SCIT_BG	13541	14920	0	392
N5S2	06OCT2015:19	CME_SDGE	CME_SDGE	1943	1400	543	910

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Technical analysis: stressed scenarios

- The ISO will release these results in the final technical analysis report

- Results indicate that the CME constraints may rarely bind

Running preventive-corrective model in parallel to production

RESULTS FROM PARALLEL OPERATIONS

Results from parallel operations

- The ISO ran CME in parallel to production for 2 weeks at the end of March through the beginning of April

- Over the two week period, CME did not bind.

- Results further indicate that the CME constraints may rarely bind

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How do these results impact policy decisions?

POLICY IMPACT OF RESULTS

Policy impact of results

Both stressed scenarios and parallel operations show that the constraint rarely binds

- Market operations would prefer a sharper tool than MOC

- Operation engineers have confidence we can set up the constraints the appropriate way using CME

- We will no longer need the MOCs and other similar constraints

- We will no longer need certain operating procedures

- CME ensures that we have effective capacity where we need it

- CME is the in-market solution

- Results in better price formation

MSC THOUGHTS?

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Market surveillance committee thoughts?

Given stressed scenario results & parallel operations results:

- The ISO will propose to make minimal changes to the congestion revenue rights market for preventive-corrective contingencies at this time.

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QUESTIONS