



RMDSTF Regulation Signal Design

PJM's Current Proposal

Madalyn Beban, Market Design &
Economics

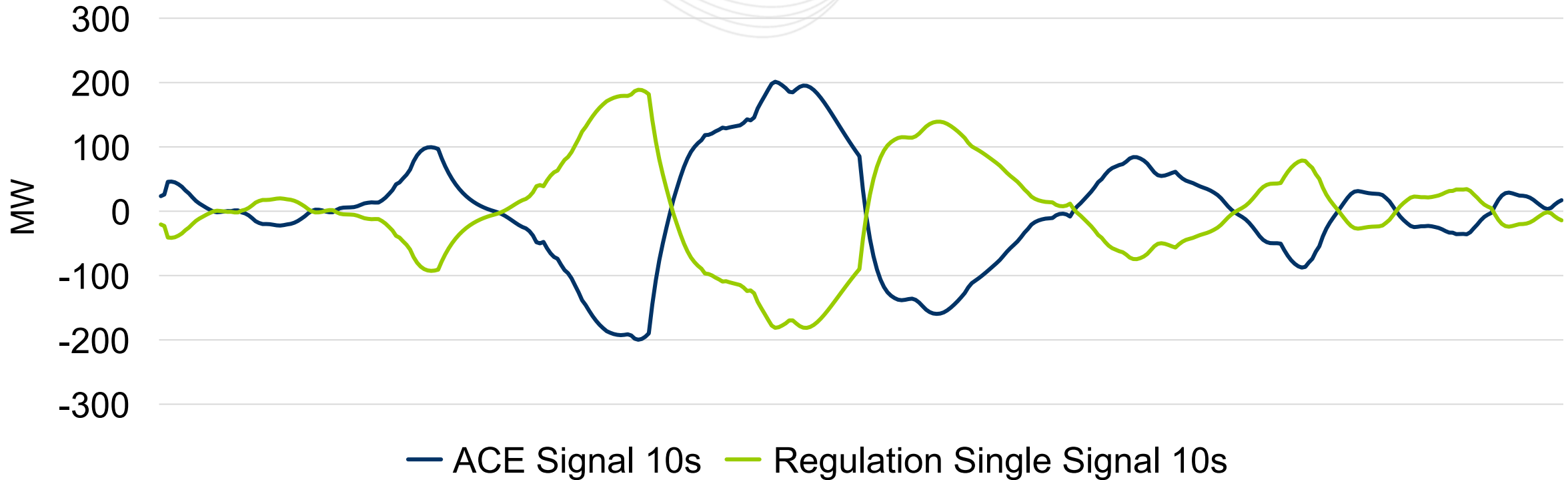
RMDSTF

November 15, 2022

- Guiding principle remains the same: **regulation provides Operations with capability to control ACE in the short-term**
- PJM believes a single signal design is a more efficient method to provide that control
- Two signal design works today but complexities remain
 - Benefits factor
 - Effective MW and operational awareness
- Signal redesign provides an opportunity to improve and to better align market incentives with operational need

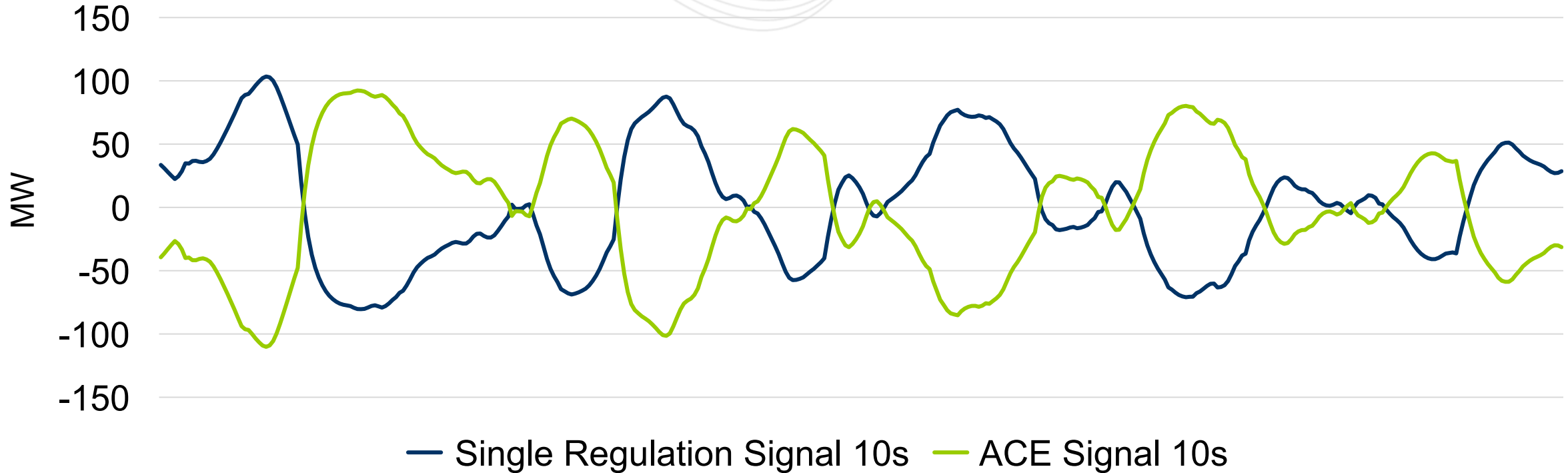
- **Speed: 10 seconds**
 - No change to telemetry requirements
 - Requested response required within 10s for performance
- **Signal Saturation (Peg):**
 - No neutrality in the proposed signal
 - Pegs not addressed by the controller
 - Addressed in part by proposed modifications to the requirement
- **Mileage:** Have not fleshed out how mileage would look like under a single signal; TBD

August 20, 2022 1:00 AM – 2:00 AM



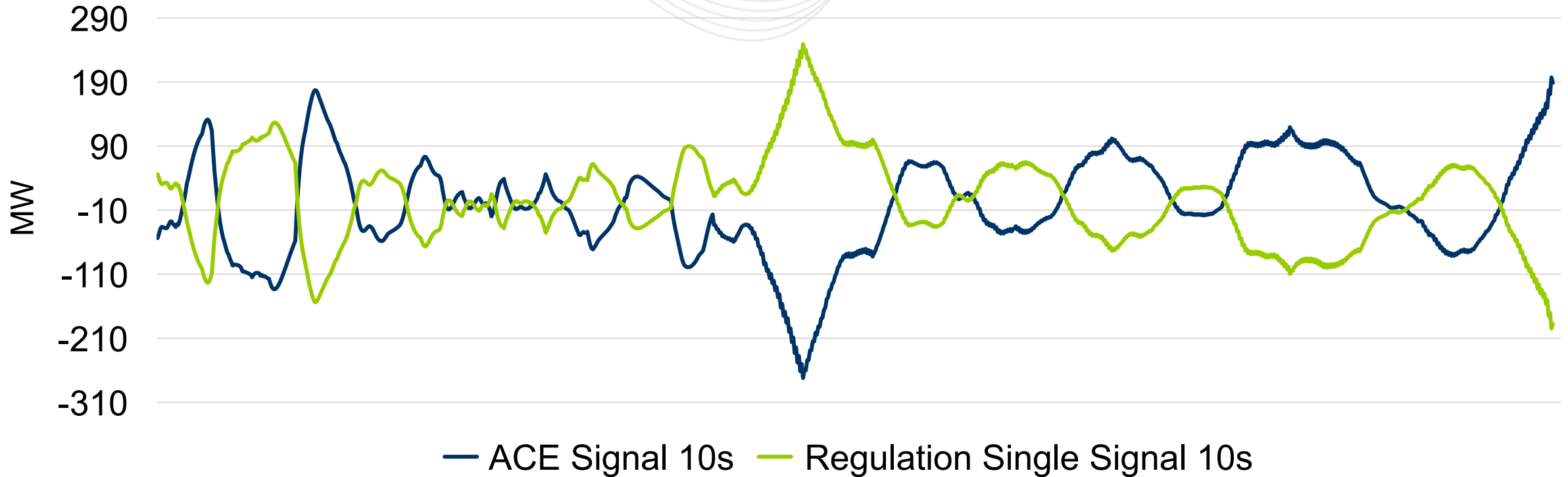
- Hypothetical single signal during early fall day with system ACE perturbation
- Mockup derived from real system ACE on that day (Item 06, Slide 04, October RMDSTF)

August 20, 2022 5:00 AM – 6:00 AM



- Hypothetical single signal during load pickup on a fall day
- Mockup derived from real system ACE on that day (Item 06, Slide 04, October RMDSTF)

August 20, 2022 2:00 PM – 3:00 PM



- Hypothetical single signal during early PM on a fall day
- Mockup derived from real system ACE on that day (Item 06, Slide 04, October RMDSTF)

Facilitator:
Michael Herman,
michael.herman@pjm.com

Secretary:
Wenzheng Qiu,
Wenzheng.qiu@pjm.com

SME/Presenter:
Madalyn Beban,
madalyn.beban@pjm.com

Regulation Signal Design



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

Version No.	Date	Description
1	11/10/2022	Original slides posted
2	11/14/2022	Addition of slides #4, #5, #6; added graphics for context

**PROTECT THE
POWER GRID
THINK BEFORE
YOU CLICK!**



Be alert to
malicious
phishing emails.

Report suspicious email activity to PJM.
(610) 666-2244 / it_ops_ctr_shift@pjm.com

