



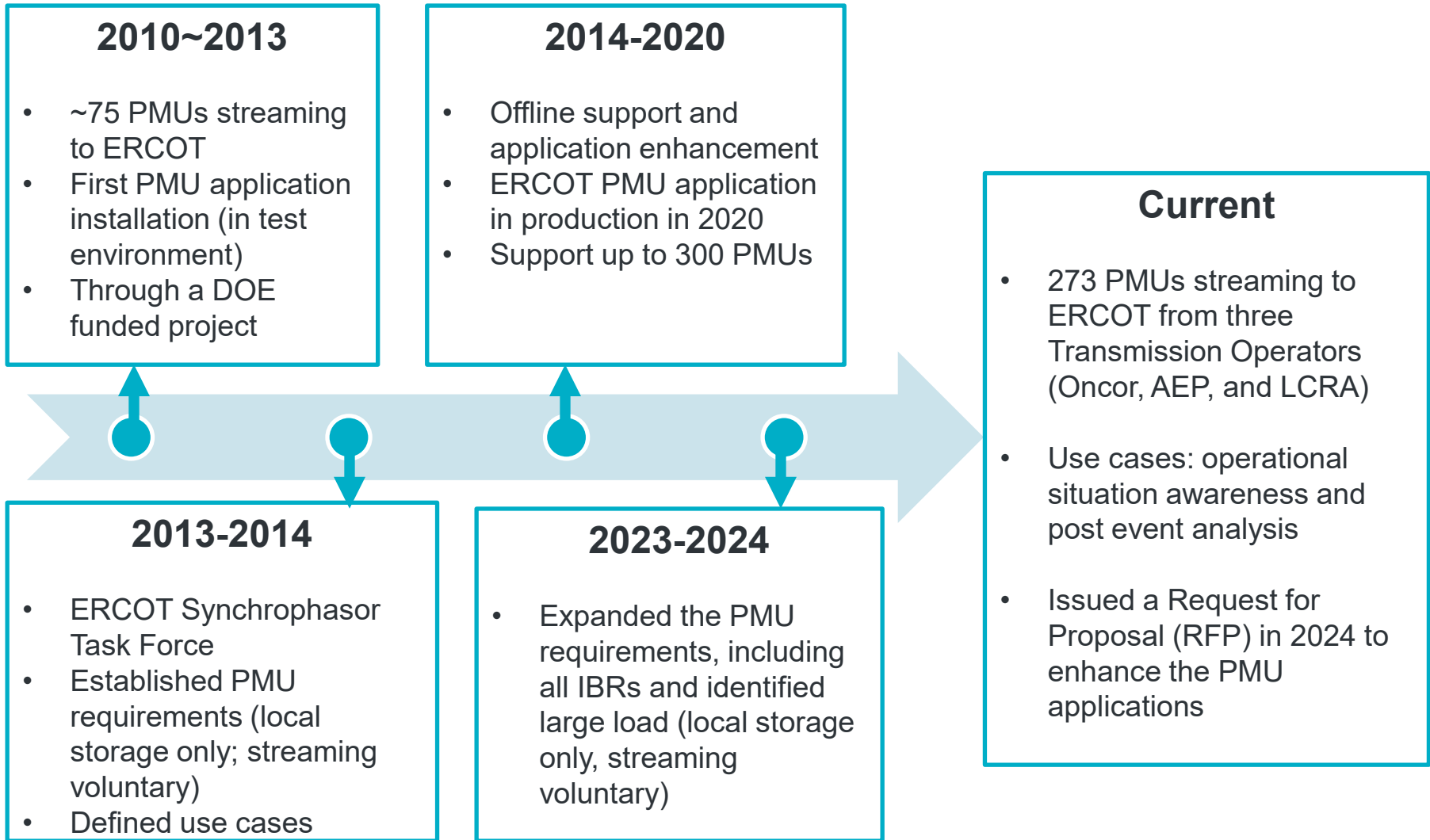
Item 5.2: ERCOT Updates and Future Plans for PMU and WAMS

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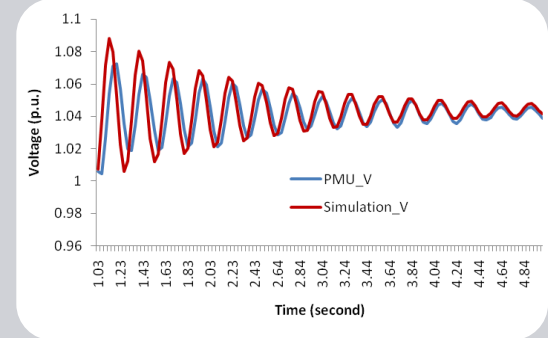
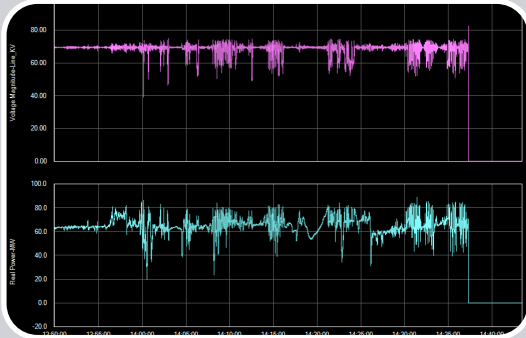
Technology and Security Committee

ERCOT Public
October 9, 2024

Existing ERCOT PMU Application Overview



Current ERCOT PMU Use Cases



Oscillation
Detection and
Mitigation

Event Detection
and Analysis

Model Validation

Barriers and Future Plans

Barriers and Needs	Future Plans	Status
Enhance existing use cases and add new use cases	<ul style="list-style-type: none"> • Expand the PMU streaming capability to allow for > 2,000 PMUs with corresponding storage • Improve existing real-time PMU application and use cases <ul style="list-style-type: none"> <input type="checkbox"/> oscillation detection and mitigation <input type="checkbox"/> event detection and analysis <input type="checkbox"/> Post-event model validation, and • New PMU application features <ul style="list-style-type: none"> <input type="checkbox"/> system inertia and system strength monitoring and measurements, <input type="checkbox"/> advanced model validation, <input type="checkbox"/> linear state estimation 	Issued RFP in 2024 (with projected implementation by 2026)
Limited geographic coverage in PMU streaming	<ul style="list-style-type: none"> • Rules and requirements 	TBD
PMU data quality and maintenance	<ul style="list-style-type: none"> • Rules and requirements 	TBD
Limited use of PMU data for real-time operation	<ul style="list-style-type: none"> • Rules and requirements, including CIP requirements. 	TBD

