Austin SHINES

Update to the Austin Energy Utility Oversight Committee

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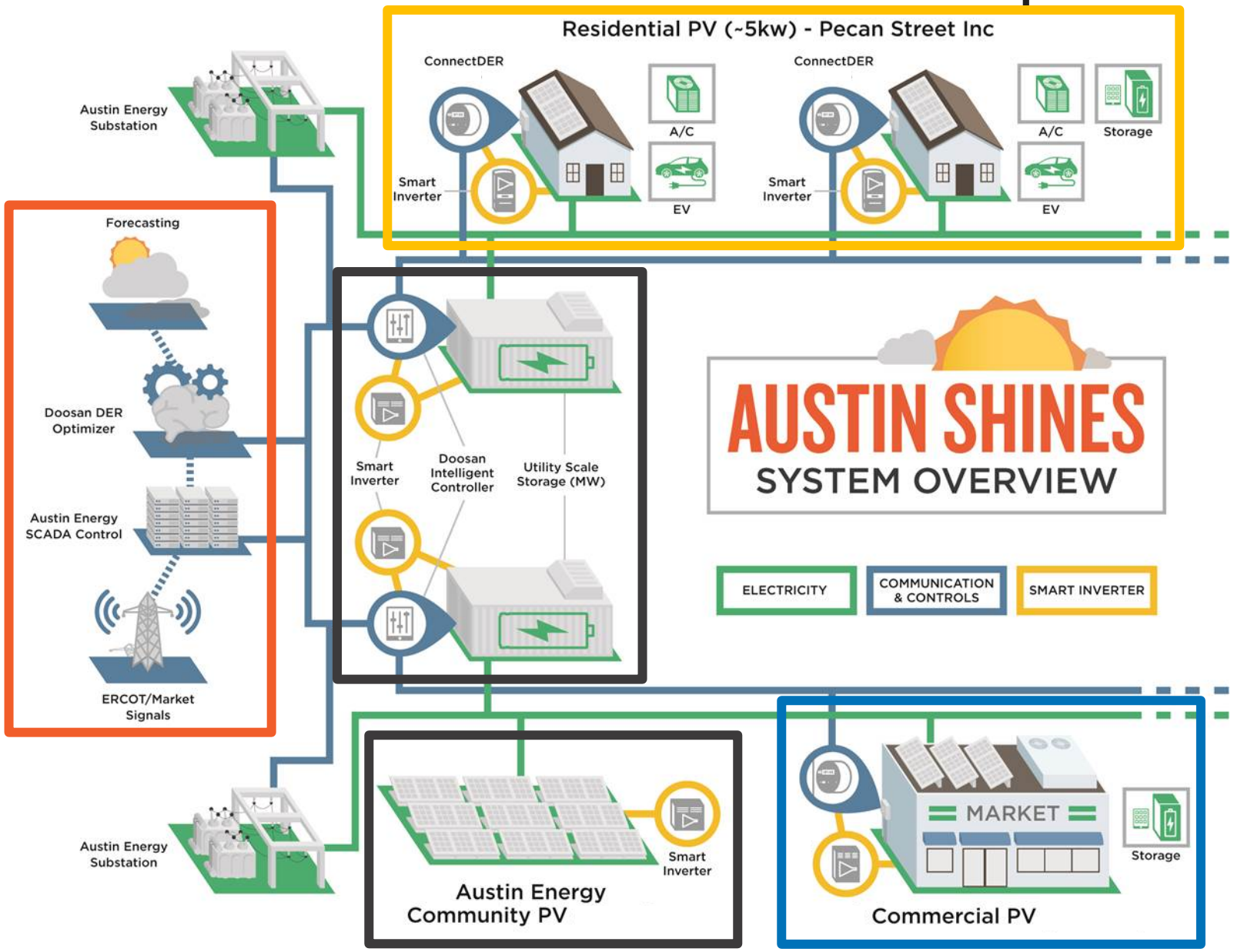
Austin Energy's Vision

To drive customer value in energy services with innovative technology and environmental leadership

Austin SHINES Concept



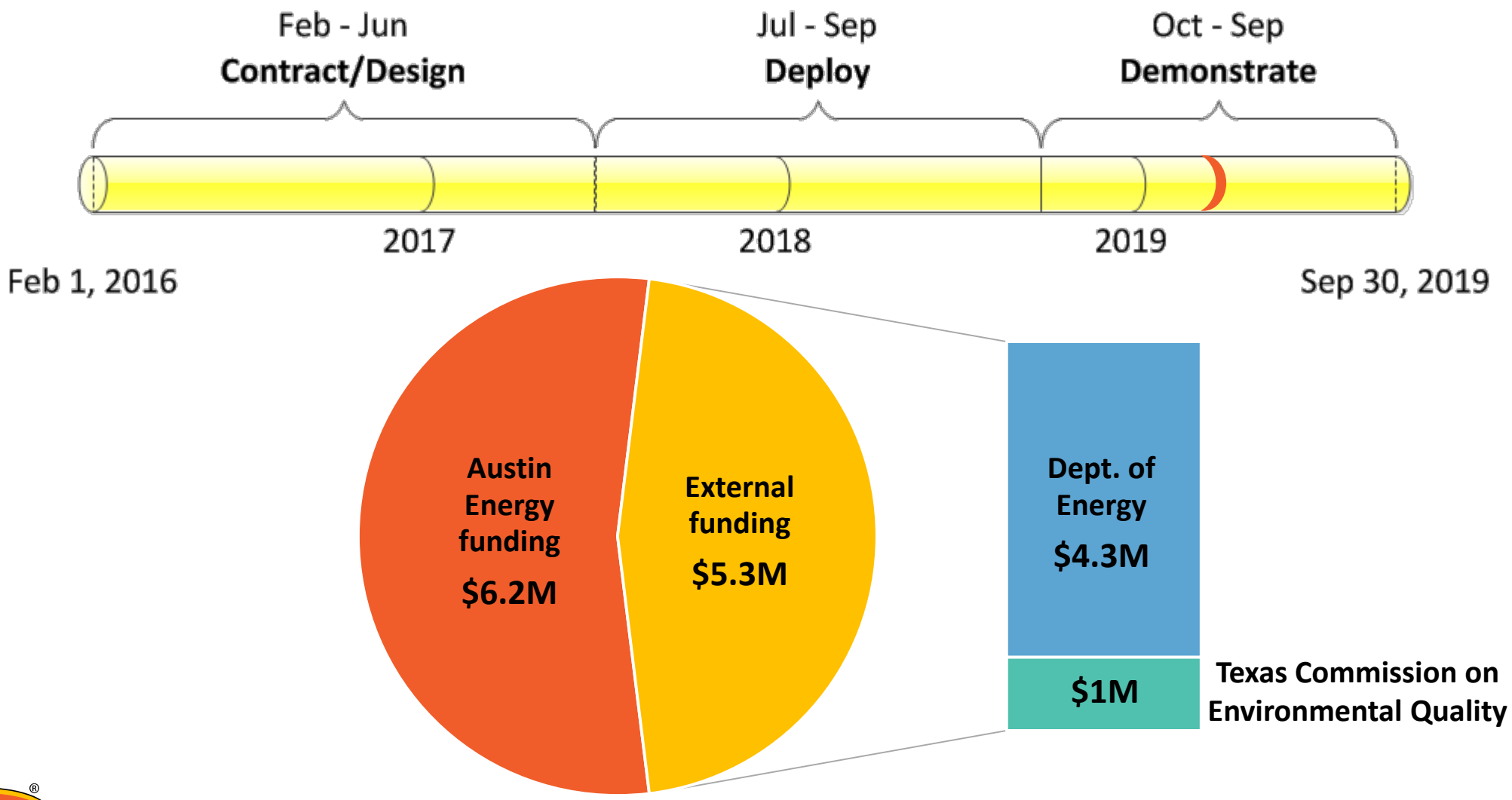
Utility Scale Energy Storage + PV

Commercial Energy Storage + PV

Residential Energy Storage + PV

DER Management Platform

Project Timeline & Funding



Austin SHINES Partnerships

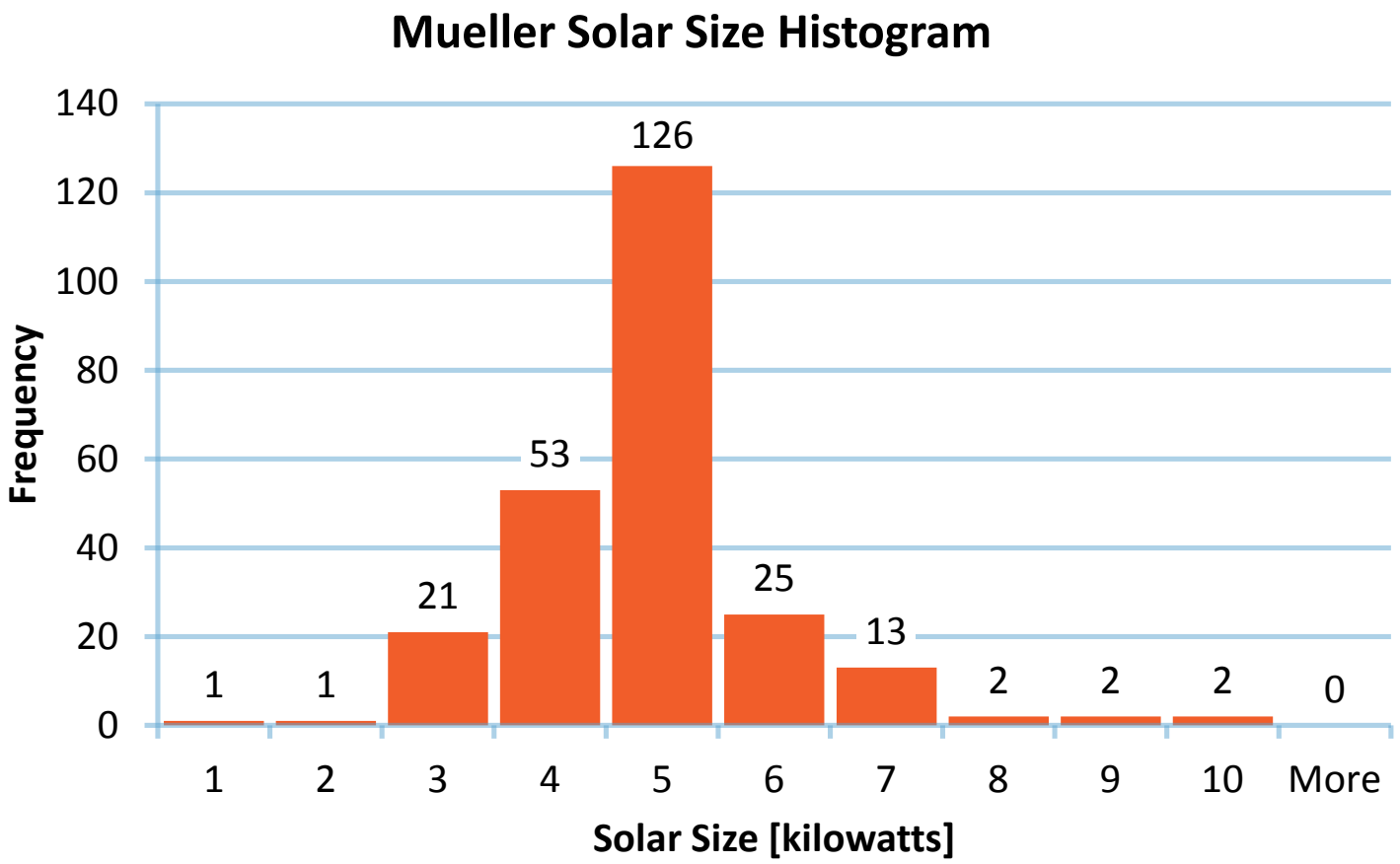
La Loma Community Solar
2.6 megawatts (MW)

Parker
Kingsbery Energy Storage System
1.5 MW / 3 MWh

Inside the Battery Container

Solar on Mueller Circuit

246 Rooftop Solar Installations, ~1.1 MW total



Mueller Energy Storage System
1.5 MW / 2.5 MWh

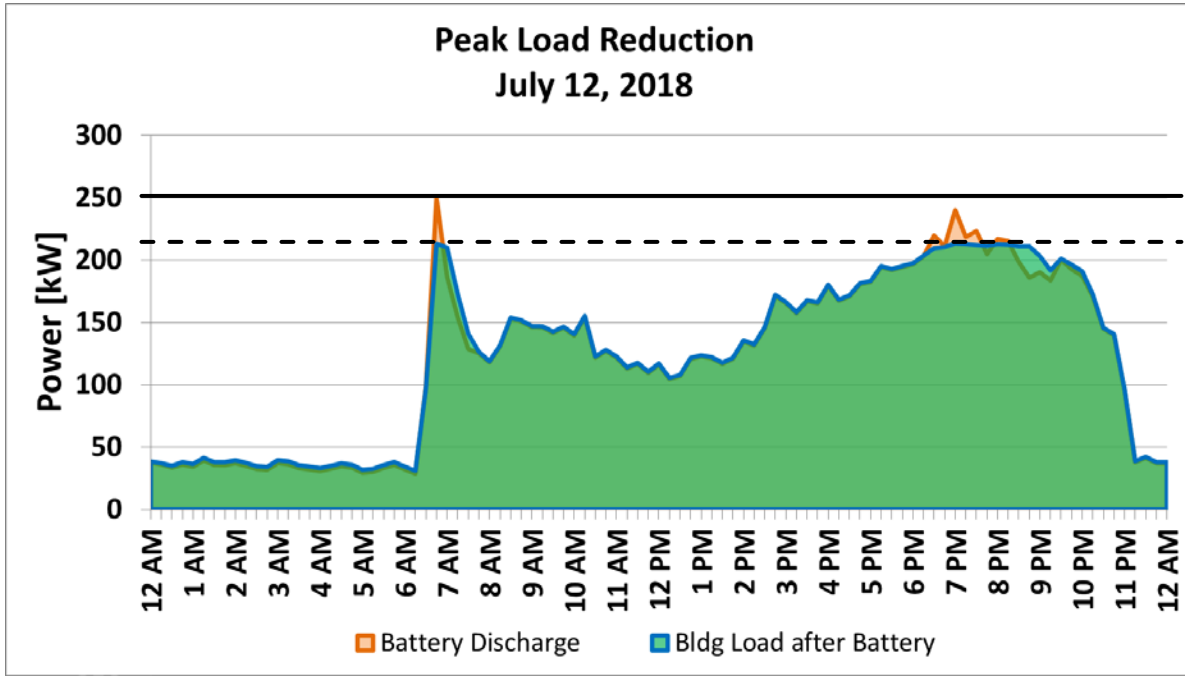
Mueller Energy Storage Site

Educational Signage & Viewing Area
Meets Mueller Neighborhood Design Guidelines

Commercial Site
72 kW / 144 kWh

Value for Commercial Customers

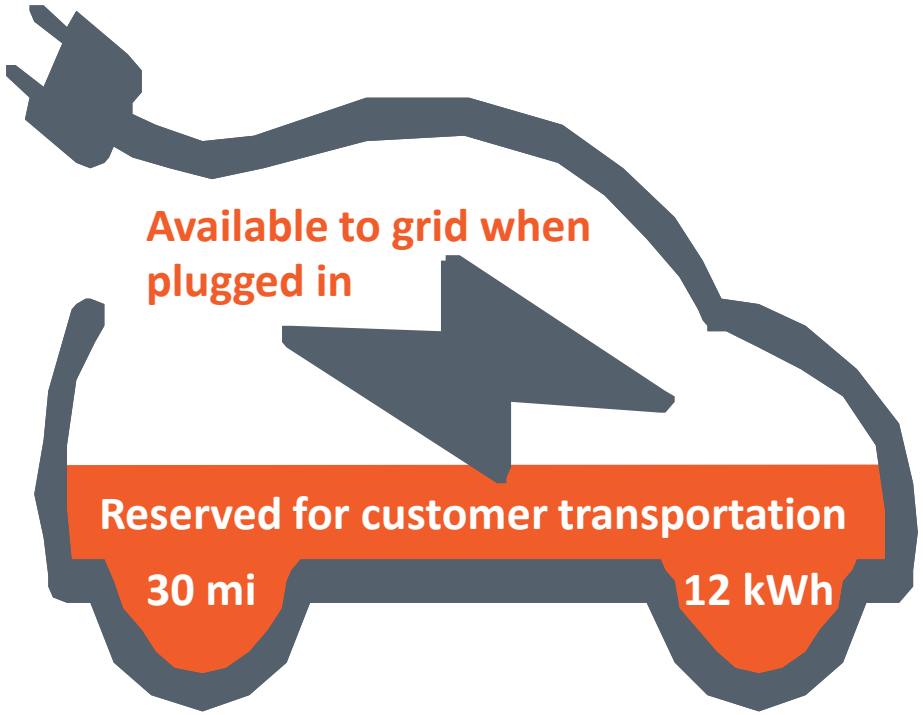
Demand Charge Reduction



Customer Bill Savings	Site A (18 kW)	Site B (72 kW)	Site C (72 kW)
Billing Period Ending Sept 2018	1.1%	3.5%	7.6%
Billing Period Ending Oct 2018	13.1%	2.3%	6.6%
Billing Period Ending Nov 2018	9.3%	5.4%	6.2%
Average Bill Savings per Site	7.8%	3.7%	6.8%
Total Average $ Savings	**6.1%**		

Shared Value

Mobile Battery Storage: Customer and Utility Value



What can we *Learn* from Austin SHINES?

Autonomous Control

Codes/ Permitting

Sizing Techniques

Use Cases

Customer Value

Open Standards

Aggregated Control

Ownership Models

Utility Control

Data Needs

Control Location

Economic Value

Performance Capability

Reliability Value

Communication Paths

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Key Takeaways

Hands On Approach

Tremendous insight from installing these systems

Complex in nature

Each, a system of systems

Value Measurement

Highest value proposition is reduction of Transmission Cost of Service

Reliability value will be more prominent as penetration increases

Forward Looking

Simulations provide added insight on the “what-if” scenarios

Provides preparation for the future

Final Deliverables

Economic Modeling (Methodology & Framework)

Control Platform "DERO"

Fielded Assets

Optimal Asset Design

Optimal Design Mix & Configuration

Control & Ownership Use-Case Findings

Award Recognition

2017 Utility of the Year — SmartCitiesDIVE
2018 Smart 50 Award — Smart Cities Connect
2018 Grid Edge Innovation Awards — Green Tech Media
2018 Public Power Utility of the Year — Smart Electric Power Alliance
2018 Greater Austin Business Awards — Austin Chamber of Commerce

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Community Focused.℠

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