



OPENADR IN TITLE 24

Implications on ADR Technology Incentive Implementation

April 24, 2018

**OPENADR ALLIANCE
MEMBER MEETING**

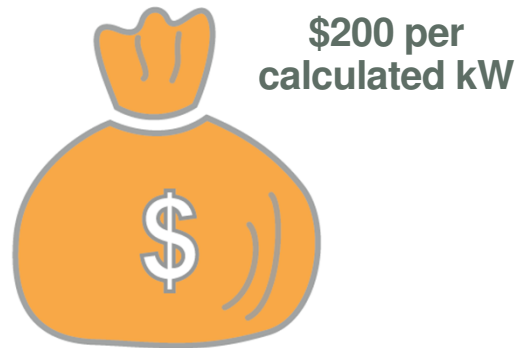
Drivers of OpenADR Adoption

ENERGY SOLUTIONS

Kitty Wang, PE

UTILITY INCENTIVES FOR DEMAND RESPONSE

Technology Incentives for Automated DR (1-time)



Incentives for hardware and software that enable participation in DR events automatically

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DR Program Participation Incentives (Ongoing)



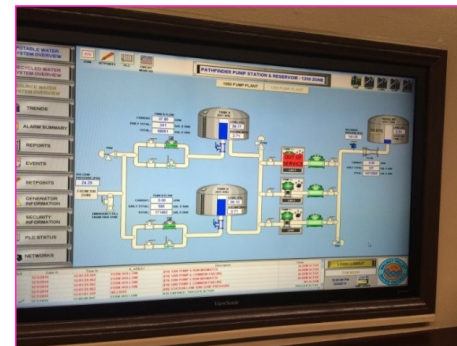
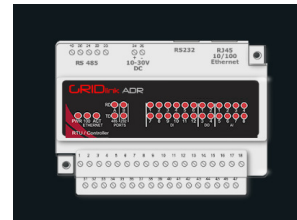
Bill credits or savings for reducing electric load during DR events



ADR INCENTIVES: ELIGIBLE COSTS

Costs Offset by ADR Incentives

- Hardware for HVAC, lighting, and other controls upgrades
- Telemetry hardware
- Labor for installation and commissioning
- Project management costs



ADR PROGRAM: COMMITMENTS OPERATORS MAKE

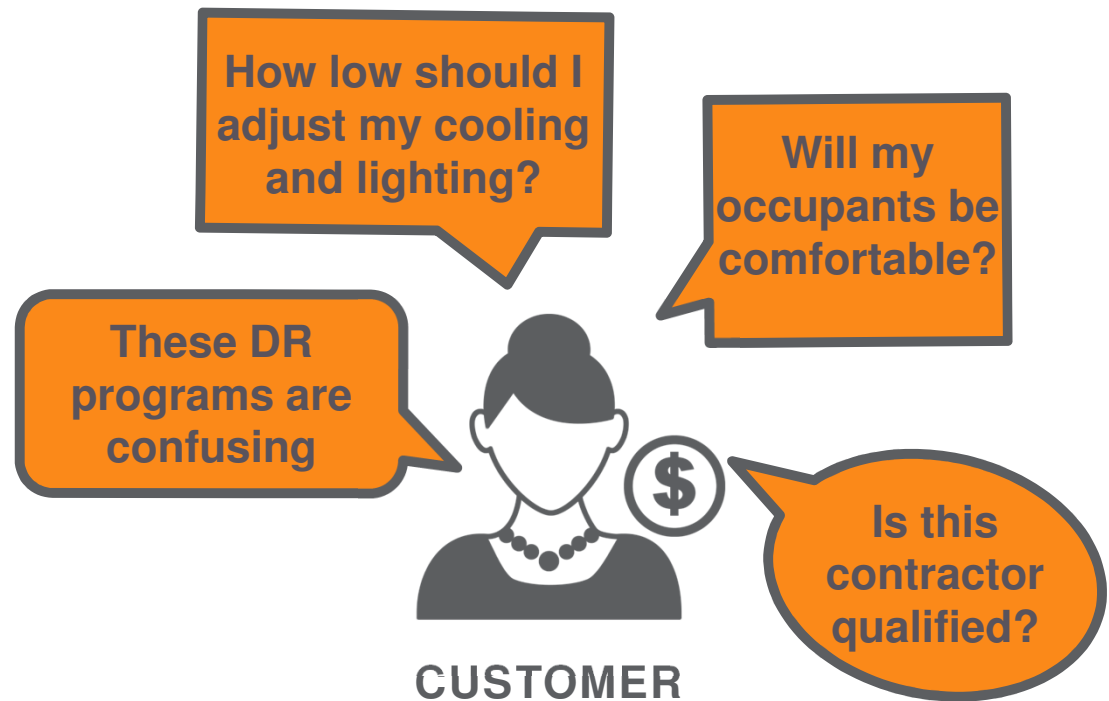
Commitment	Details
Participate in a qualifying DR program for at least 3 years	Directly with utility: <ul style="list-style-type: none">• Peak Day Pricing/Critical Peak Pricing Only with an aggregator or DRP: <ul style="list-style-type: none">• Capacity Bidding Program• Excess Supply Pilot• Supply Side Pilot• Demand Response Auction Mechanism
Adjust operations during a DR event	Conditions vary by DR program <ul style="list-style-type: none">• ~15 events / year• Usually May 1 - October 31• Usually 11AM - 7PM• 1 - 6 hours duration• Notification: day-ahead or day-of



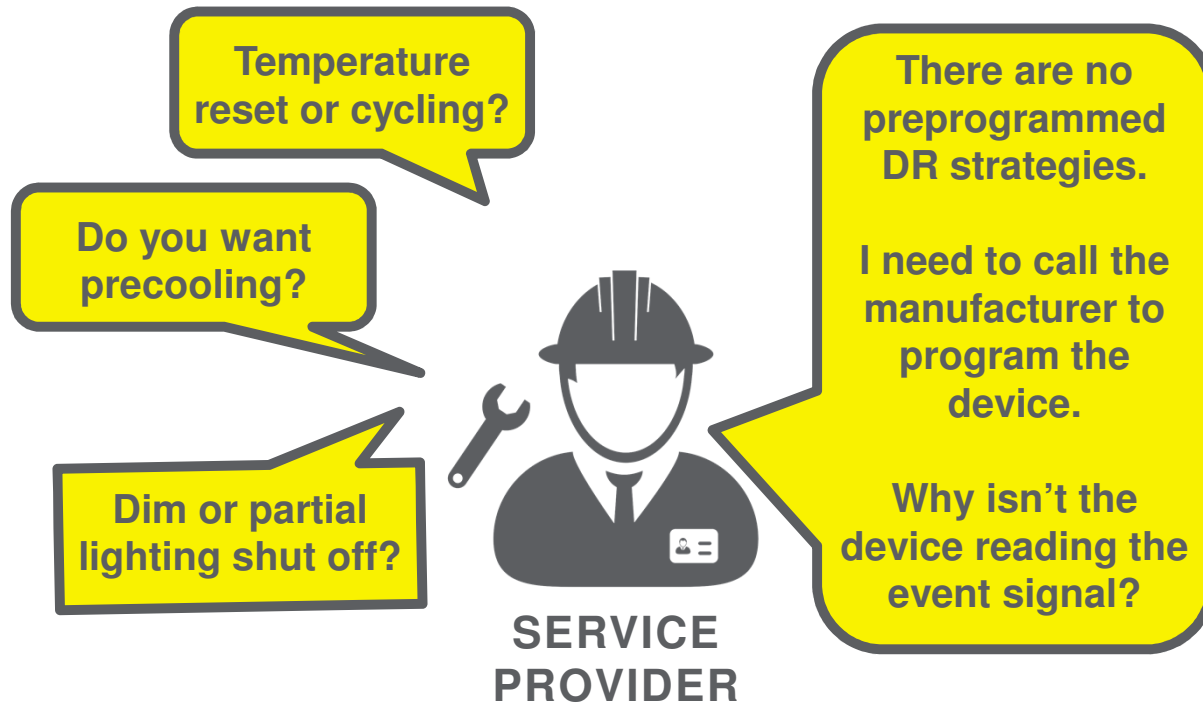
IMPLEMENTING ADR

Conceptually, it is simple

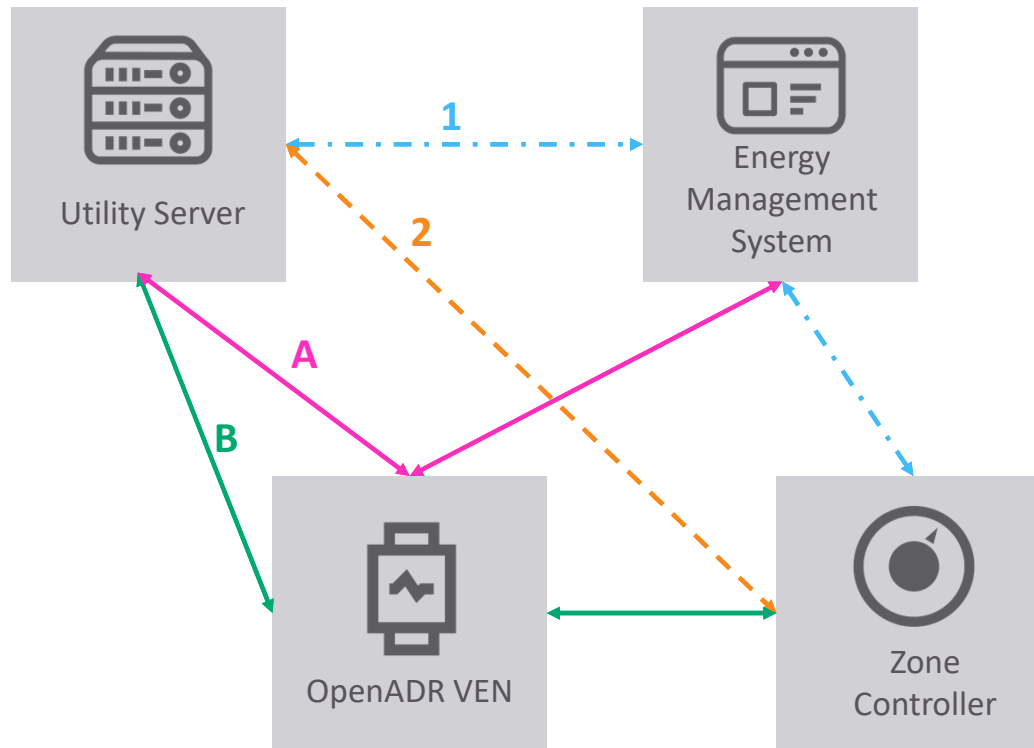
In reality, many implementation challenges remain and where programs can add value...



PROGRAMMING THE DR STRATEGY



CONFIGURING THE TECHNICAL SOLUTION



OpenADR communication allows many pathways



WORKFORCE DEVELOPMENT

Train Contractors On ADR Solutions

**Monitor And Enforce Rigorous
Quality Standards**



UNDERSTAND AUTO-DR
concepts, methods, perspectives



HANDS-ON TRAINING
to build capabilities with equipment



PROVIDE SUPPORT
to create success stories that can be
shared broadly



KEY SERVICES FOR PROGRAMS



...we need to get devices **PROGRAMMED AND ENABLED**



...we need to develop the **SUPPLY-CHAIN**



...we need to manage the **CUSTOMER EXPERIENCE**

Thank You

KITTY WANG, PE

DER PROGRAMS

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