Ideation Session Report-Out





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IRP Ideation Team Background

- How did this start?
- What was the purpose?

Ideation Team Process – Round 1

- Two 3-hour sessions
- Recap of Session 1
 - Review objective to ensure understanding
 - Identify possible criteria and align on primary
 - Develop comprehensive list of possible alternatives
- Recap of Session 2
 - Review criteria to ensure understanding
 - Breakout sessions to identify primary alternatives

Session 1 Output – Common Language

Better Leverage

Benchmarking

Enhance partnerships; Shared learning

Find new ways to innovate

Forward looking

Identify value

Learn from failures/losses and adjust

Learn from pilot programs

Not meant as a criticism - learn from best practices

Take action

Understand intersectionality - how interest impact customer

classes, grid, cost, benefits

DER & Non-wires

Batteries Clean

Close to distribution level and the customer-side

Close to load

Doesn't have to be clean because it could be serving another purpose (ex. resiliency)

EE/DSM

Electric vehicles, smart building technologies

Infrastructure, programs, rebates that influence customers

No large plants or items that require major transmission add

Small scale, local generation

Storage (including pumped storage)

Things that impact customer decisions, pricing structures, etc.

Provide Value to Utility's System

Ability to engage with customers

Balance shift from carbon and impact on customers

Demand response and balance

Economic development benefit

Environmental justice (equity and impact)

Fair value for customers

Flexibility and capacity. Shared value streams

Identify varied customer values and deliver on them

Mass customization

Power quality

Reliability

Resiliency

Safety

Public Interest

Adaptible

Affordability

Clean, leveraging technology

Collective impact

Control of future costs

Customer choice

Economies of scale for overall cost reduction

Equality

Healthy & Safety

Integrity of the system

Intolerance for rate changes

Locally Sourced

Multidimensional

Options and Choice

Overall vision/strategy

Transparency and clarity

Session 1 Output – Criteria

Affordability - value and cost Feasibility Reliability Resiliency (includes scalability, diversity, flexibility) Serves customer interest Accessibility - Underserved, equity (are we addressing something where there's a current gap?) General consensus from group that we want to (or want to try) Consider risk costs Consider scale of the opportunity Readiness of the opportunity (policy barriers, technology state, etc.) Impact, value add Resilience Economic benefit Diversity and flexibility Innovation, forward looking (adaptable) Partnerships Clean - identified as common language in DER/Non-wires Clean enabling - identified as common language in DER/Non-wires

Session 1 Output – Alternatives

- Bring Your Own Thermostat (BYOT)
- Community solar funded by utility
- Controllable electric vehicle (EV) chargers
- Develop building with own solar array, battery for each unit (e.g., apartments)
- Electrification funded through the energy efficiency (EE) rider (fuel switching)
- Electrification in general
- Emergency backup for commercial/industrial
- Energy disclosure for buildings
- Enhance Advanced Metering Infrastructure (AMI) use
- EV Battery changeout station
- Expanding IPC's existing demand response (DR) programs
- Flexible grid, temperature controls on freezers
- Grid interactive buildings (DR, ice storage, etc.)
- Heat pumps and split systems (electrification)
- Home Report program, use app to give notice
- Hosting capacity analysis
- Inductive EV chargers
- Locational value AC upgrade incentives
- Metered Energy Efficiency Transaction Structure (MEETS)
- Microgrid including solar and storage

- Microgrids (portable energy solutions at substations)
- New ownership models (shared solar ownership with irrigators including inverter and storage)
- On-bill financing
- On-demand water heaters for EE
- Optimization of transformers
- Prebuild green turn-key developments
- Residential aggregation of interruptible loads (curtailment)
- Residential battery storage for DR
- Rural opportunities
- Thermo electrics Leverage waste heat
- Time of use pricing model
- Turn off irrigation transformers in off-seasons
- Utility controlled heat pumps
- Utility renting rooftops for solar
- Water heater storage for DR
- Widescale smart thermostat deployment (DR)
- Work with city to obtain where transmission and distribution deferral benefits can be leveraged
- Workplace EV chargers

Session 2 – Primary Alternatives

- Time of use pricing models
- Controllable customer load
- Grid interactive buildings
- Utility-controlled, customer-owned storage
- Hosting capacity analysis