

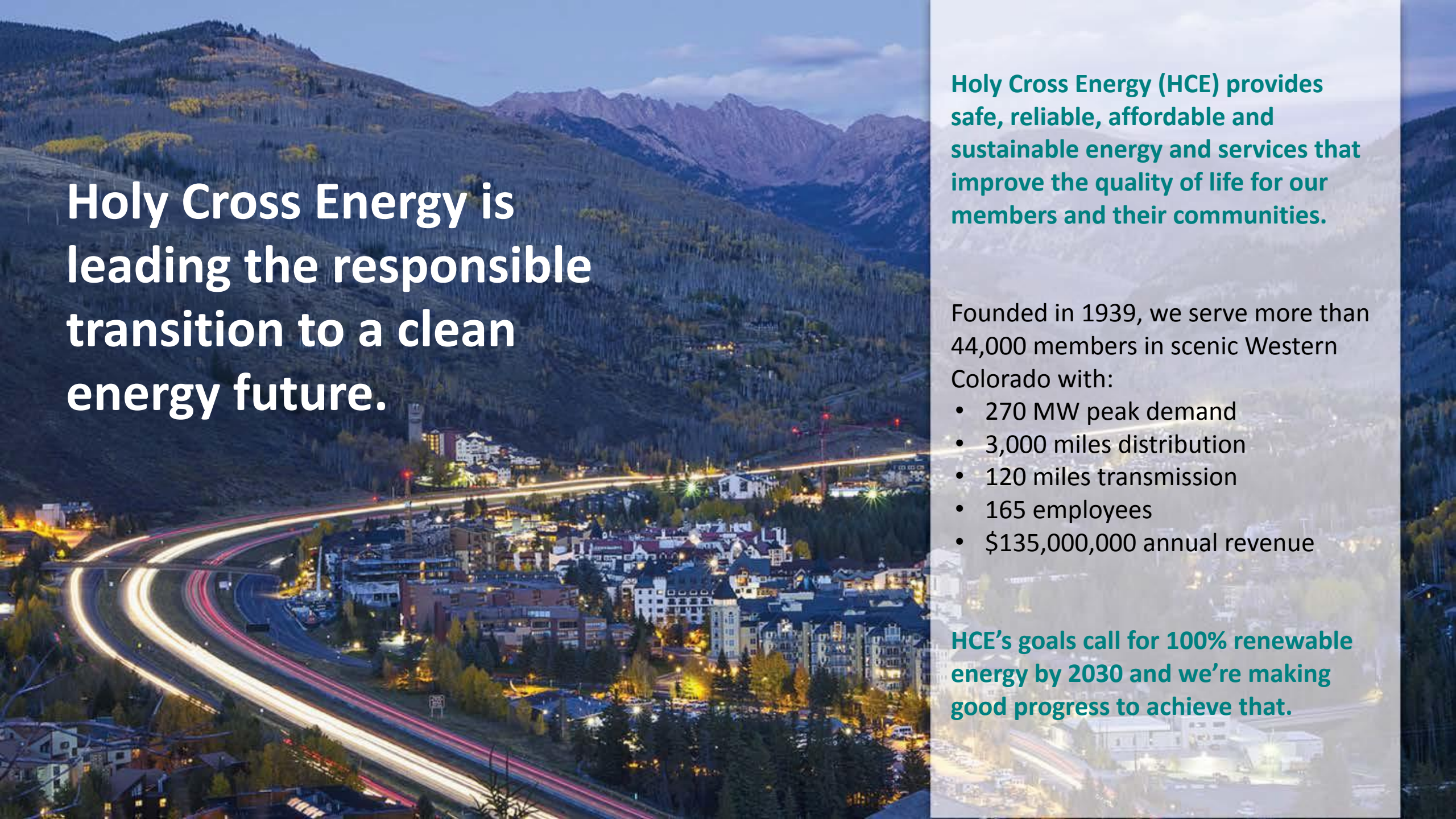


Leading the responsible transition to a
clean energy future.

NARUC

HCE – Flexible DER Programs

Holy Cross Energy
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Manager, Power Supply
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Holy Cross Energy is leading the responsible transition to a clean energy future.

Holy Cross Energy (HCE) provides safe, reliable, affordable and sustainable energy and services that improve the quality of life for our members and their communities.

Founded in 1939, we serve more than 44,000 members in scenic Western Colorado with:

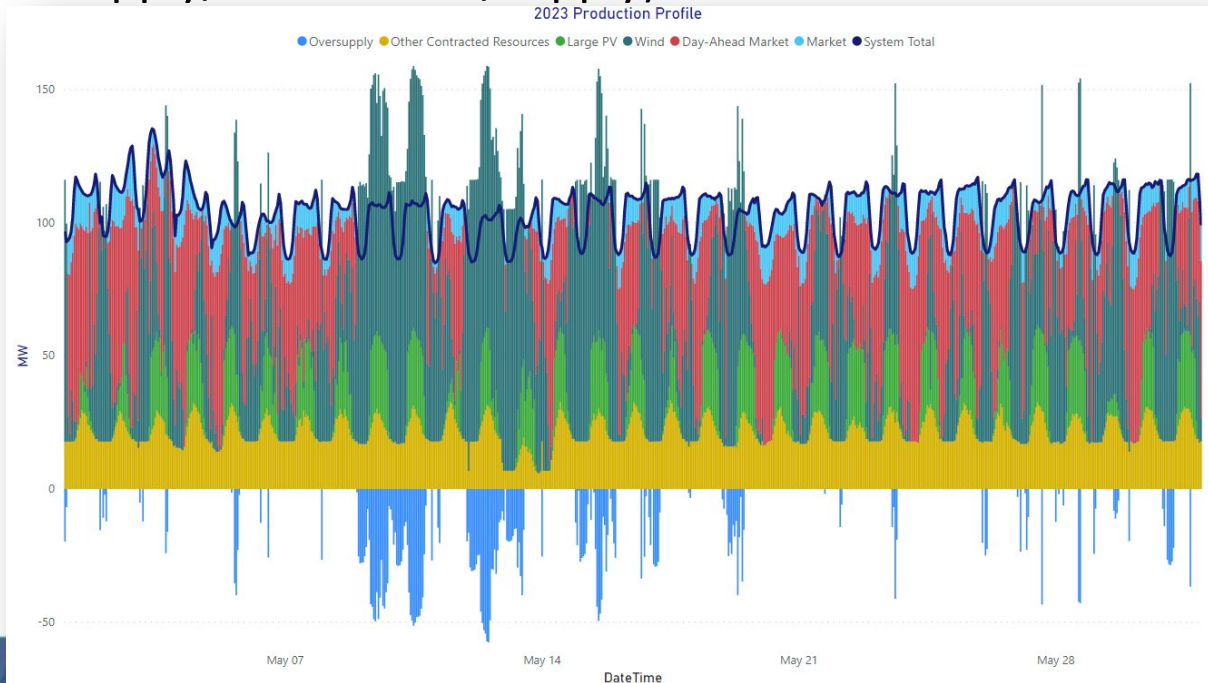
- 270 MW peak demand
- 3,000 miles distribution
- 120 miles transmission
- 165 employees
- \$135,000,000 annual revenue

HCE's goals call for 100% renewable energy by 2030 and we're making good progress to achieve that.

DER Programs – why are we interested in this?

Value Streams:

- **Capacity Costs** (need for peak demand reduction)
- **Renewable Oversupply** (need for balancing supply/load or load/supply)



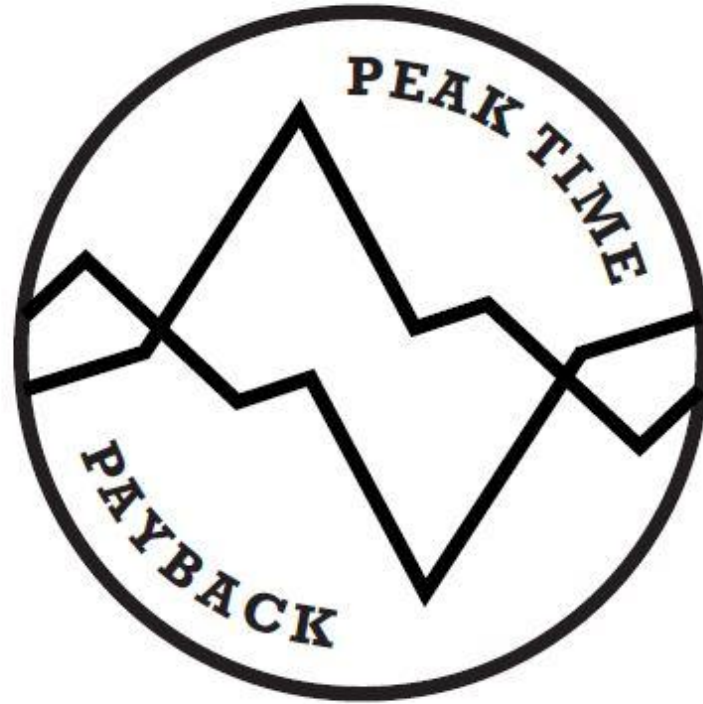
Our Approach:

- **Member Option to Control** – Dynamic rates are messaged to participants to provide voluntary price signals and incentives to member's that exercise control over their own DERs and/or usage
- **HCE Option to Control** – HCE offers a bill credit in exchange for the member giving HCE operational control over the DER
- **Cover installation costs** - A Service Agreement helps members overcome investment hurdles and repay the DER installation cost to HCE over time

Dynamic Rates – Peak Time Payback:

Peak Time Payback – behavioral demand response rate for ~96 hours per year

- Credits provided based on consumption that is less than the baseline
- \$0.50/kWh reduction for “High” events
- \$1.00/kWh reduction for “Critical” events



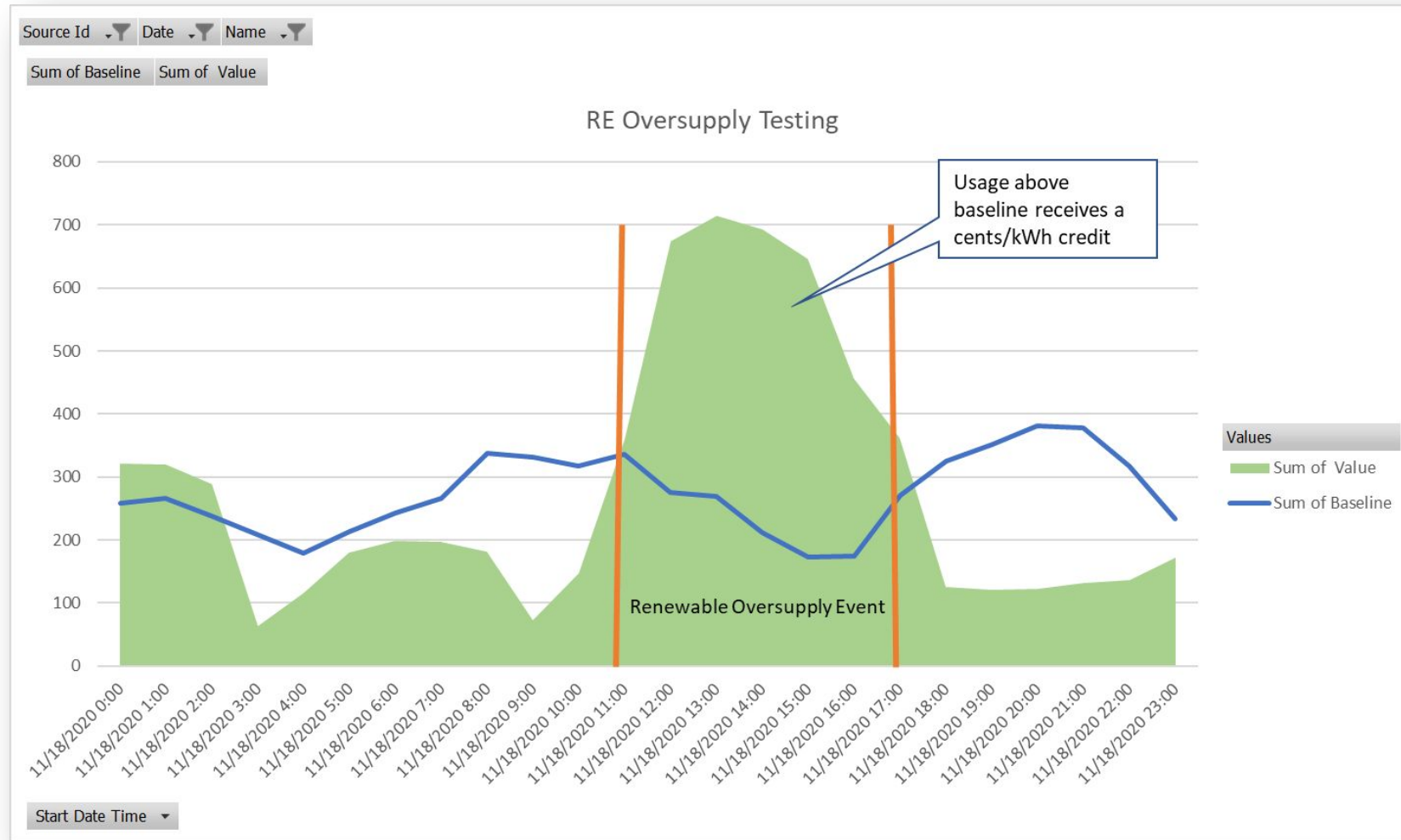
Programs Stats

- 1900 members enrolled as of June 2021
- Aggregate average reduction of ~20%
- Some Large Commercial reduction of 60-80%
- Nearing 2MW of peak reduction
- Consistent response, even with multiple events in a row

Dynamic Rates – Renewable Optimization:

Dynamic Renewable Pricing – behavioral demand response rate for ~300 hours per year

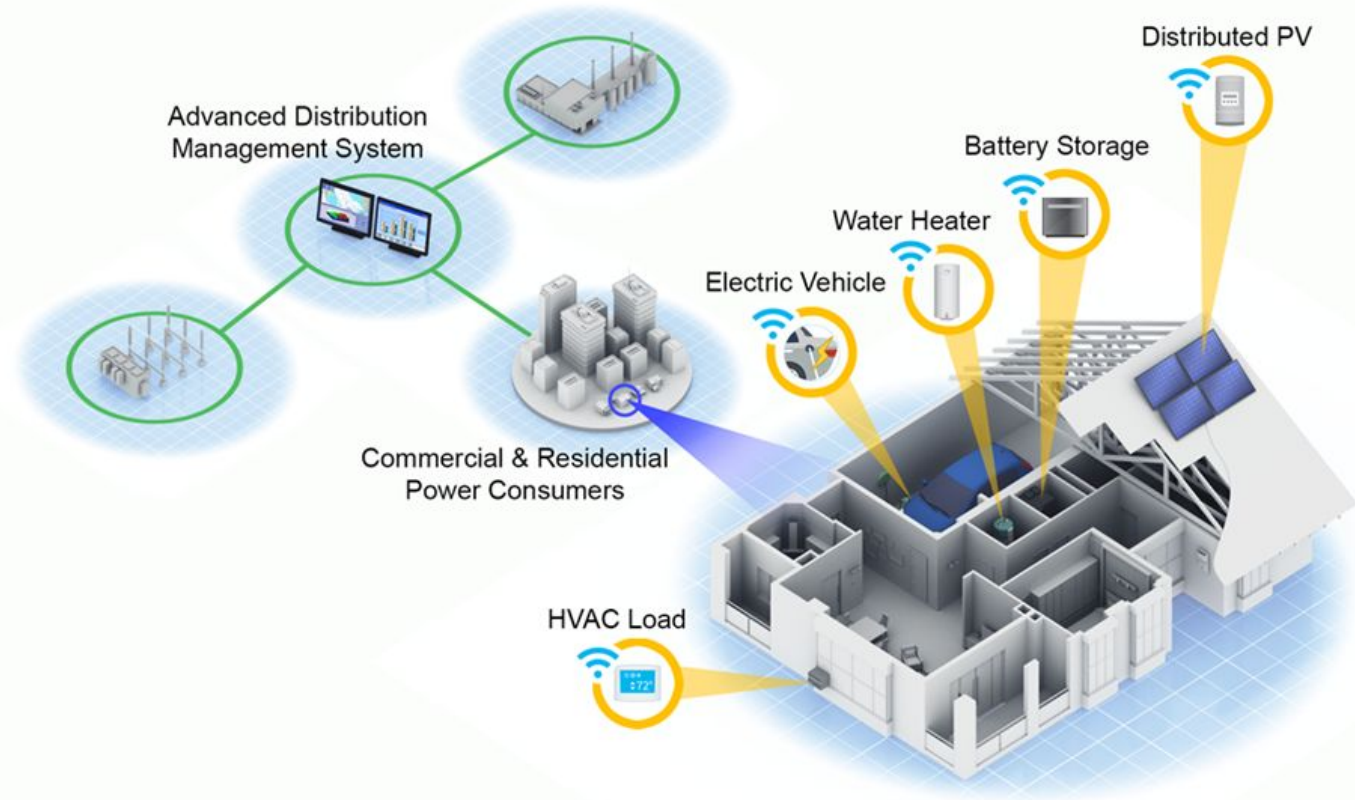
- Variable rate “credits” based on consumption that is greater than the baseline
- Rate credits will vary based on market conditions (i.e. renewable curtailments, market pricing, other system operation conditions)
- Initial testing showed an ability to increase usage effectively while not setting the monthly demand peak



Distributed Control of DERs

HCE's Approach

1. **EV Program** – 1.25MW controllable residential load, significant growth in transit and DCFC
2. **Basalt Vista Pilot** – early learnings about DER controls
3. **Distribution Flexibility Tariff** – financial incentives for providing HCE control of DERs
4. **DER Service Agreement** – financing mechanism for upfront cost of DERs
5. **Camus Energy Platform** – provides integration of market operations, insight into DER capabilities, and dispatch/control of DERs
6. **Power+** – combination of tariffs/programs for HCE's storage control and member resilience for ~\$30/mo





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