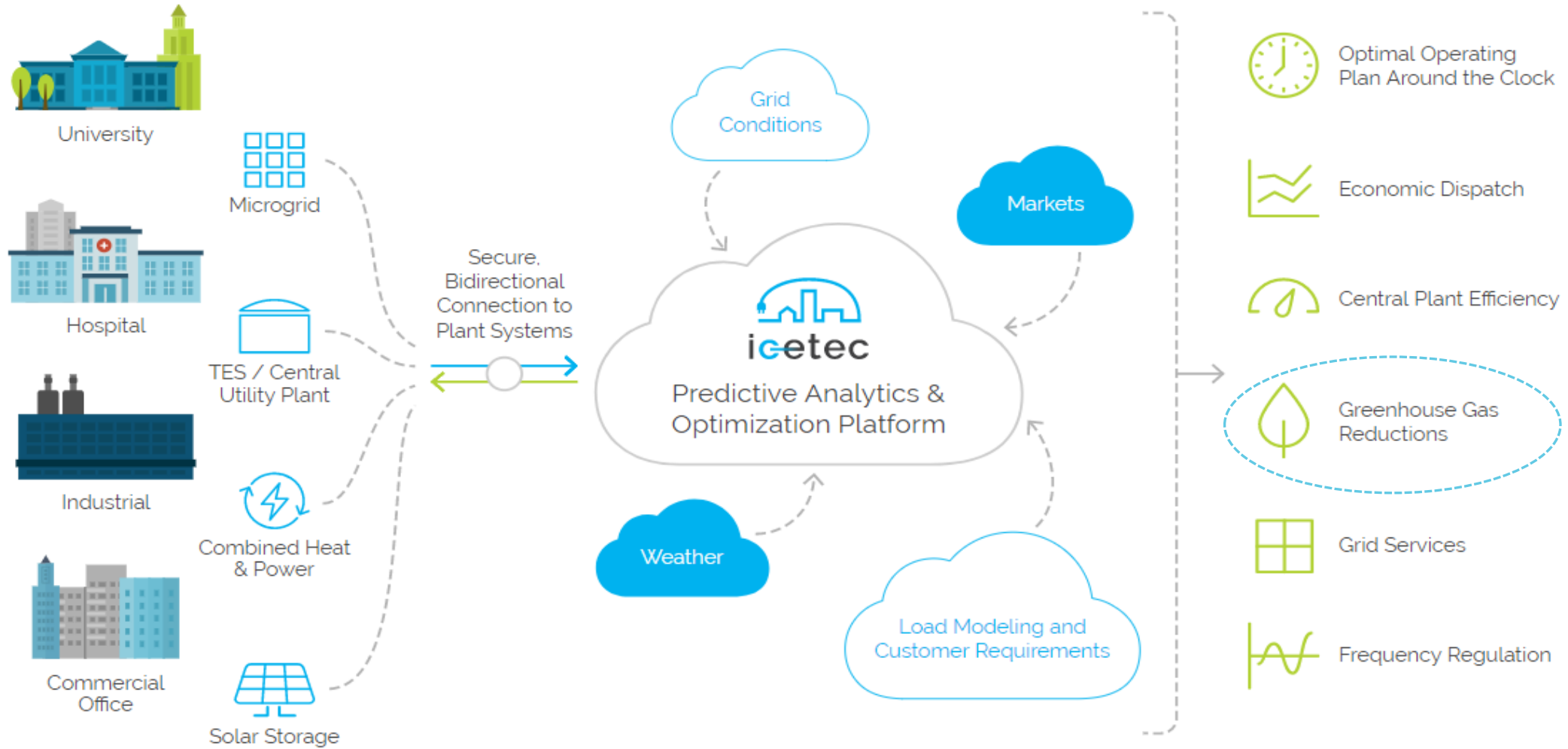




# CONSUMER LIAISON GROUP THE BENEFITS OF LOAD RESPONSE

March 2024  
Portland, Maine

# ICETEC ENERGY SERVICES



# IMPORTANCE OF FLEXIBLE LOAD

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- For all electric customers
  - Reduces cost of energy and capacity (quantity and price)
  - Reduces cost of transmission
  - When targeted appropriately, reduces CO2 emissions and related costs
  - Improves reliability
- For those customers who have made an investment
  - Above benefits, and
  - Can reduce retail volumetric costs if on TOU rate
  - Reduces demand charges
  - Potential program or market revenue
  - Increases resiliency
- We can and do manage load for these gains.  
We can and must do much more.

# EXAMPLE: TRANSMISSION COST

- Transmission Rates already dramatic
  - \$154/kW-yr now
  - Est. \$196/kW-yr in 2028<sup>[1]</sup>
- ISO-NE 2050 Transmission Study
  - \$1.5b/GW over 51 GW peak
  - Underground line costs 4x of overhead costs
- 1. RNS Rate Forecast Overview. Slide 3. NEPOOL RC/TC Summer Meeting. July 18, 2023. Please read disclaimers.  
2. RNS Rates Effective Jan 1, 2024. Weighted average of carrying costs from slides 7-8. Same meeting.

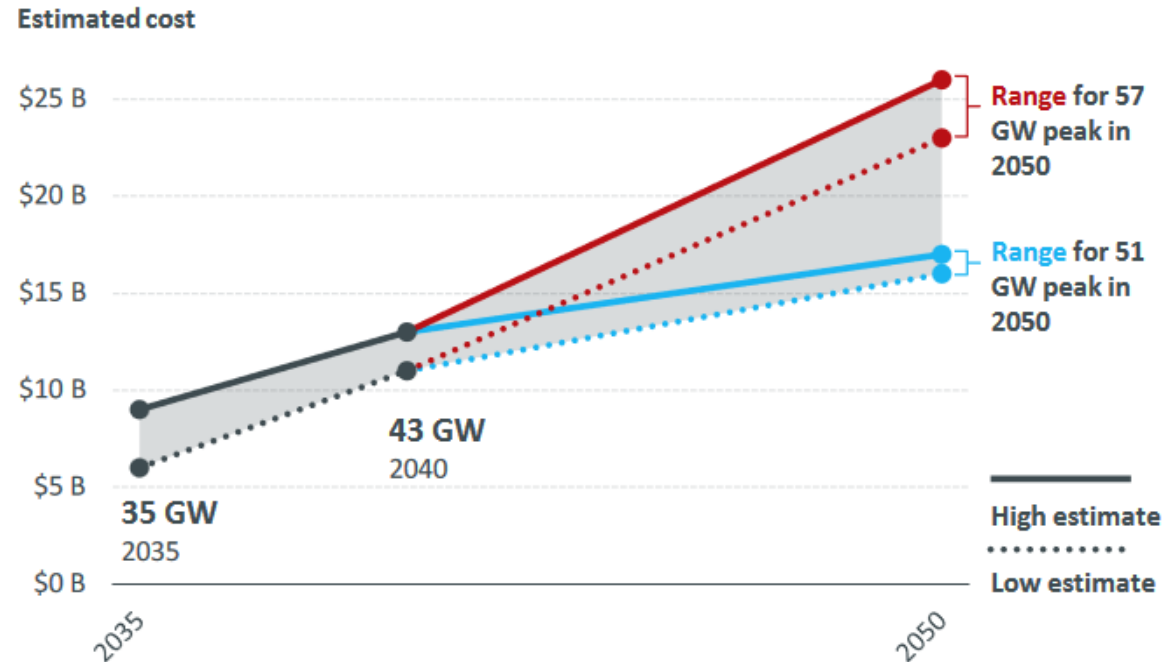


Figure 2-1: Costs by Year Studied

These are \$B in costs,  
locked in for 20 years,  
at ROR above 14% [2]

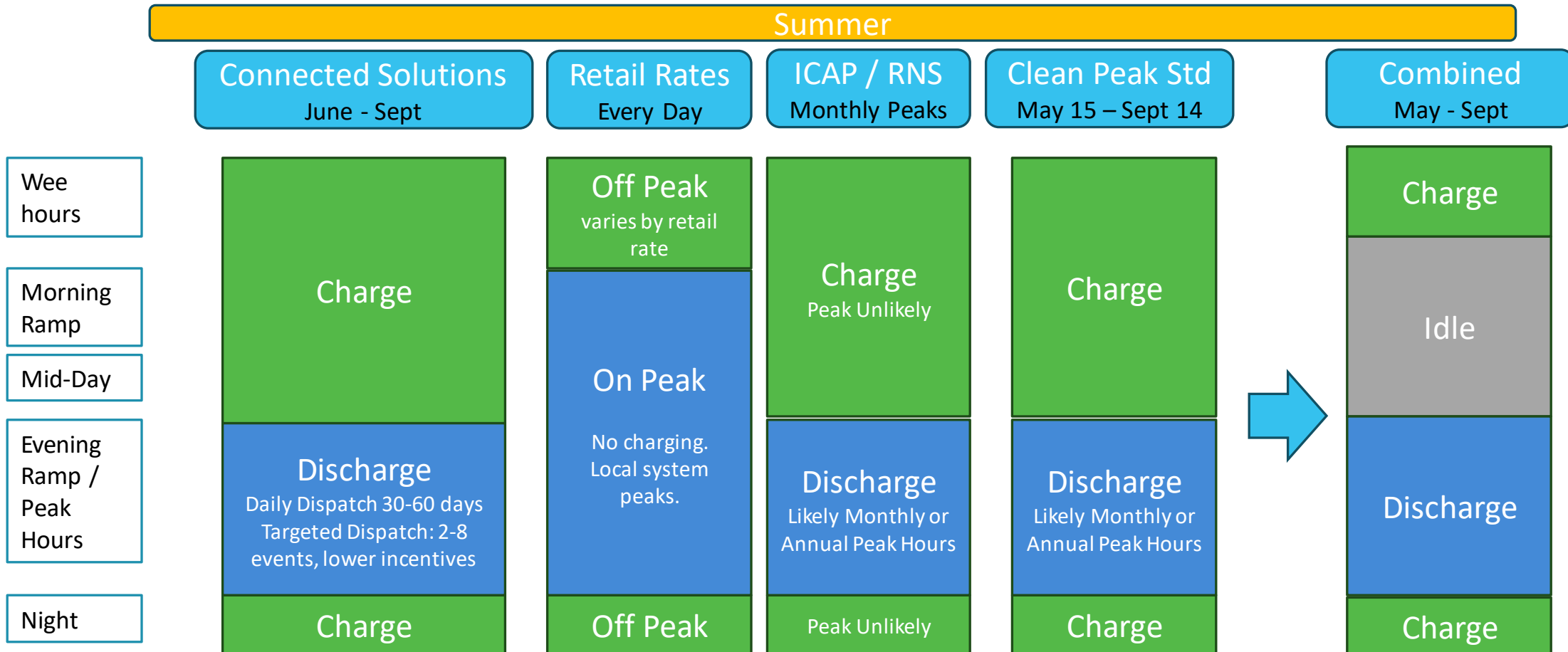
# THE OPPORTUNITY: BEHIND THE METER

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- Icetec provides intelligent, predictive single-source solutions and software engines to maximize Behind the Meter opportunities.
- When optimized, a multi-layered success story can be told:

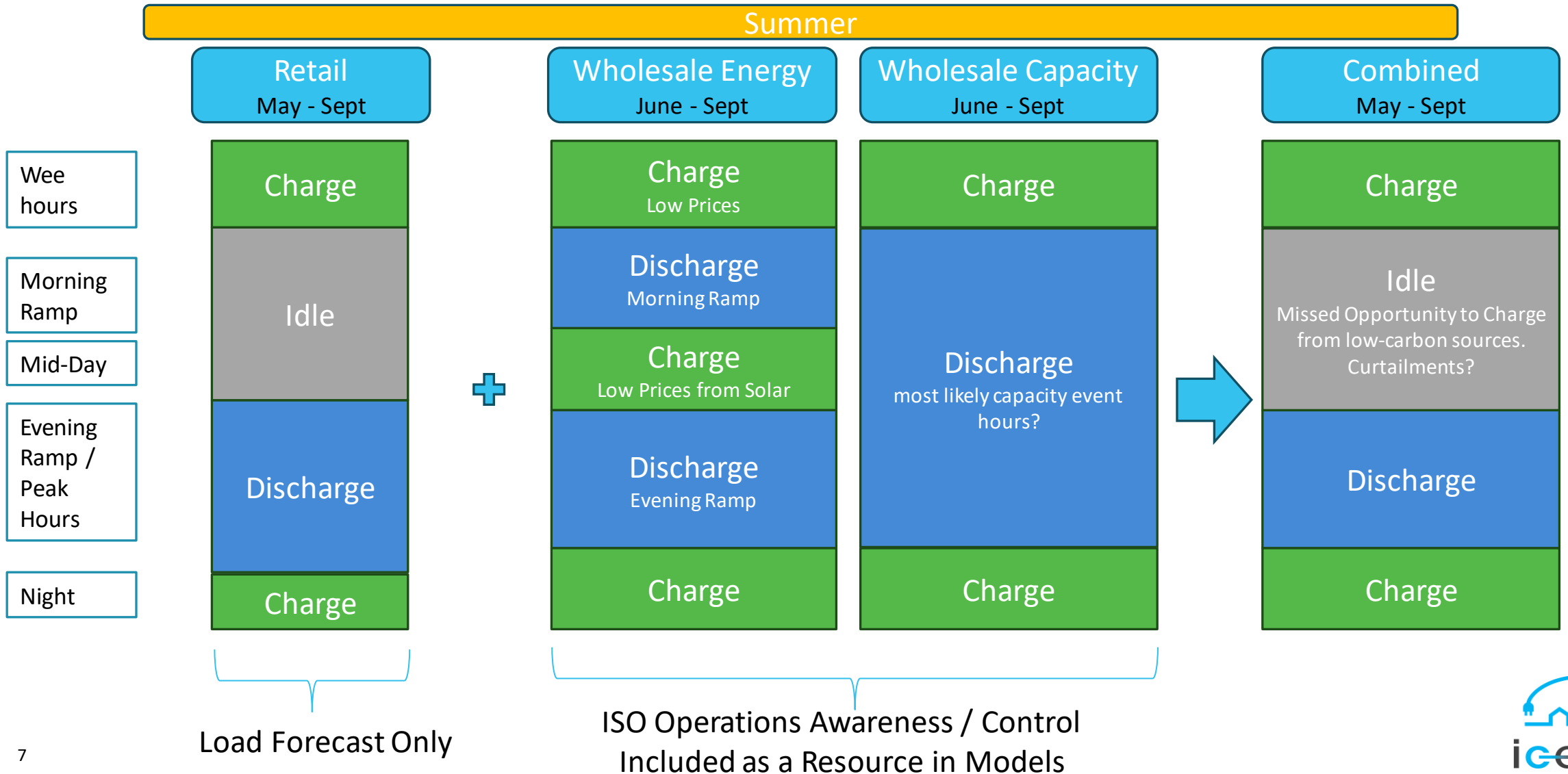


# BATTERY INTEGRATION CHALLENGE - RETAIL



Captured for Load Forecast

# BATTERY INTEGRATION - WHOLESALE

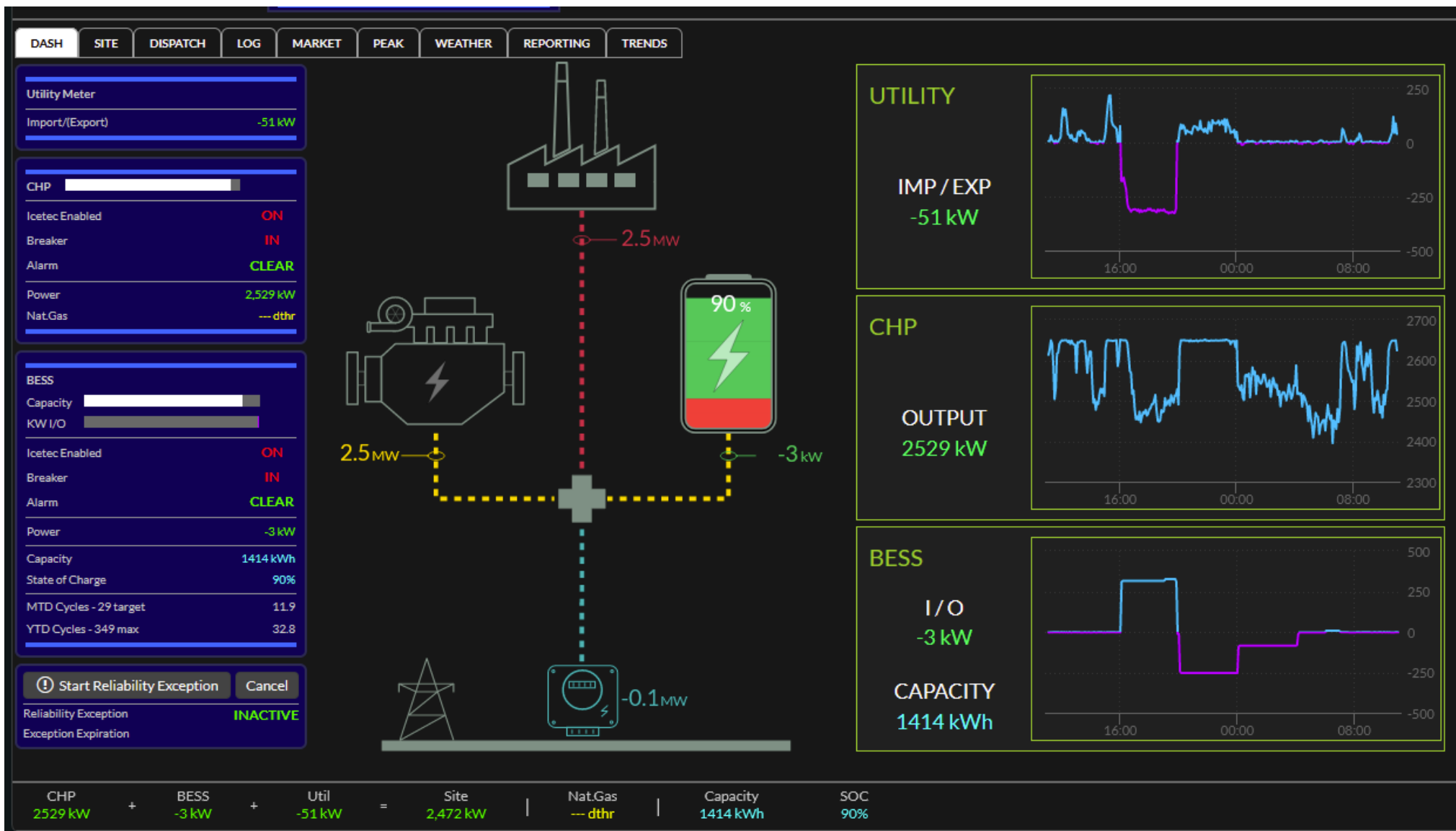


# PEAK REDUCTION WITH MARKETS





# FULL SITE INTEGRATION



# CHALLENGE OF FERC ORDER 2222

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- FERC Order requiring all DERs technically capable to be allowed into all markets
- Compliance to date will not achieve any participation. An opportunity wasted. Infeasible solutions.
- Focus of ISO-NE and Host Utilities is misdirected. Latest compliance filing would require years of contract negotiations and registration as a Load Serving Entity. Remaining hope is that we continue to address workable solutions.
- Customers and aggregators need to be able to meter at the device level, not at the POI.
- Distorted accusations of double payment waste valuable time and prevent investment that will benefit all customers, even those cannot or choose not to invest.



Technology that transforms  
the way you view energy

THANK YOU

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