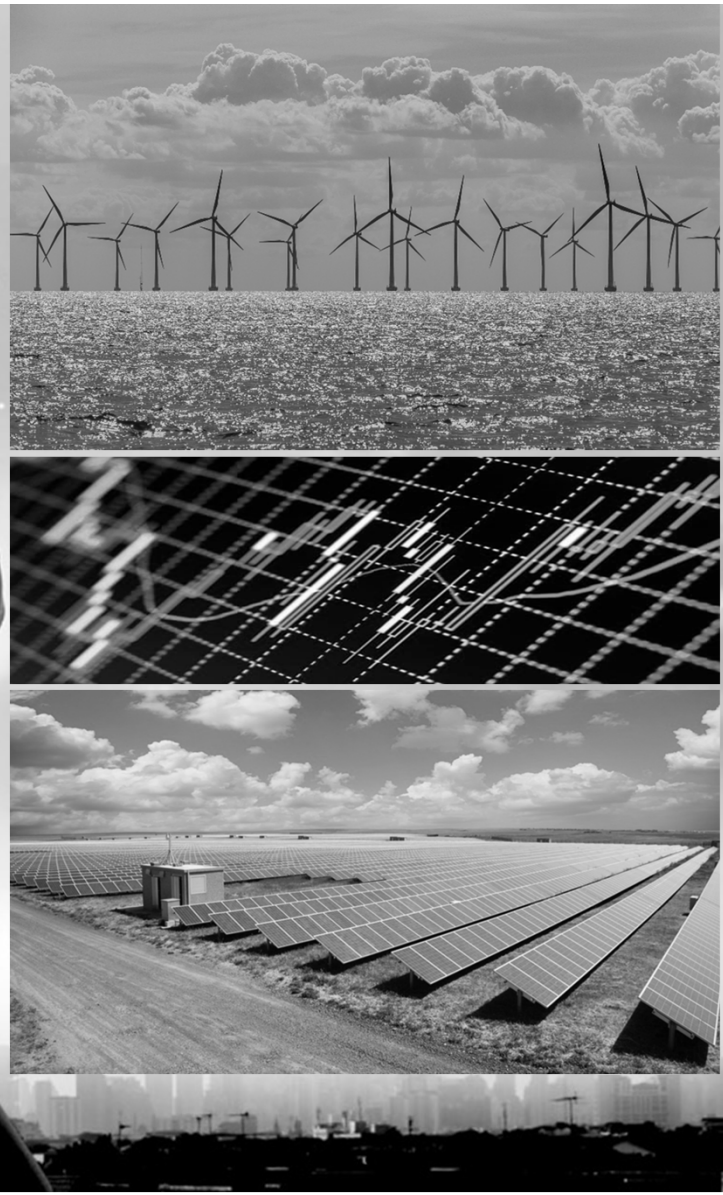
AutoGrid DERs and Virtual Power Plant Overview

June 2023



AutoGrid

AutoGrid: The Leader in Global Flexibility Management

50+
Global Energy Customers

6,000 MW+
Flexible Resources

17 Countries
Operational Systems

Marquee Customers Across the Globe

CPS Energy, CLP, Shell, Tata Power, Consumers Energy, nrg, SunRun, PSE Puget Sound Energy, PG&E Pacific Gas and Electric Company, BC Hydro, CPA Clean Power Alliance, GreenStruxure

#1 DERMS and VPP by Guidehouse Insights

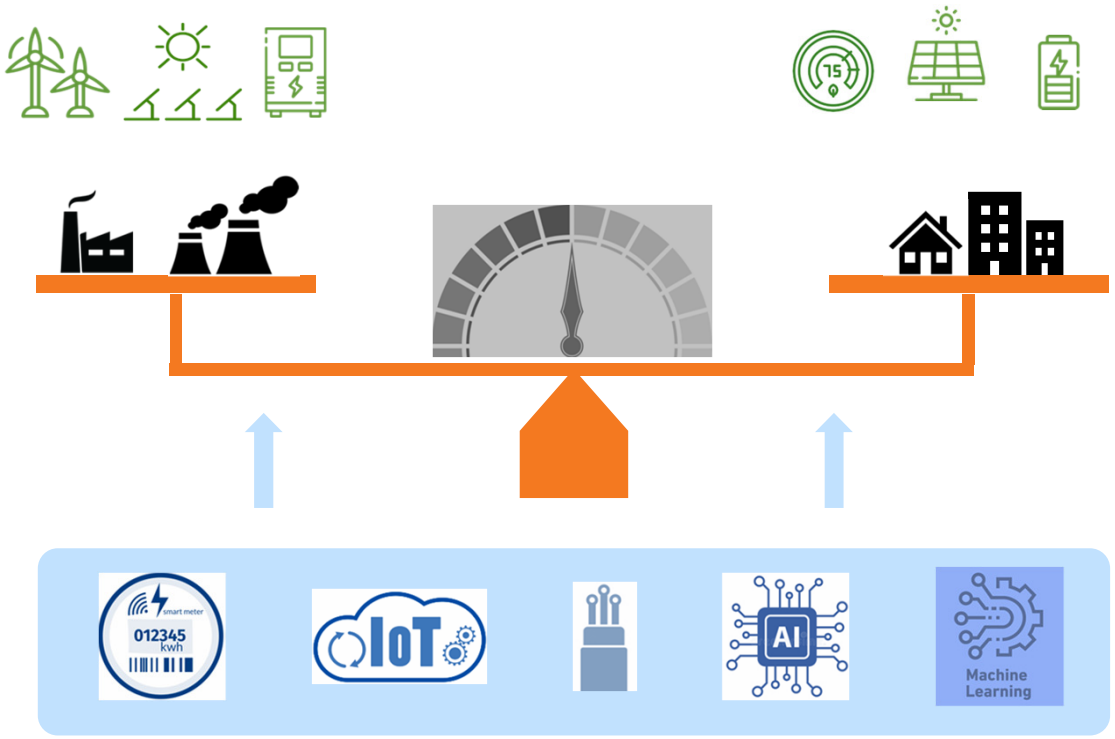
2022 Acquisition by Schneider Electric

Century-Old Electric Power Industry is Disrupted

New Variable Generation, Smart Loads, and Storage

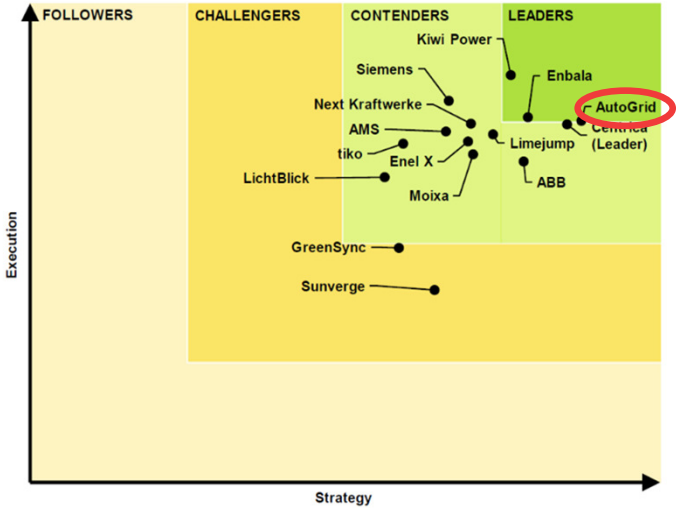
Traditional Generation and Loads

Enabling Technologies



Ranked **#1** Flexibility Management Platform by Industry Analysts

#1 VPP Platform

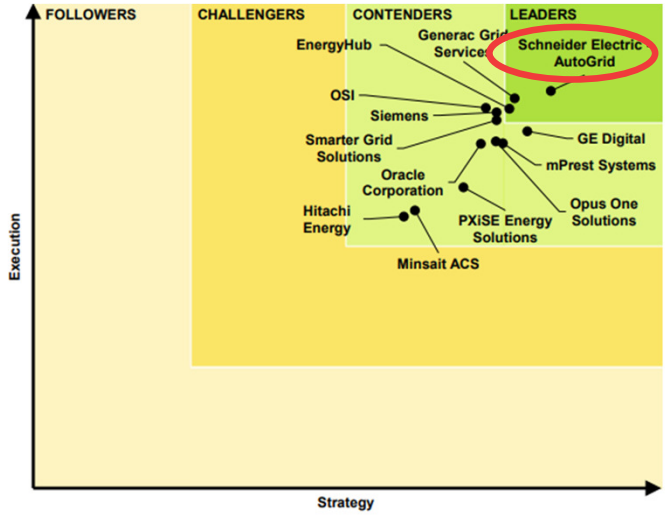


Virtual Power Plant Leaderboard

AutoGrid

Guidehouse INSIGHTS

#1 DERMS Platform



Distributed Energy Resource Management System Leaderboard

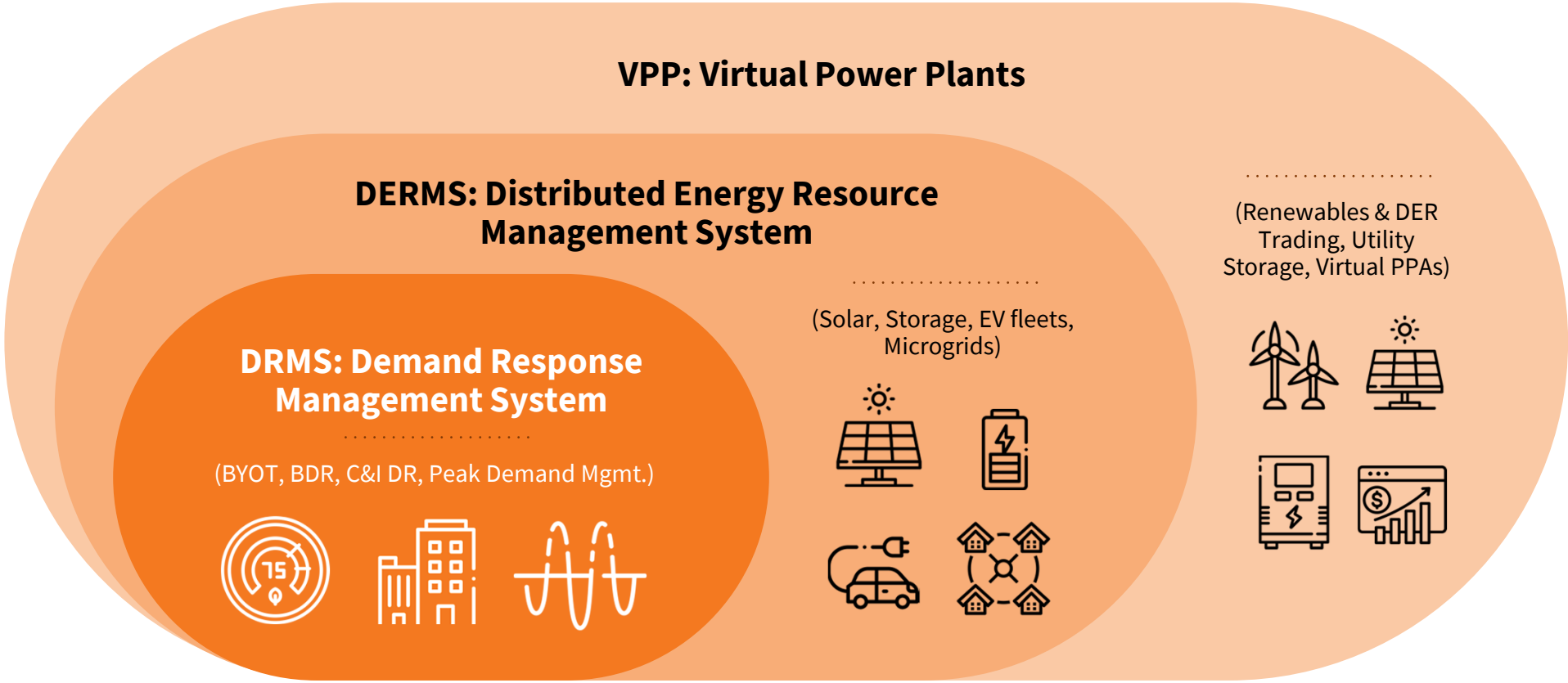
arpa·e CHANGING WHAT'S POSSIBLE

DISTRIBUTECH INTERNATIONAL

WORLD ECONOMIC FORUM

ISGF India Smart Grid Forum

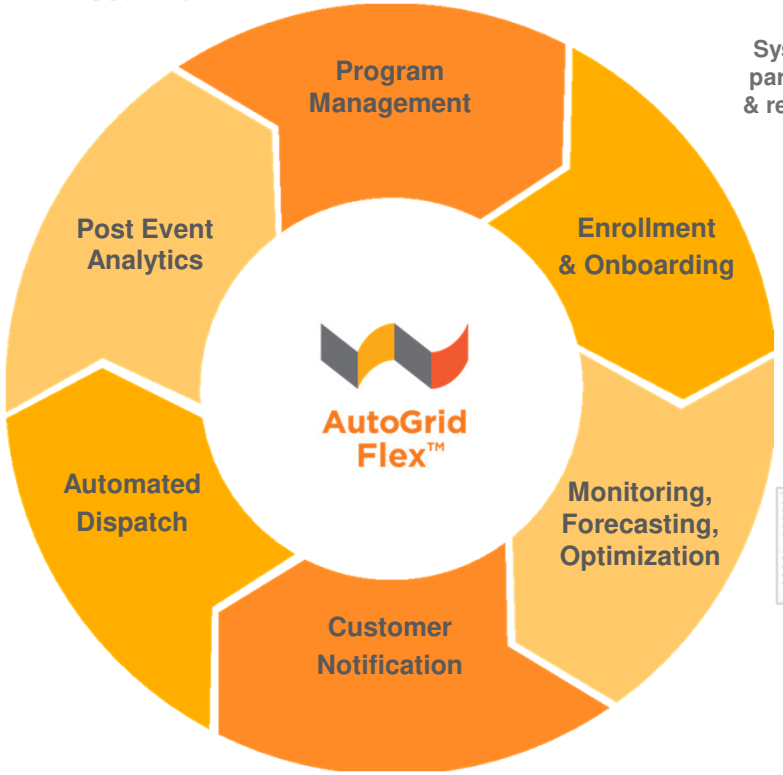
Virtual Power Plant Definition



The VPP Asset Lifecycle

Program Rules and Constraints

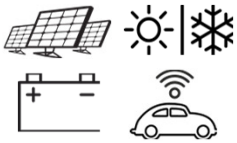
M&V, Settlements & Incentives

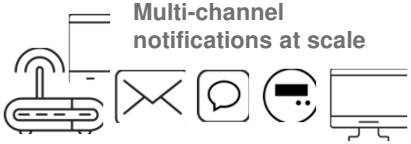


System of Record for participant enrollment & resource onboarding

24x7 ML/AI based Algorithms

Open-Standards & API-based Dispatch and Controls





Multi-channel notifications at scale

AutoGrid

Comprehensive Functionality

- Peak Shaving / Shifting, Renewable Balancing
- Capacity, Energy, Ancillary Services
- Voltage & Frequency Based Dispatch
- Residential, Commercial, Industrial Programs

Advanced Analytics

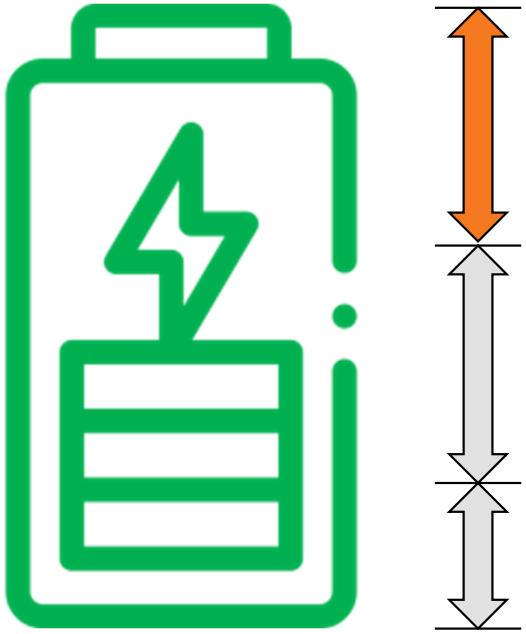
- Uses ML, AI, and Big-Data throughout
- Meter & Device Level Data processing
- Monitoring, Forecasting & Optimization
- BI Reports & Utility Dashboards
- Customer Segmentation and Personalization

Utility-Grade Cyber-Security

- Highly secure mission-critical deployment
- 24x7x365 Network Operation Center (NOC)
- SOC2 & NERC-CIP attested
- Cleared US DOE & DOD diligence

AutoGrid VPP Rents Residual Capacity in Assets

Customer-sited Asset



Underutilized capacity
- Grid balancing
- Peak shaving
- Renewable firming

Bill optimization
- Avoid peak rate periods
- Maximize rooftop solar

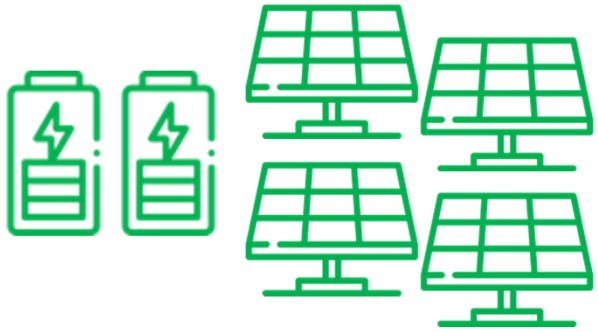
Reserve Margin
- Backup power

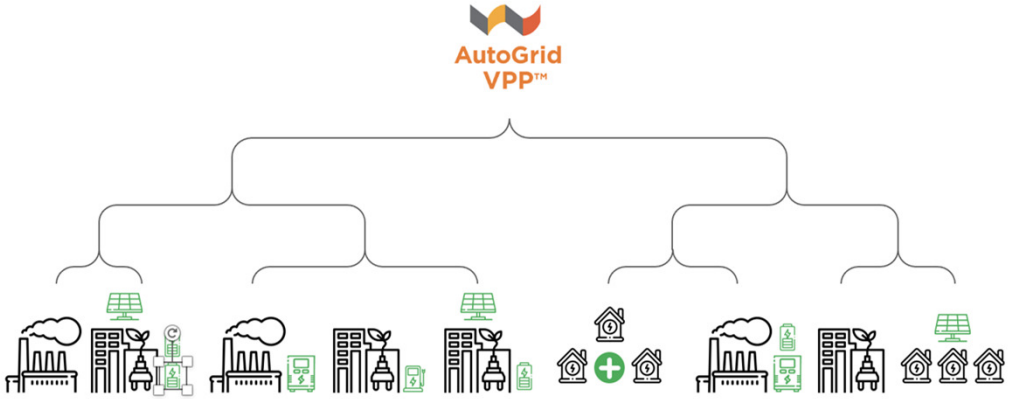
AutoGrid VPP™

AutoGrid pays asset owner for visibility into asset and control under contracted terms, eg:

- Date and time ranges
- Maximum duration
- Maximum hours per year
- Notice lead time

VPPs: A New Model for Energy Asset Development





Centralized Generation

- Large scale, colocated assets owned by developer or plant operator
- Plant operator responsible for physical maintenance, upkeep, interconnection

Virtual Power Plant

- Assets distributed and owned/maintained by 3rd parties
- Asset owners responsible for siting, construction, and interconnection
- AutoGrid pays asset owner for access/control rights to equipment

In both cases upfront investment to acquire physical assets

Energy AI Systems: Turnkey Grid Services from DERs

Example offtakers:

CPA CLEAN POWER ALLIANCE

PG&E Pacific Gas and Electric Company

ISO new england

California ISO

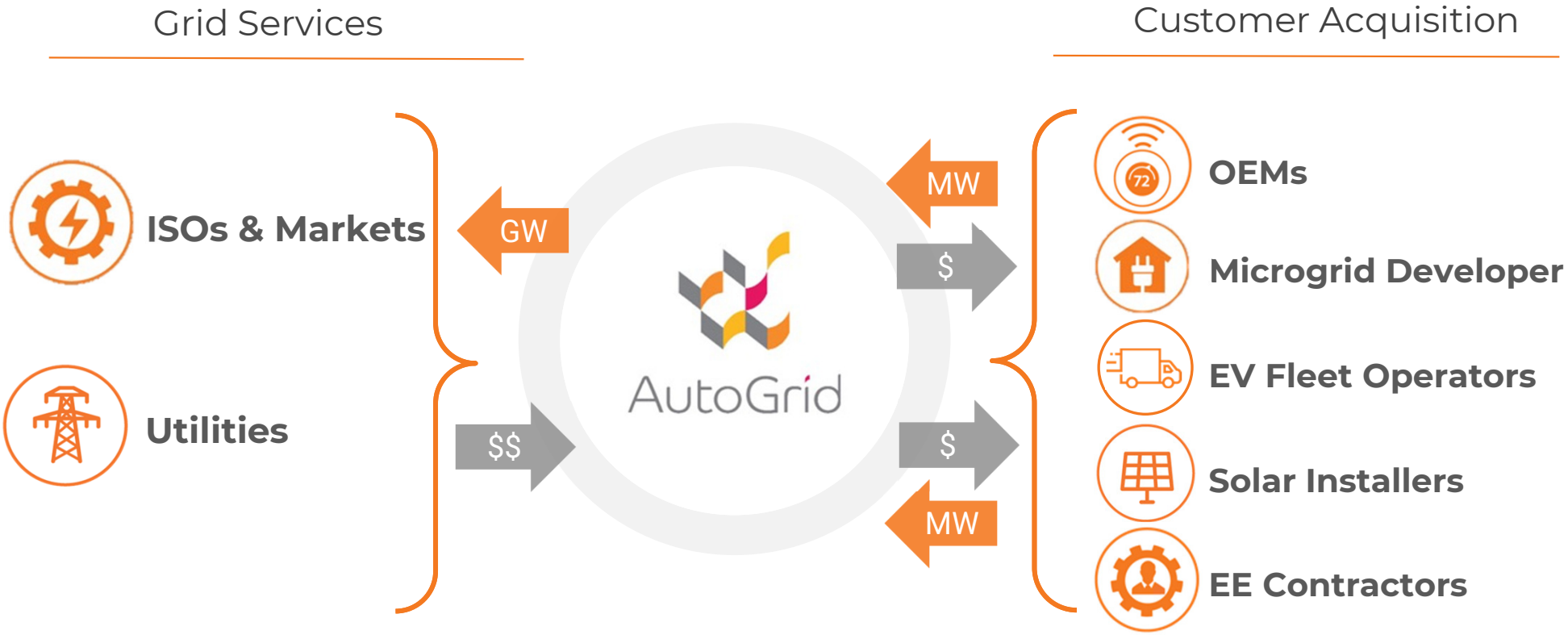
pjm

ercot

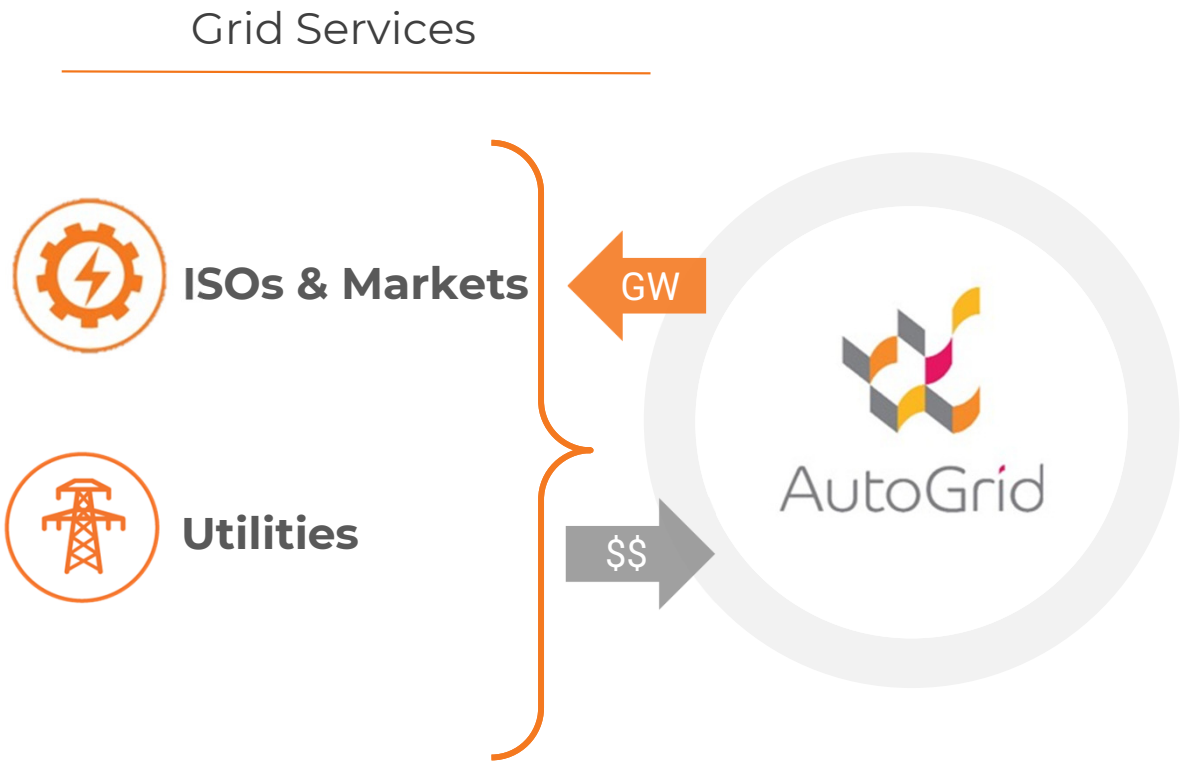
New York ISO Independent System Operator

nationalgrid

AutoGrid Simplifies and Accelerates VPP Deployment



AutoGrid Simplifies and Accelerates VPP Deployment



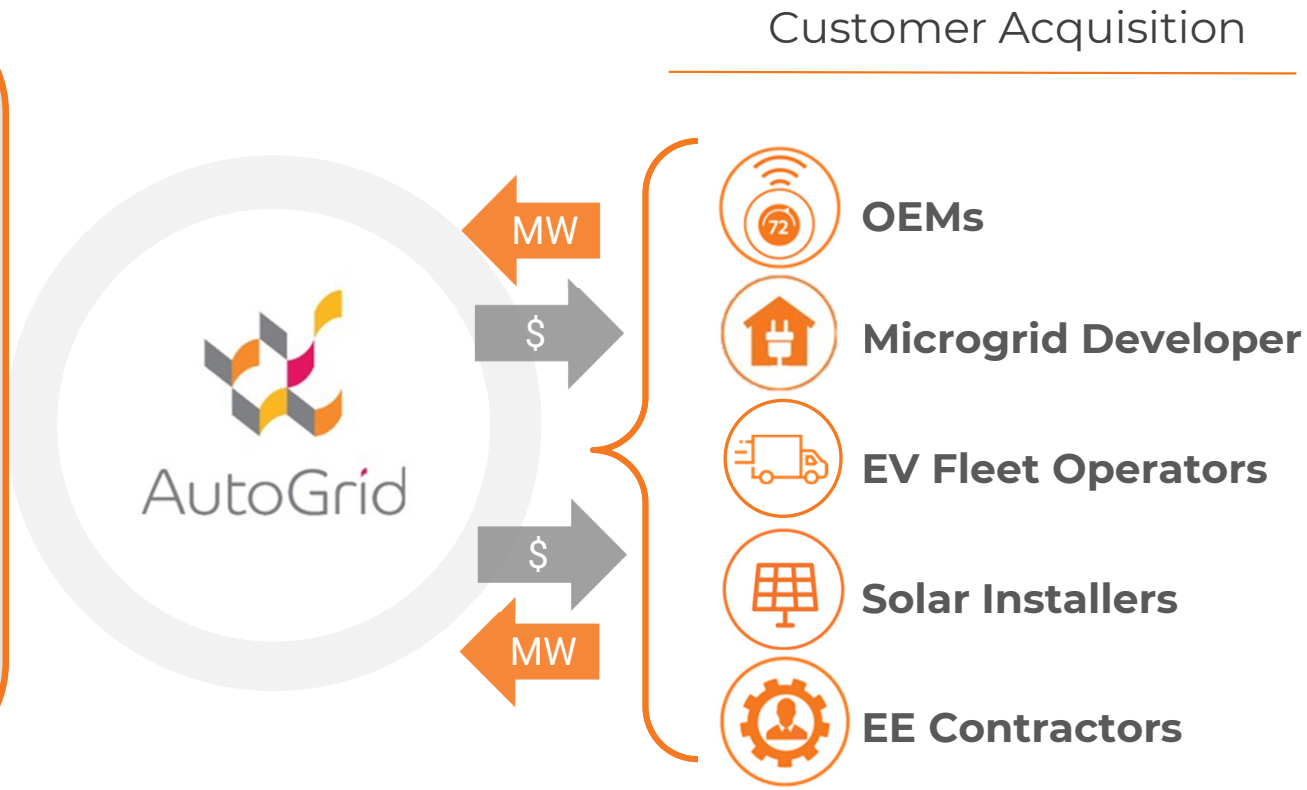
Why Attractive to Offtakers?

- Familiar procurement model, similar to PPAs
- Aligned incentives with pay-for-performance pricing
- Fast delivery of MWs
- Scalable capacity sizing
- No appetite or ability to evaluate and contract with full landscape of DER vendors

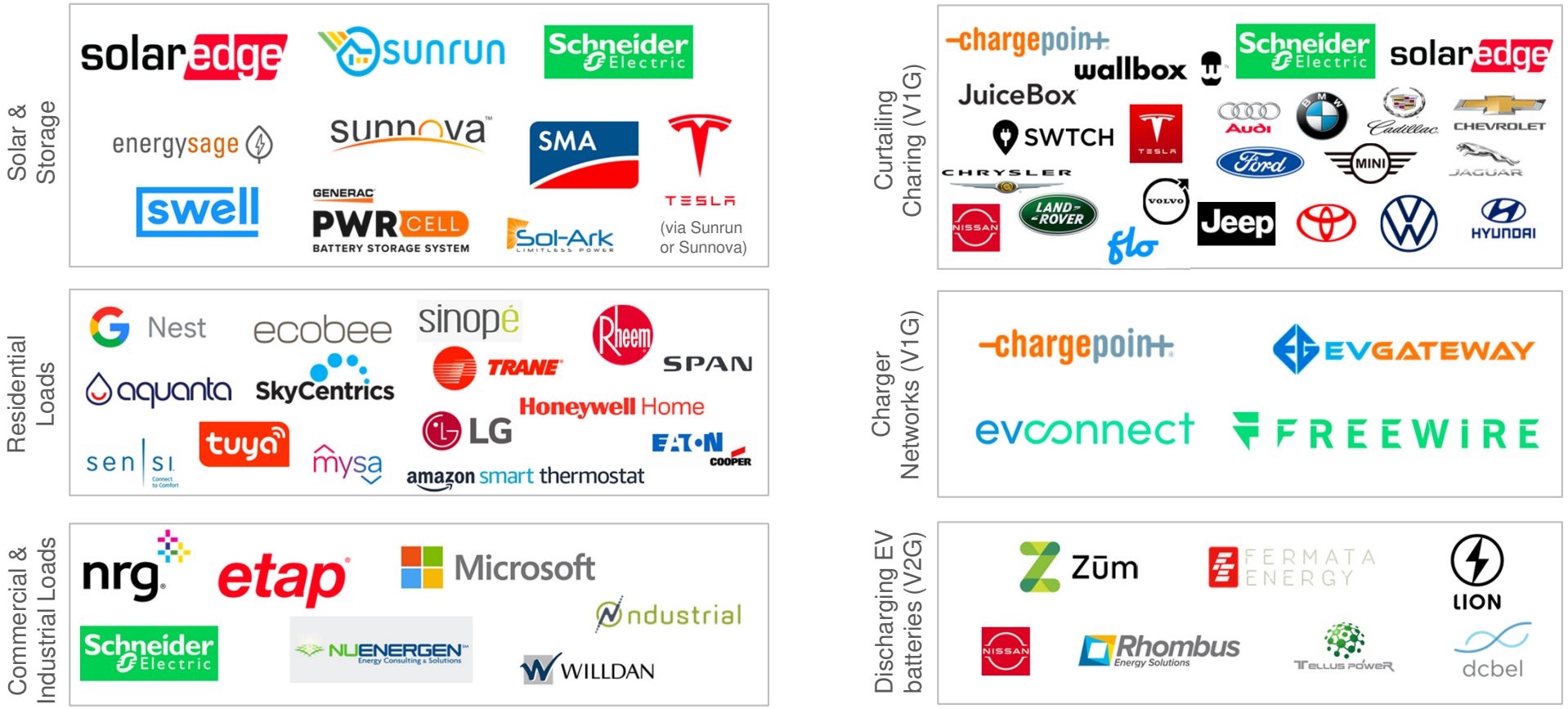
AutoGrid Simplifies and Accelerates VPP Deployment

Why Attractive to Partners?

- Improves unit economics of hardware sales with program incentive payments
- Offers additional revenue stream to partner
- Obviates the need to build sophisticated inhouse grid services team
- Streamlines or circumvents utility contracting process



Largest Ecosystem of DER Partners for VPP Supply Assets

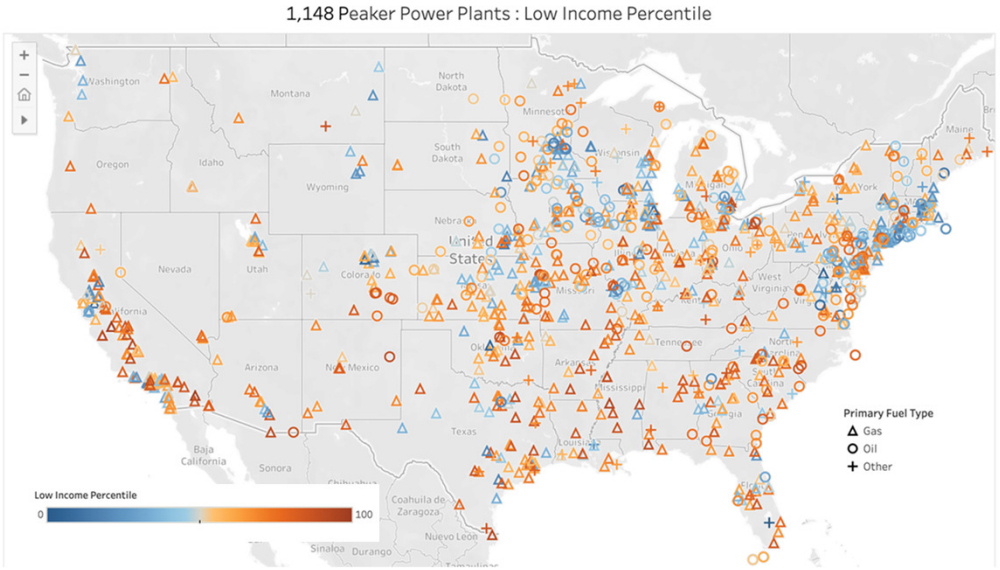


Offering the widest choice with multi-segment multi-brand offering

Peaker Plant Basics

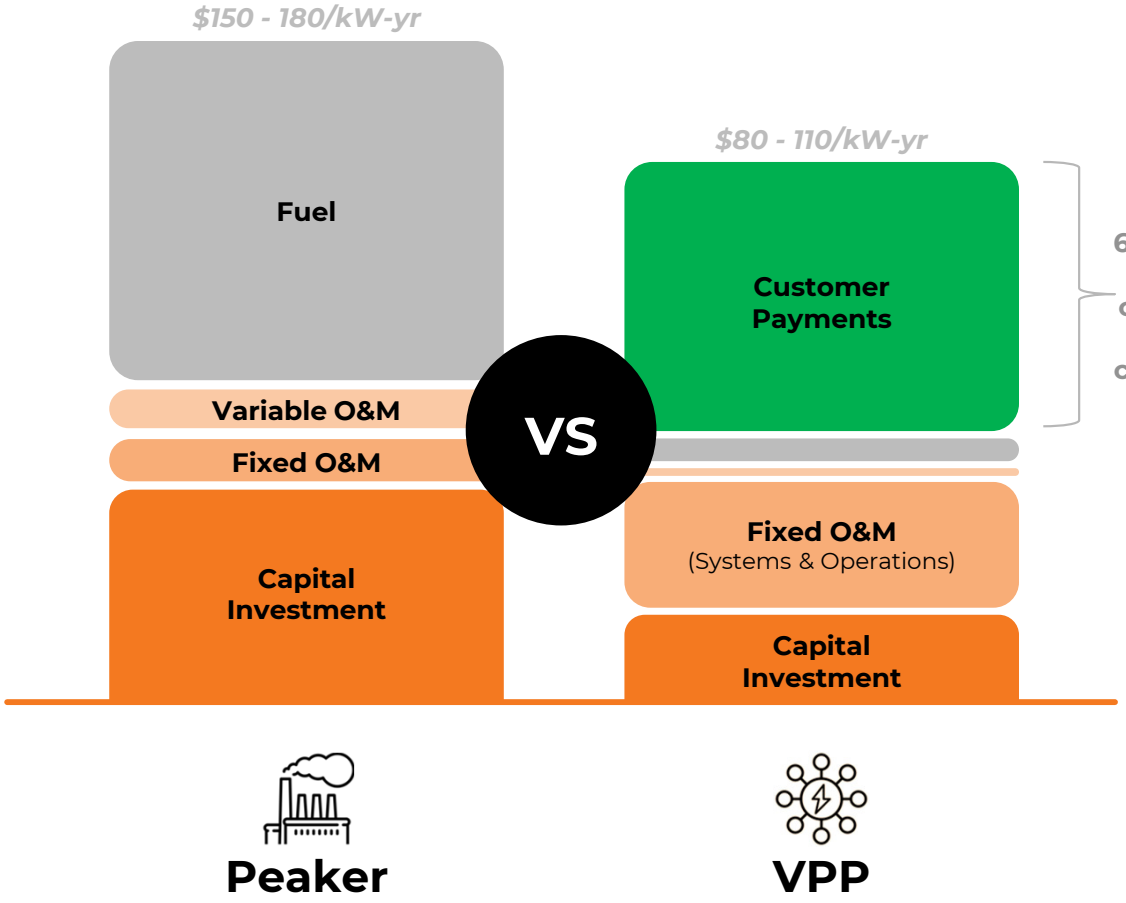
- Able to start and sync rapidly (less than 30 minutes)
- Primarily simple cycle combustion engine, fueled with gas or oil
- More than 1000 peakers in the US
- Operates just a few hundred hours per year (<10% capacity factor)
- Most expensive generation source by Levelized Cost of Energy

AND… disproportionately located near low income and marginalized communities



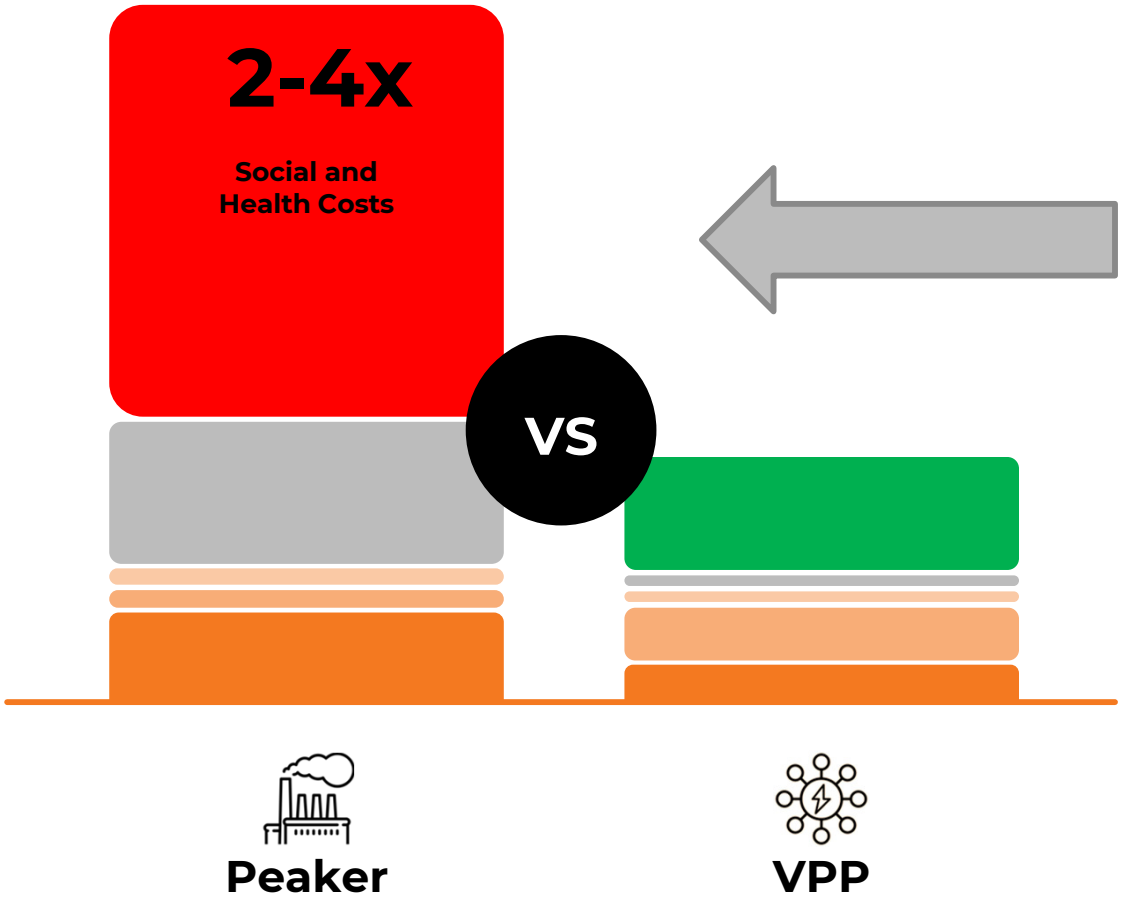
AutoGrid

Virtual Power Plants Offer Superior Alternatives to Peakers



- Zero Carbon
- Faster to Deploy. Targeted, Expandable
- Cheapest Resource
- Empower Consumers
- Accelerate energy transition

The Full Economic Picture Is Much More Stark



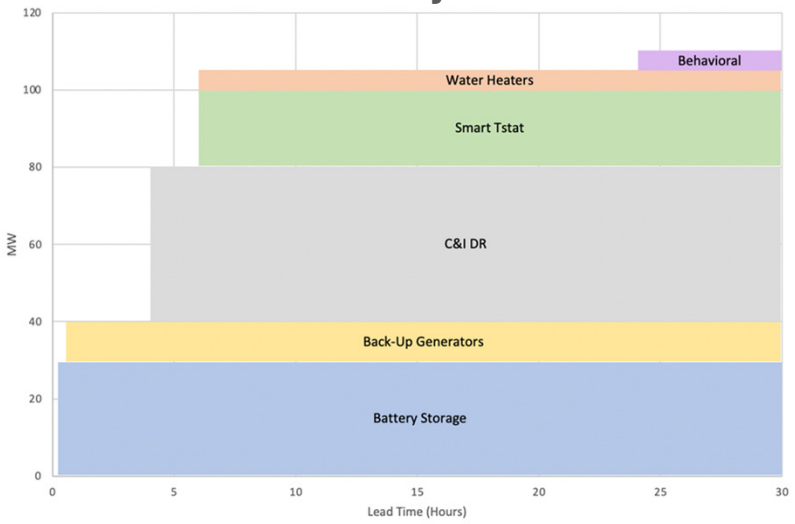
Social costs include emissions impact of CO2, NOx, and SOx

Health costs include morbidity, mortality, and work days lost

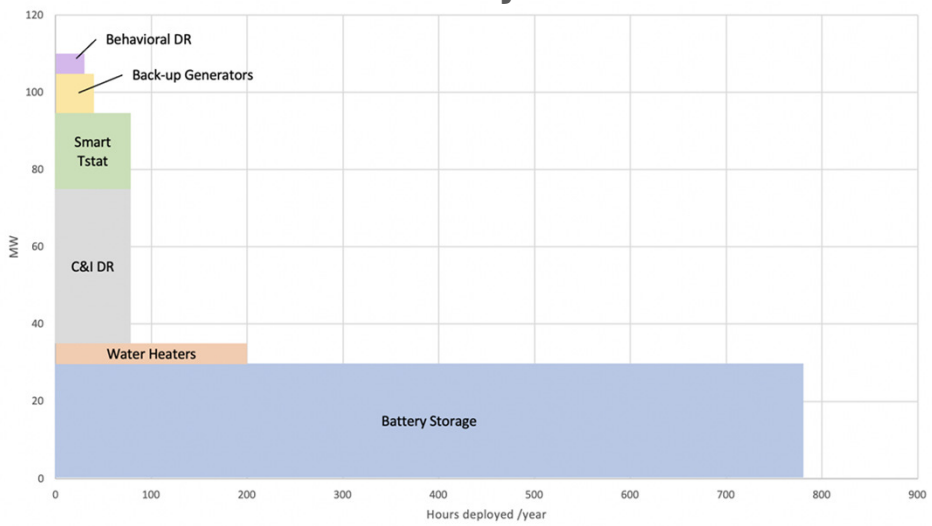
VPP Optimization to Mimic Conventional Generation

- Stack and orchestrate portfolio assets based upon specific constraints
- Daily/hourly availability forecasts incorporate device and program limits, as well as performance derating based on seasonality or fatigue

MW Available by Lead Time



MW Available by Annual Hours



VPP Barriers and Challenges

1. Open Standards and Interoperability
2. Inconsistent Market Rules and Regulations
3. Customer Education, and not Customer Confusion
4. Well-Designed Incentives
5. Telemetry and Integration Issues
6. Performance Guarantees and Financial Risk

Questions?

Alex Pratt
Strategic Business Development
alex.pratt@auto-grid.com

Extra Slides