

ENABLING ELECTRIFICATION FOR A CLEANER FUTURE





Leading the way in maximizing today's available energy for a cleaner tomorrow.



EV Charging Infrastructure and Energy Management Solutions.

Designed & Built in North Carolina.



INNOVATION

Developed and commercialized the first digital circuit breaker technology and performance optimized EV charging infrastructure.

OPERATIONS

Committed to operational excellence with vertically integrated 'people-process-capabilities' from research & development to manufacturing and product delivery.

PEOPLE

Our ~60 team members are experts in their fields, with 71% devoted to product development, engineering and manufacturing.

SUSTAINABILITY

Realizing a cleaner tomorrow with a goal of driving >500 megatons of GHG reduction by 2030 with our operations and products.

In 2019, Atom Power commercialized the first solid-state **Digital Circuit Breaker**.

And received the first ever **UL listing** for a solid-state circuit breaker in history.



Paving the way for last-mile **intelligent power delivery**.



**Demand
Response (DR)**




**Demand Energy
Resources (DER)**

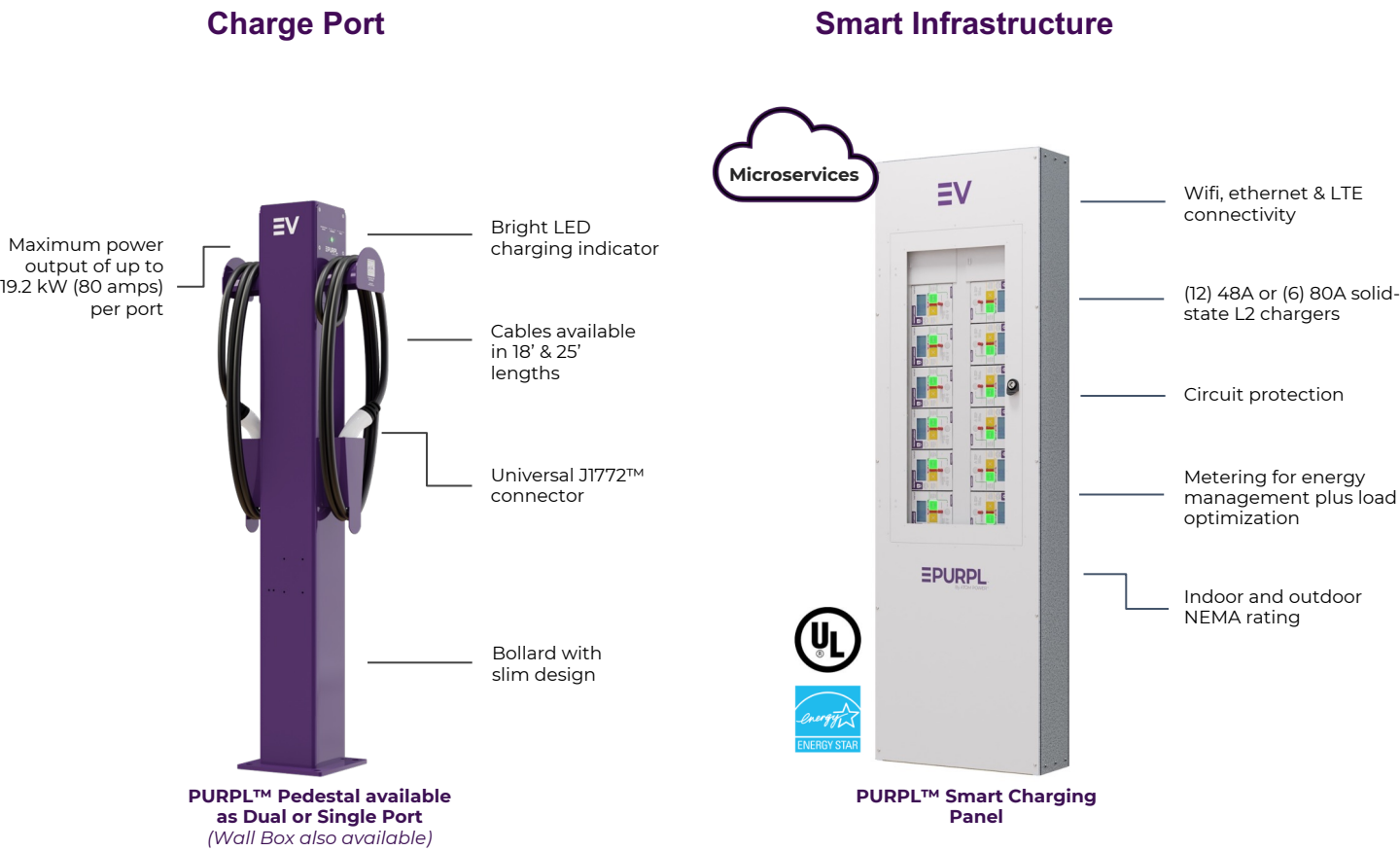


**EV Charging
Infrastructure**

Benefits of our approach:

-  **Maximized energy efficiency**
-  **Improved carbon footprint**
-  **Scalable EV charger asset deployment**
-  **Optimized TCO, Capex, and Opex**
-  **Improved asset performance**
-  **Deliver peace of mind**

FULLY INTEGRATED & OPTIMIZED EVSE SOLUTION



FLEET EV CHARGING



Service



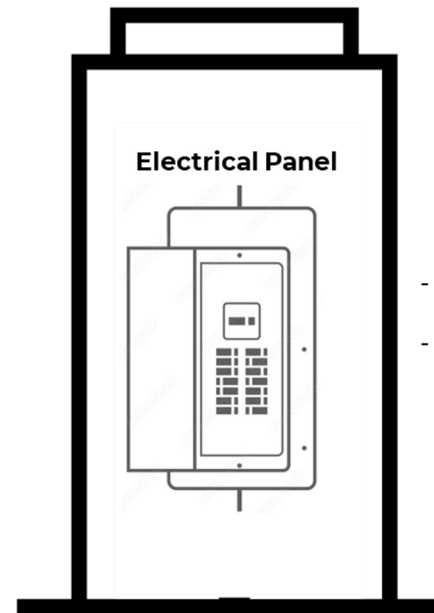
Maintenance



Reliability

What if we rethink what it means to be an EVSE?

Traditional



What's safe inside the facility?

- "Dumb" mechanical circuit breaker
- Cheapest equipment

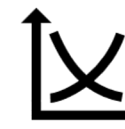
Repair Costs: \$



What's located in the parking lot?

- Expensive charging equipment
- Bollards needed for protection

Repair costs: \$\$\$\$



Demand Management

- Branch or panel via cloud

FLEET EV CHARGING



Service

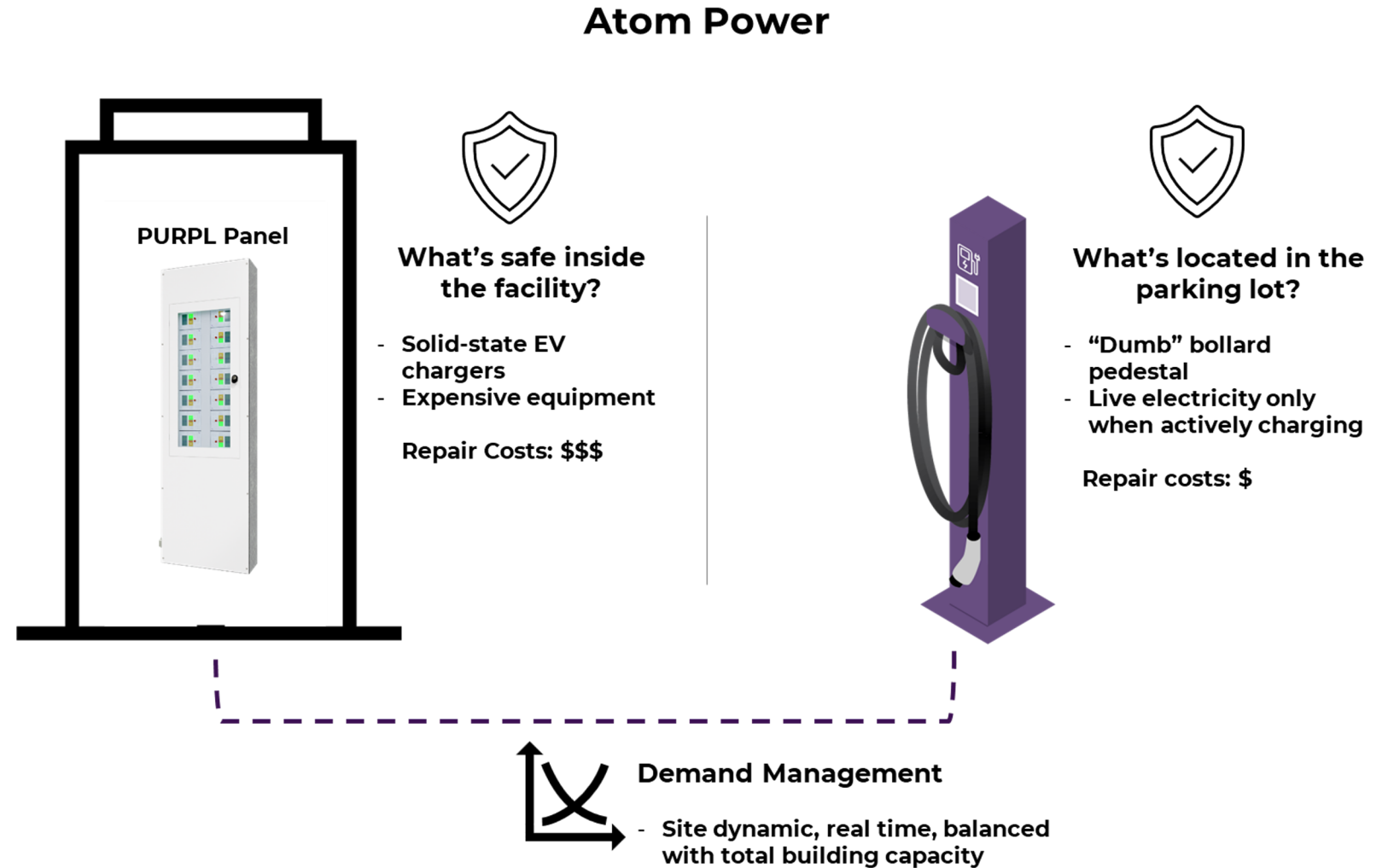


Maintenance



Reliability

What if we rethink what it means to be an EVSE?



FLEET EV CHARGING

-  **Life Safety Device**
-  **Current Limiting**
-  **Beyond Code Compliance**

What if EVSEs were held to a higher standard?

	TRADITIONAL EVSE UL 2231	ATOM POWER UL 489/UL 2231
Overload Testing (489_7.1.3 vs 2231_27)	150% of rating 50x	600% of rating 50x
Endurance Testing (489_7.1.5 vs 2231_28)	6,000 operations	10,000+ operations
Surge Protection (489_SF4.5 vs 2231_24.10)	6kV	6kV
Short Circuit Test* (489_7.1.7 vs 2231_32)	3.5kA	200kA
Voltage to the Pedestal While Not Charging	Typically Present	No
How Fast Can You Stop Power	N/A	400µs
Let Through Current	Maximum Available Fault Current	1.5kA

FLEET EV CHARGING



Established Telematics Integrations

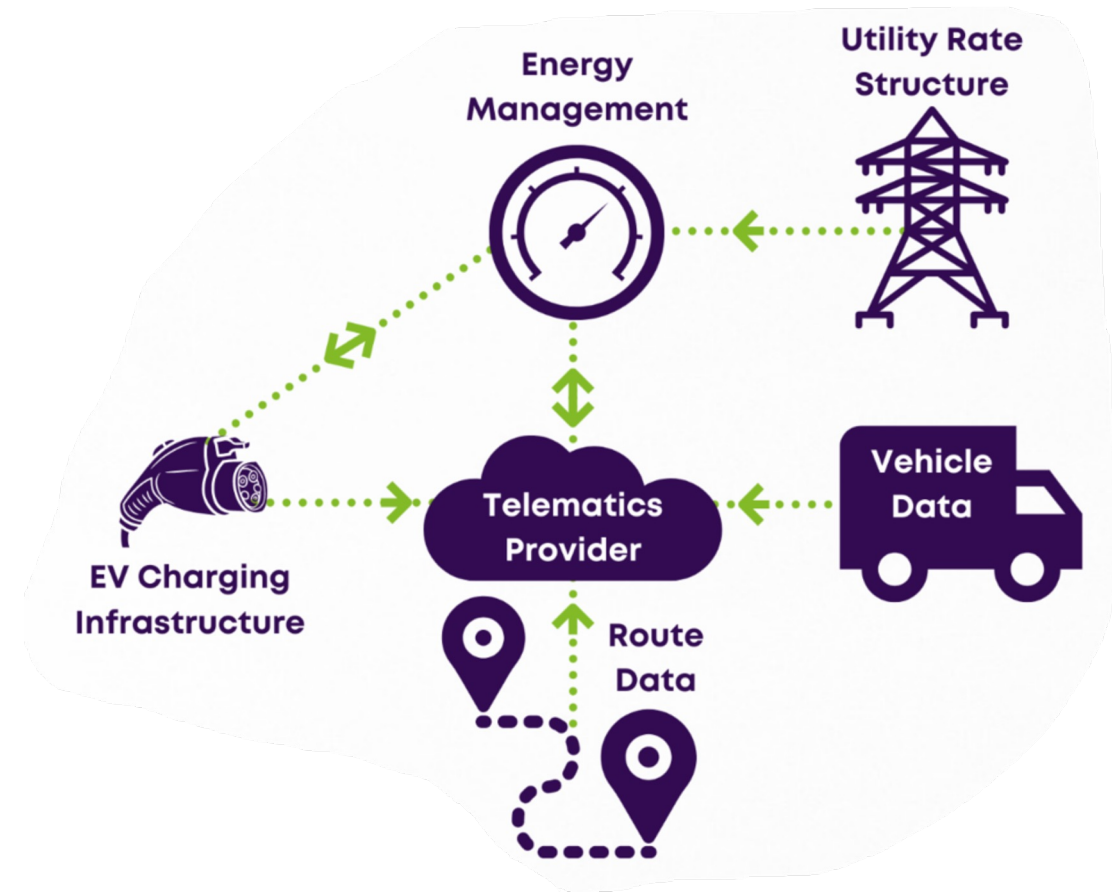


Open API



Scheduling & Priority Capabilities

Real Time Visibility & Control So Your Vehicles
Are Always Ready



Service and Maintenance: Improve Reliability while Reducing Costs

FLEET EV CHARGING



Service



Maintenance



Reliability

How often do you service and maintain your electrical panel?

- No Moving Parts - Solid-State with Passive Cooling
- Breaker can be replaced in <5 mins by a certified electrician
- Metal Dispenser - Rugged Design, Not Expensive
- EV Cable replaceable by certified electrician
- Local Control Operates Without Reliance on Network
- Integrations Alert Abnormal Conditions
- Remote Diagnostics - Prevent Service Calls

THANK YOU.

Logan Rosevear, PE
Application Engineer
lrosevear@atompower.com

