



Commercial Use Cases of UEP's Zinc Batteries

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NAATBatt SODIUM ZINC BATTERY WORKSHOP

Nov 19, 2025



About Urban Electric Power

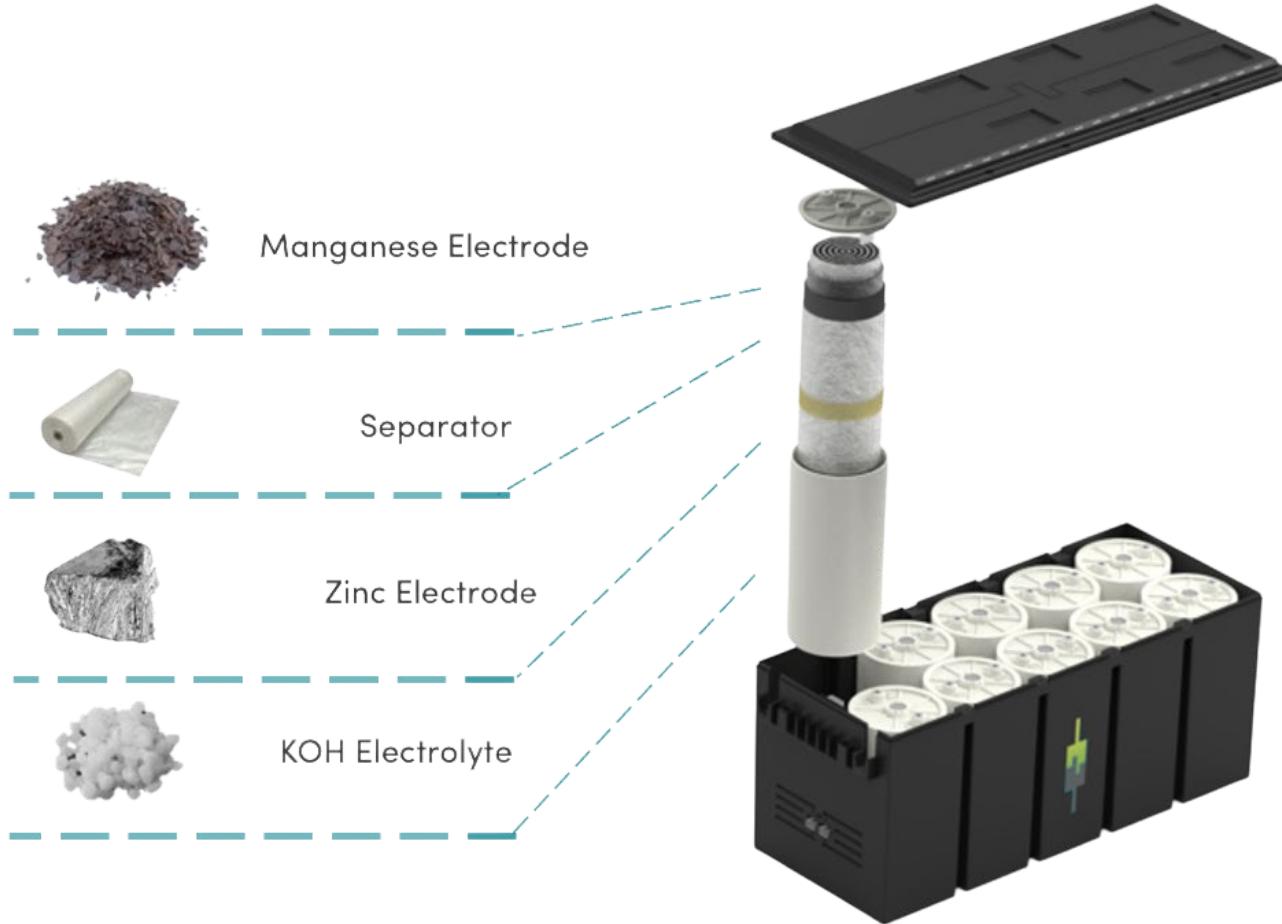
A global leader in zinc-based battery energy storage systems

- Headquartered in New York with a combined > **100MWh** battery manufacturing and testing facility between New York and Mumbai.
- **12+ years** of development in battery manufacturing and product design.
- **Vertical integration** from R&D to battery production and system engineering.
- Joint venture with Indian industrial conglomerate **Godrej Enterprises**.



Rechargeable Battery Technology: Alkaline Zn-MnO₂

Same safe chemistry as a traditional AA battery; Engineered for rechargeability



Fire safe, non-toxic



Sustainable, Recyclable,



Earth abundant materials.
No Lithium, Cobalt or rare earth
materials



Robust supply chain
Domestic manufacturing

Product Architecture

Modular, scalable design builds from kWh to MWh.

Performance highlights

- Durations of 2-24 hours
- Low self-discharge rates (<2% annually)
- Highly energy dense in deep utilization LDES applications (~250 Wh/L)

Battery cell



Battery module



Mini Pod



Mini Pod

Indoor commercial rack



Outdoor industrial/utility cabinet



Zn-MnO₂ Manufacturing Plant

- Automated battery manufacturing plant in Mumbai, India.
- Automated slurry mixing, electrode coating, tab welding, jellyroll winding, terminal welding.
- Upgraded UEP plant in NY will be completely automated by 2026.



Use Cases

Multiple installation are underway for power backup and load management



**NYSERDA LDES Demonstration
Pearl River , NY - 1MWh**

NYSERDA-supported installation in Hudson Valley Innovation Campus for 10-hour Power backup and load management



**SUNY ONEONTA
Oneonta, NY - 3.6MWh**

New York Power Authority-supported installation for 6-hour of Power backup and load management



**Tribal Utility Authority
Dilkon, AZ - 13KWh**

Solar PV powered energy storage system installation that serves as the primary electricity source for off-grid homes.