ROCHESTER
PUBLIC UTILITIES
WE PLEDGE, WE DELIVER™

4.B. Authorization for Battery Energy Storage Agreements

Rochester Public Utilities Board Meeting
November 25, 2025

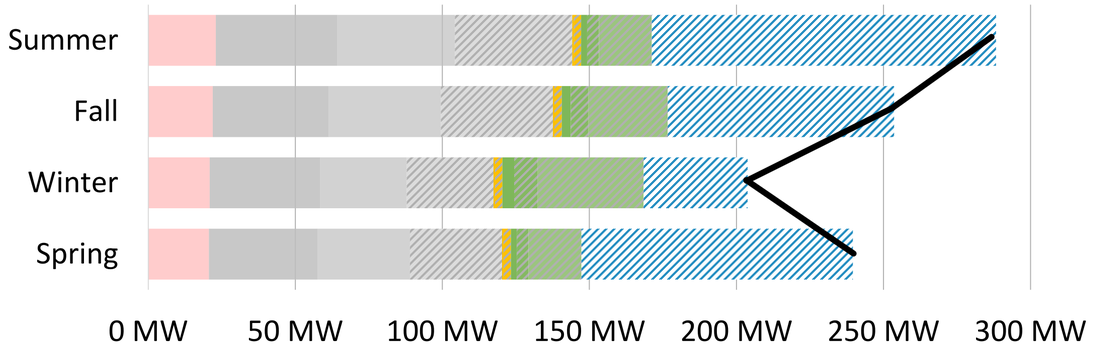
Power Supply Resource Plan | Reliable Capacity. Renewable Energy.

Reliable Capacity

Dispatchable Generation

Battery Storage

Demand Response

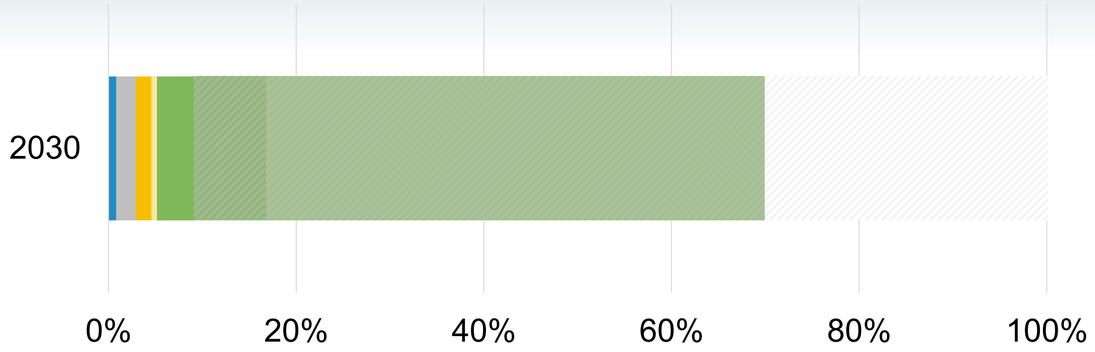


Renewable Energy

Wind

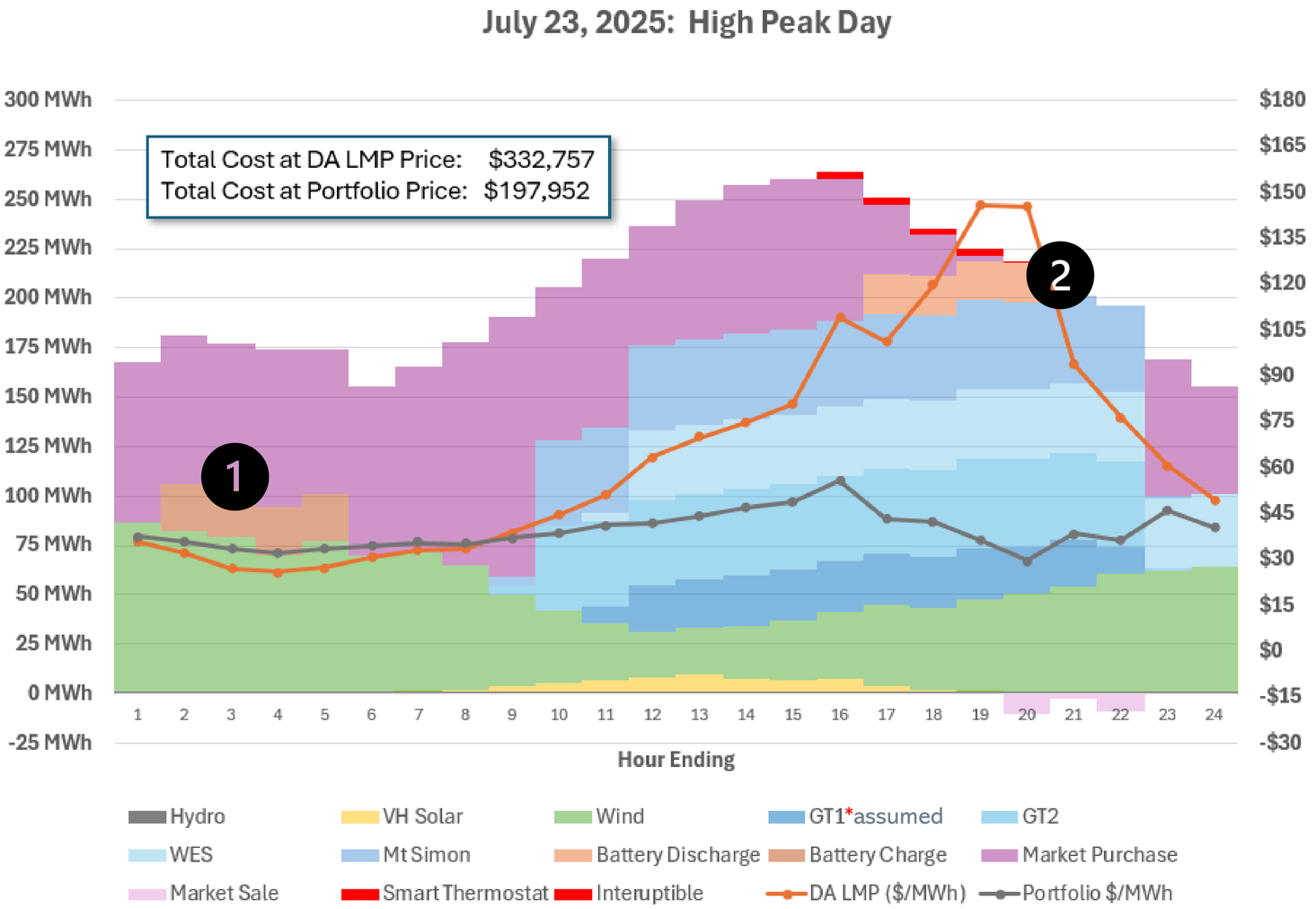
Solar

Hydro



Continued Conservation

Reliable Capacity | Battery Energy Storage System – Energy Arbitrage



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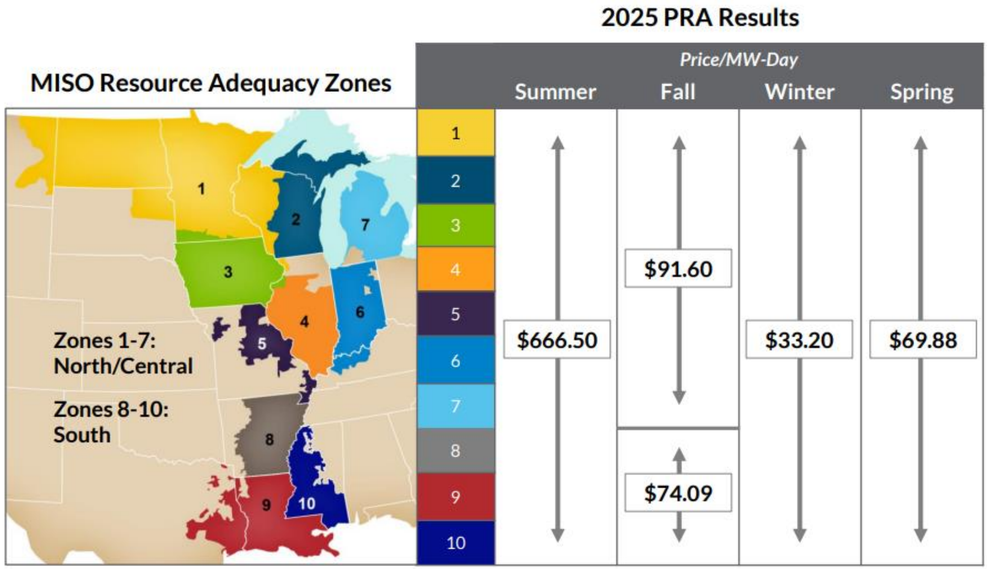
During high peak or high energy demand days, the Battery Energy Storage System (BESS) is strategically **charged during off-peak hours**, generally when Locational Marginal Prices (LMPs) are lower than the Portfolio Cost Price.

2

This stored energy can then be discharged during peak periods, either for **peak shaving** or, more **optimally, when LMPs are elevated**—avoiding the need to purchase energy from the market at high cost.

Additionally, any surplus energy stored in the BESS can be sold back into the market during these high-price periods, generating potential revenue and further enhancing cost-efficiency.

Battery Energy Storage System | Capacity Cost Trends



- **2025 auction yielded highest prices ever**
- **Caused by decreasing capacity margins across MISO due to unit planned retirements**
- **New builds are more questionable due to inflation costs and repeal of tax credits**
- **Upward cost pressures are expected to continue**

Summer Capacity at 2025 PRA prices

20 MW × $666.50/MW-day =
$13,330 per day x 92 days =

$1,226,360 → **$20.28 / kW-month**

Summer Cost of New Entry (CONE)
$1384.36 /MW-day → **$42.20 / kW-month**

Battery Energy Storage | Economic Case

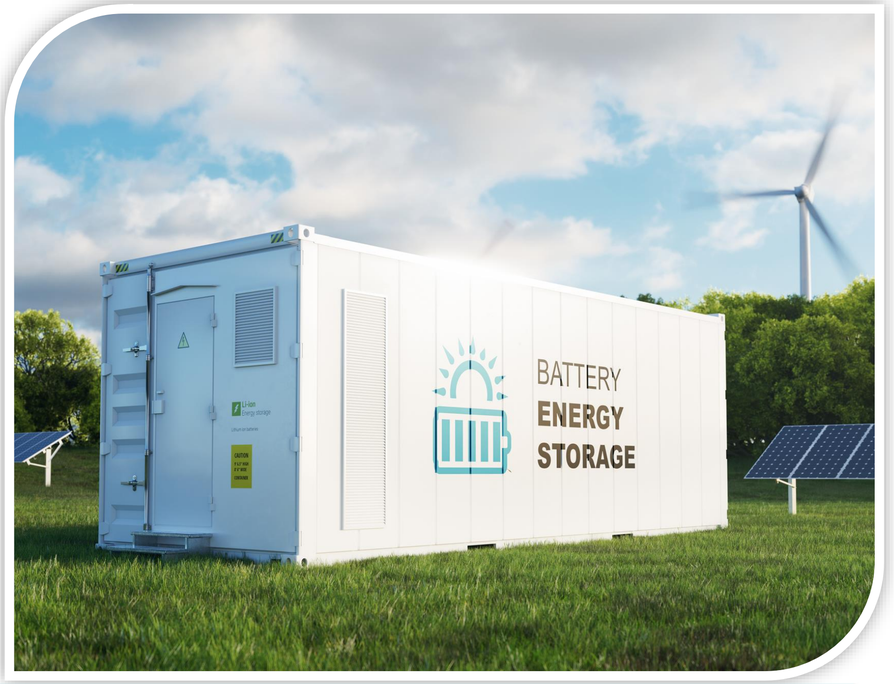
	MISO Resource Auction PY25/26				Battery Cost		Battery Size		Cost	Capacity Value	Net Value
Summer	$666.50	/MW-day	$21.92	/kW-mo	$14.00	/kW-mo	20,000	kW	$840,000	$1,315,461	
Fall	$91.60	/MW-day	$3.01	/kW-mo	$14.00	/kW-mo	20,000	kW	$840,000	$180,789	
Winter	$33.20	/MW-day	$1.09	/kW-mo	$14.00	/kW-mo	20,000	kW	$840,000	$65,526	
Spring	$69.88	/MW-day	$2.30	/kW-mo	$14.00	/kW-mo	20,000	kW	$840,000	$137,921	
									$3,360,000	$1,699,697	($1,660,303)
			EnergyAS Value							EnergyAS Value	
Annual			$6.31	/kW-mo			20,000	kW		$1,514,400	$1,514,400
							Net Total Cost		**$3,360,000**	**$3,214,097**	($145,903)

(Cost of Annual Capacity Hedge)

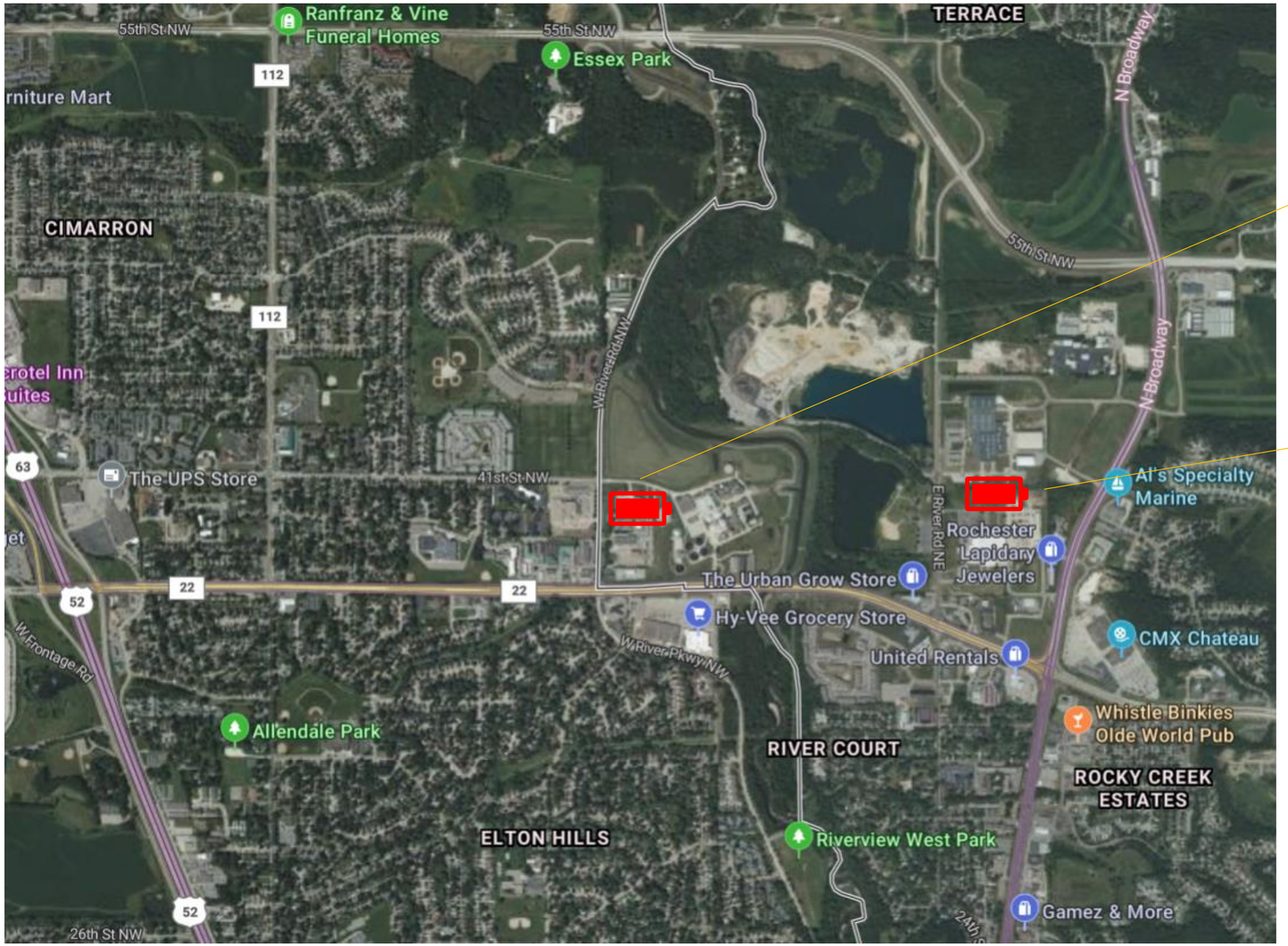
Source: TEA RPU Storage Study October 2025

Battery Energy Storage System | Current Actions

- **Fast Deployment**
  - Approximately 20 MW can be placed at Zumbro Substation and Service Center (RPU has site control)
  - Developer has line of site of supply that is already onshore (reduced tariff risk)
  - Connecting to distribution system means no interconnection delay
  - Permitting – simple zoning certification and site storm water review
- **Contract Structure**
  - Tolling agreement
    - RPU pays developer to build, own and maintain the BESS
    - RPU responsible for dispatch as market participant
  - Lease agreement
    - Grants site control for defined parcel to Lighshift
  - Interconnection agreement
    - Part of ordinary business for any device connected to the distribution system



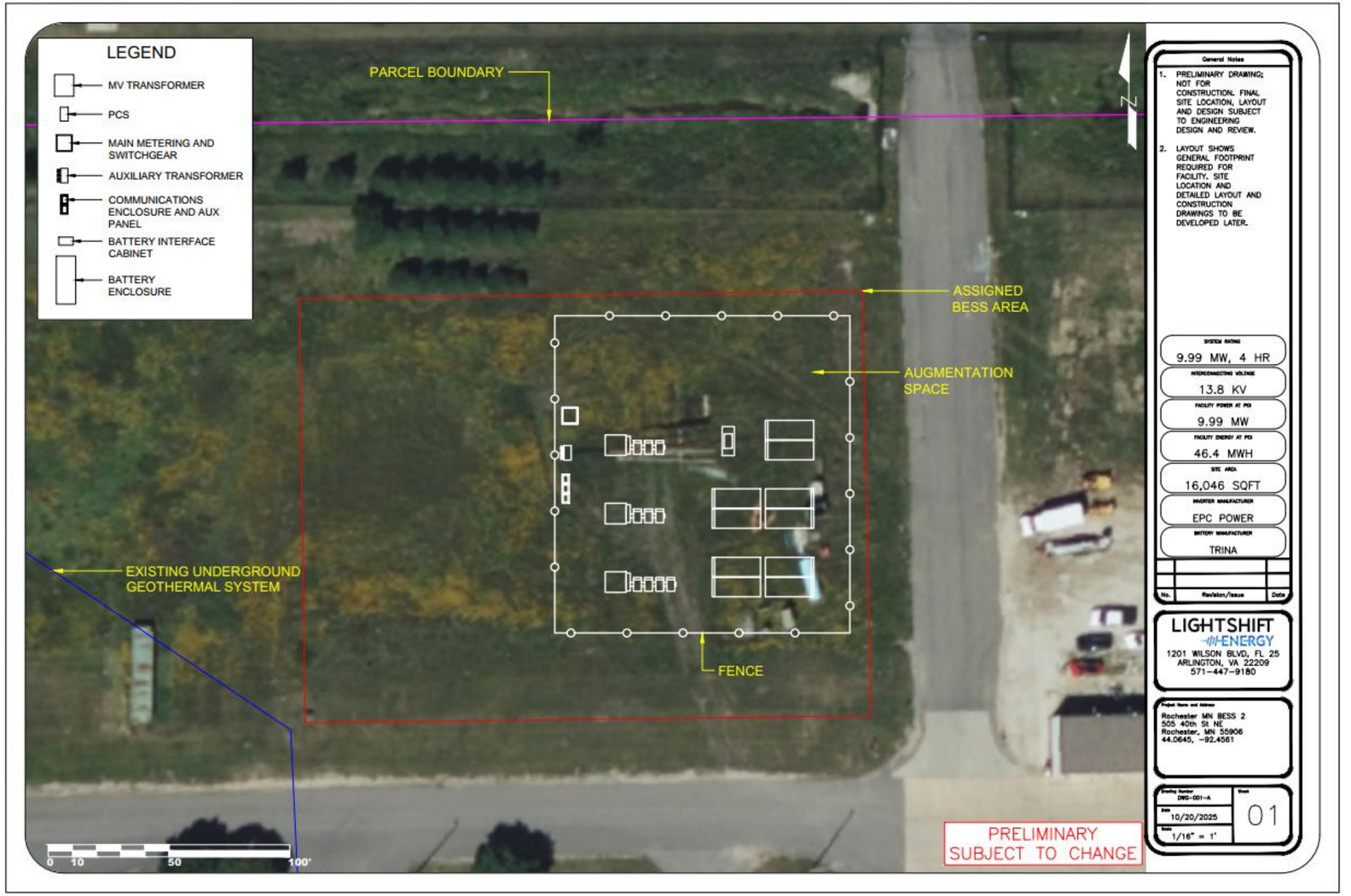
Battery Energy Storage System | Locations



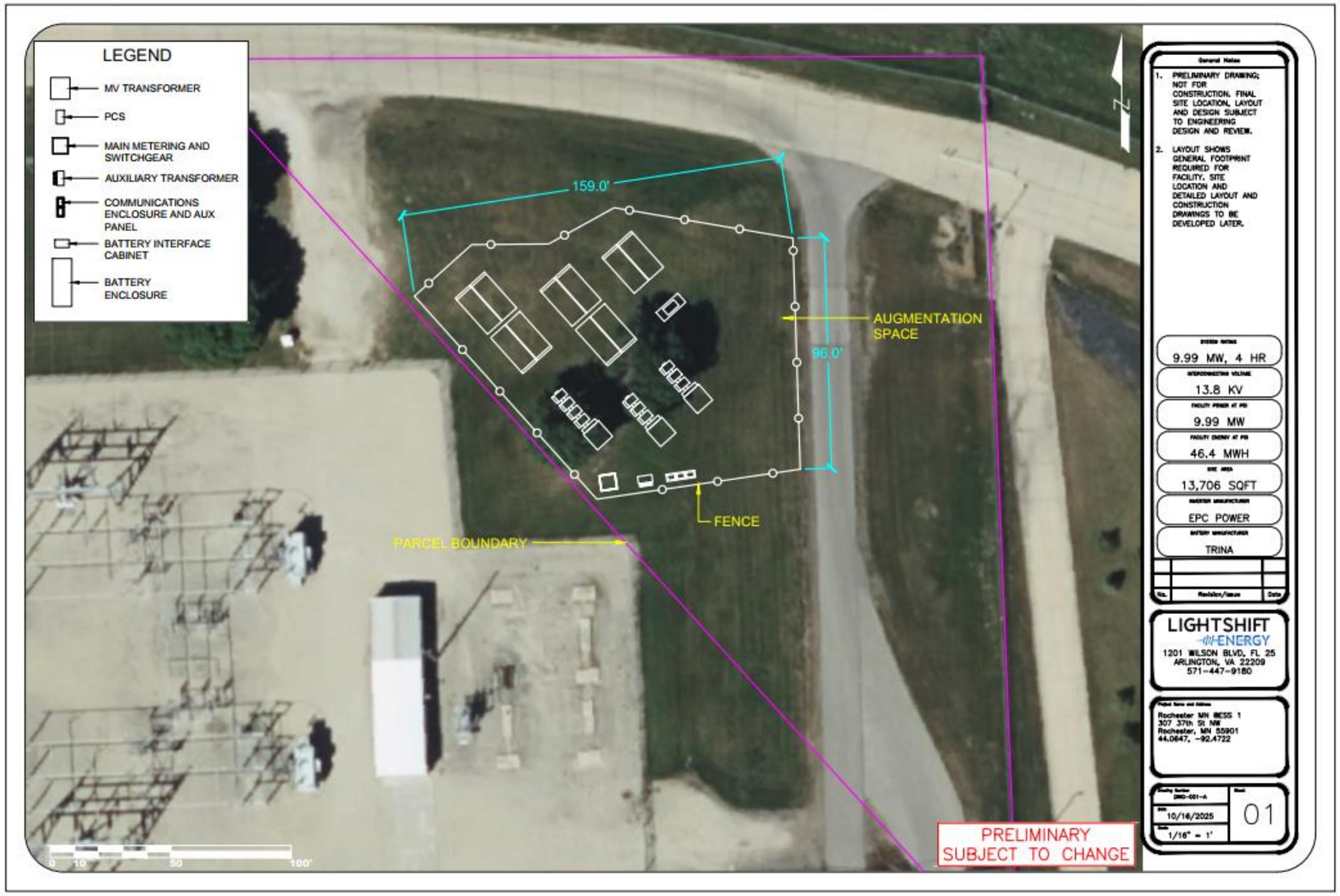
- **Zumbro Substation**
- **RPU Service Center**

- Both units will feed into the Zumbro Substation - on different feeders.

Battery Energy Storage System | RPU Service Center



Battery Energy Storage System | Zumbro Substation



Questions