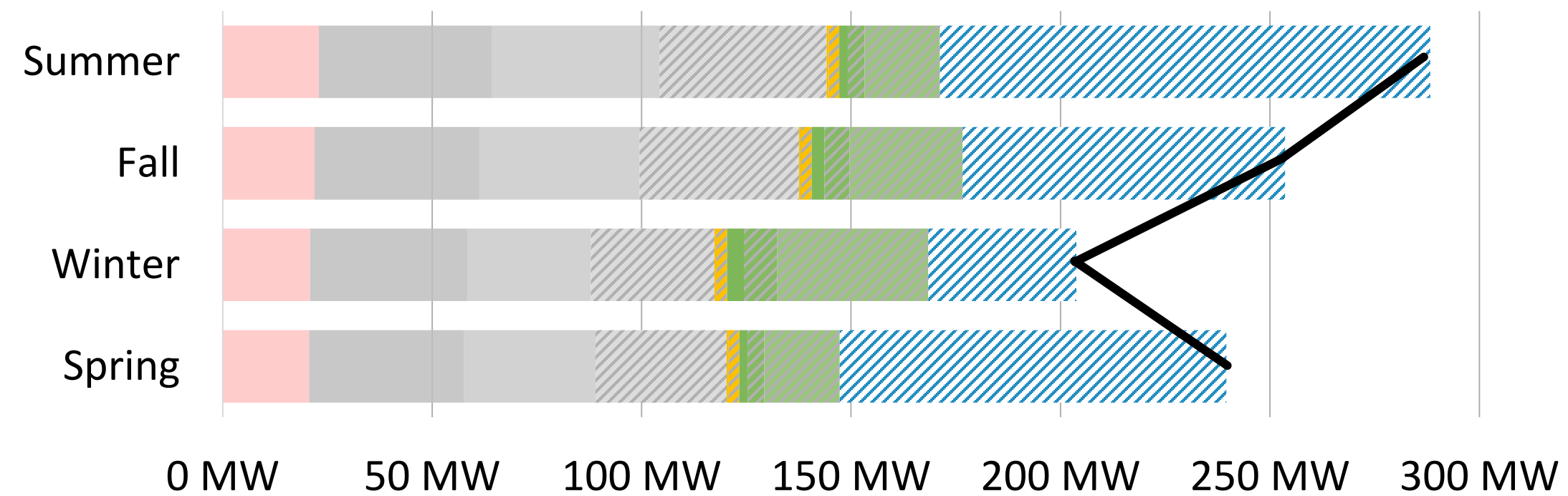
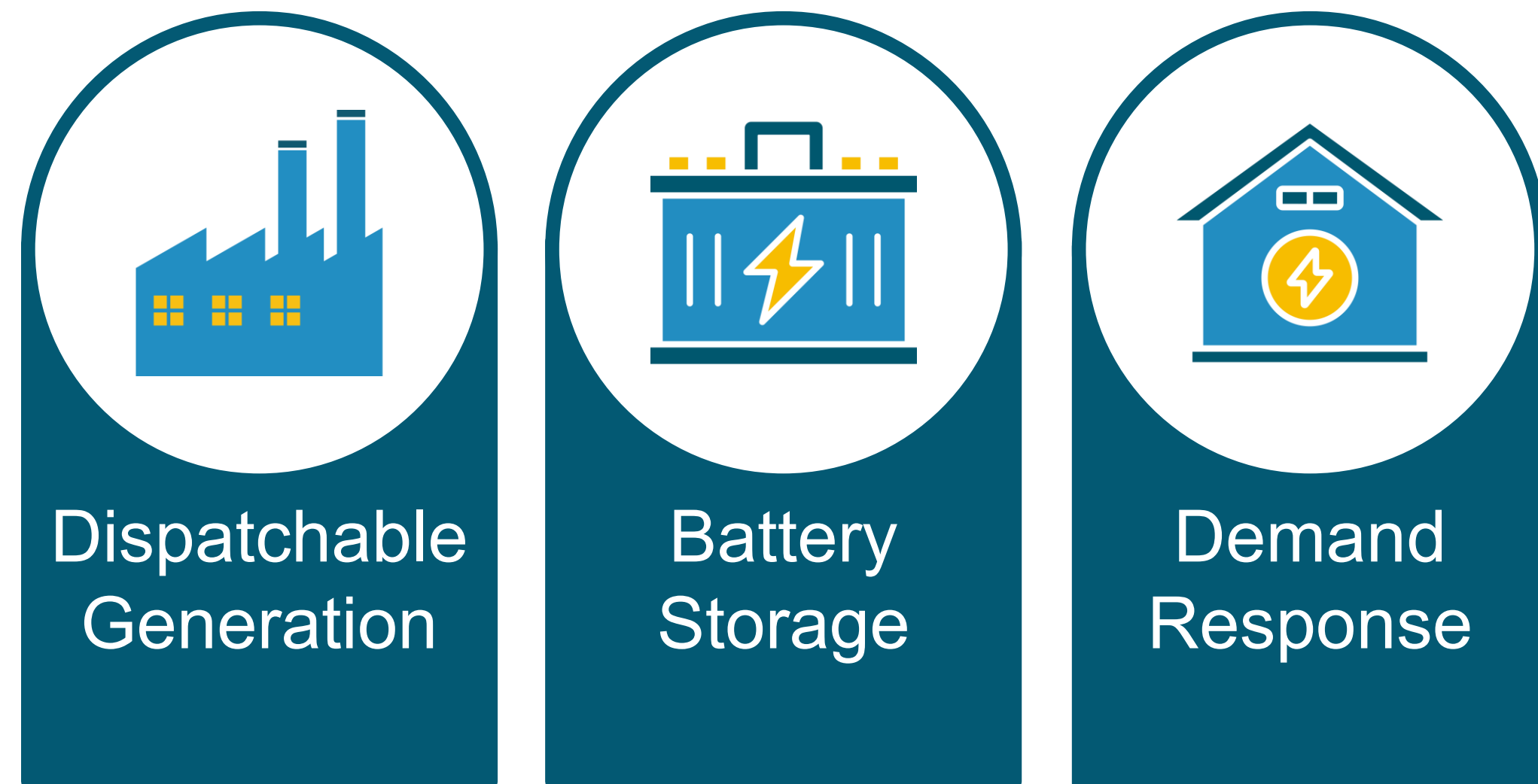


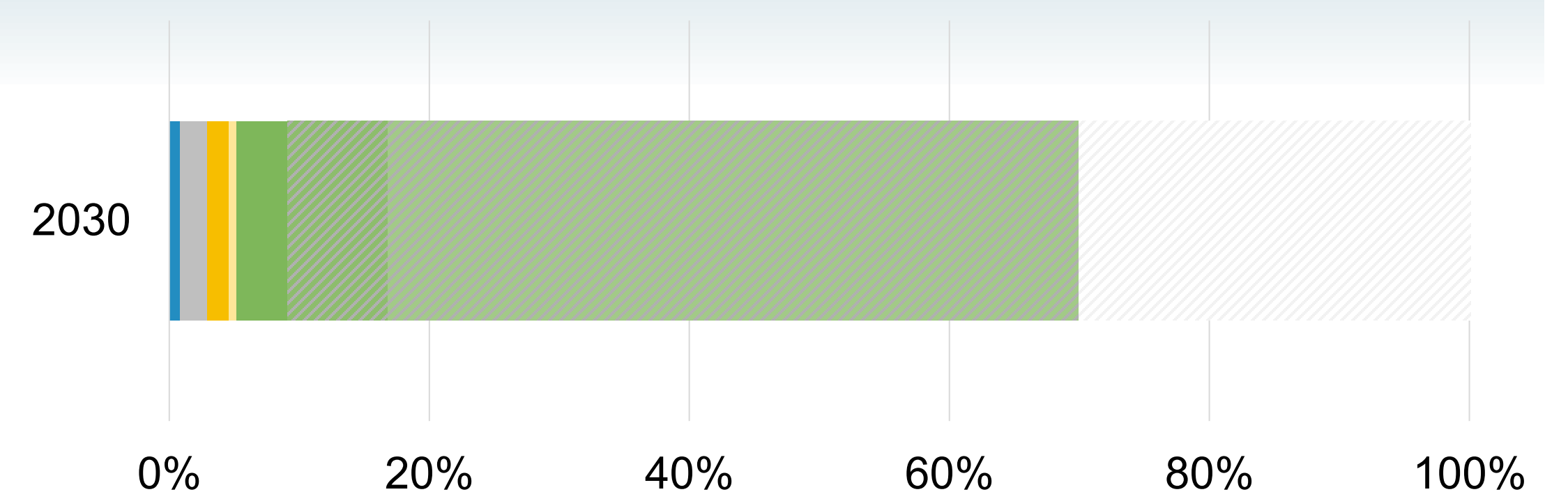
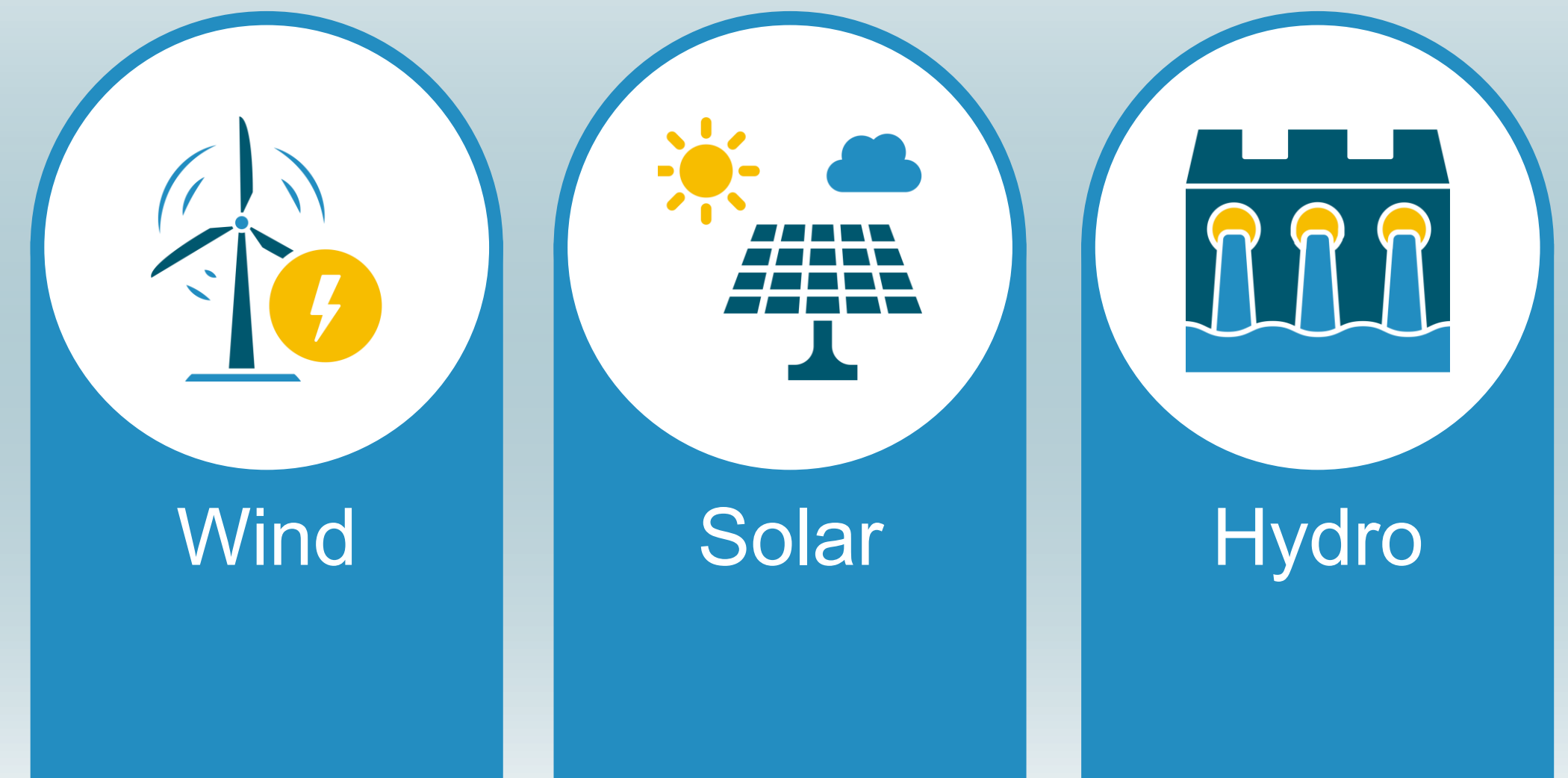
5.B. Review Battery Energy Storage System Opportunity

Power Supply Resource Plan | Reliable Capacity. Renewable Energy.

Reliable Capacity



Renewable Energy



Continued Conservation



Reliable Capacity | Current Actions

- **Build Mount Simon Station**

- ✓ Turbine Generator Packages are selected. 3 x Solar Titan 130 Combustion Turbines
- ✓ MPCA air permit application process is underway
- ✓ MISO Generator Interconnection Application (GIA) is underway
 - ✓ RPU applied for the MISO's Expedited Resource Addition Study (ERAS)
- ✓ Authorized remaining project development steps in August of 2025
- Generator step up transformer procurement is in process.

- **Rebuild or Replace GT1 Capacity**

- The site, air permit, and interconnection are too valuable to write off
- We believe there is a viable short-term salvage and repair option to restore the capacity within a year
- We are also planning for a capacity replacement eventually. The current gas turbine is a lower efficiency 50-year-old unit. The capacity must be replaced eventually.

- **Explore Other Capacity or Supply Contracts**

- Battery Energy Storage Systems (BESS) through contracts
- Capacity Contracts with other Utilities
- Potentially explore short or long-term Contract Rate of Delivery (CROD) agreements in 2026



Federal Changes to the Inflation Reduction Act

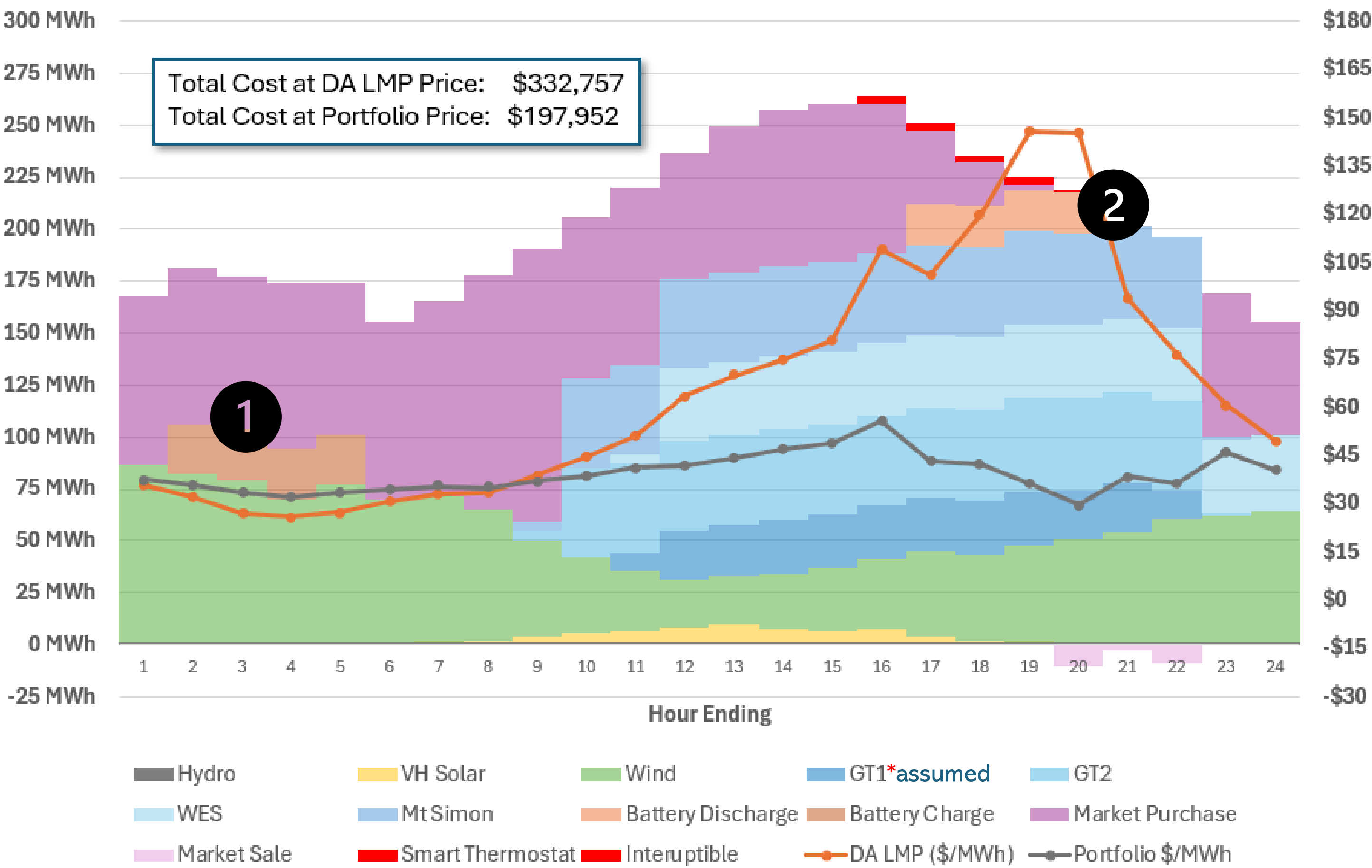
- **Short-Term Status Quo:** Most renewables still eligible for tax credits through ~2027.
- **Investment Tax Credit (ITC) and Production Tax Credit (PTC) Phaseout:**
 - **Residential Solar** and other residential efficiency tax credits phase out **on December 31, 2026**
 - **Utility Scale Wind & Solar** must begin construction **by July 4, 2026** OR be energized **by Dec 31, 2027**
- **Foreign Materials Restrictions:**
 - **Batteries** can avoid Foreign Entity of Concern (FEOC) requirements by starting construction **before Jan 1, 2026**
 - Post-2026 projects face thresholds on materials from “**Prohibited Foreign Entities**” (China, Russia, Iran, N. Korea). Complex rules and unknown changes pending **Treasury guidance by Dec 2026.**
- **Executive Order (July 7, 2025):**
 - Directs Treasury to **tighten guidance** on “**start of construction**” and “**safe harbor**” eligibility and foreign supply restrictions.
- **New Tariff Announcements:**
 - 50% Tariff on imported copper took effect August 1, 2025.

- **China Tariffs?**



Reliable Capacity | Battery Energy Storage System – Energy Arbitrage

July 23, 2025: High Peak Day



- 1
- 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 | 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)										

Battery Energy Storage System | Current Actions

- **Can Be Implemented Relatively Quickly**

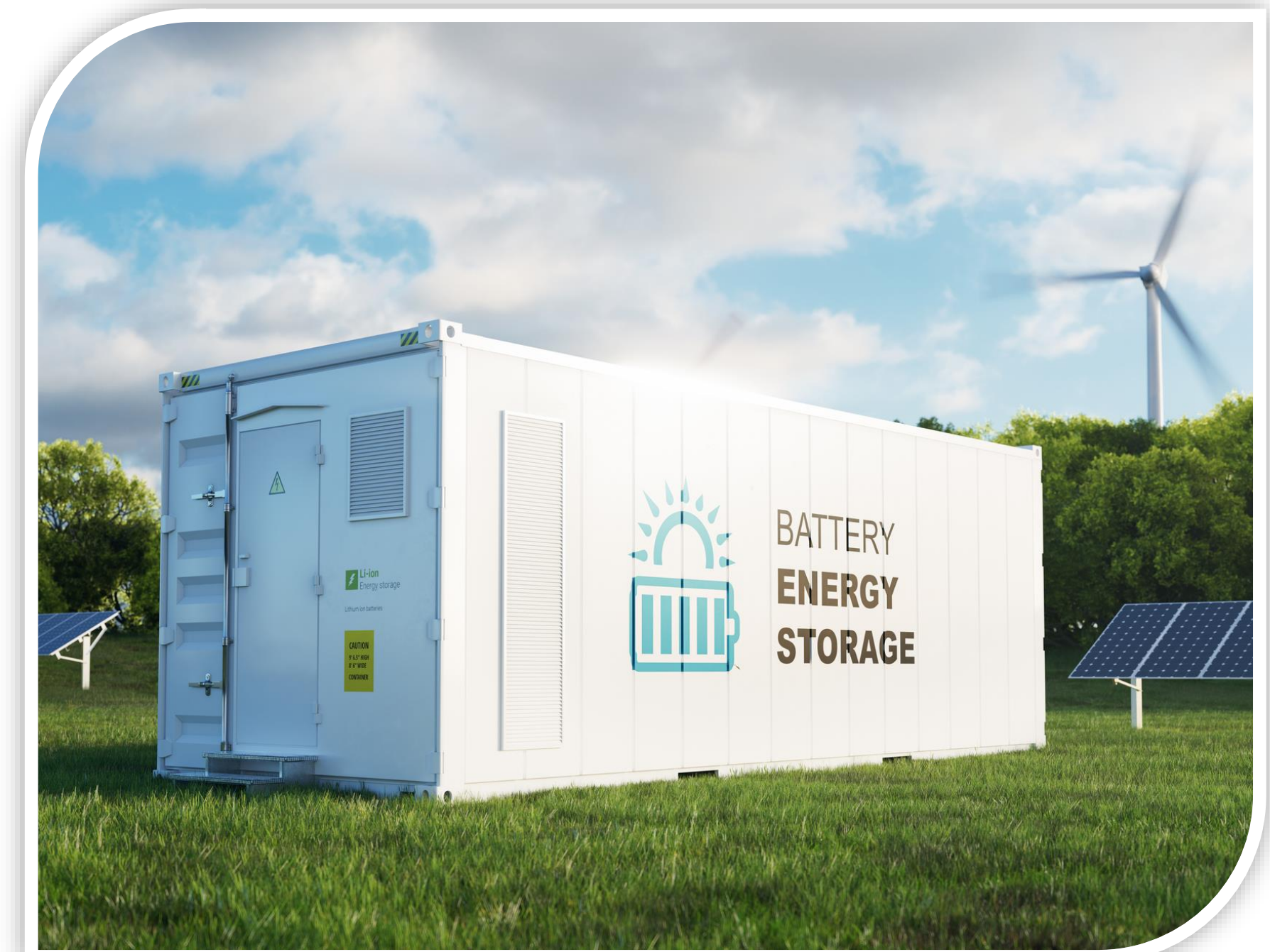
- Approximately 20 MW can be placed at Zumbro Substation and Service Center (RPU has site control)
- Developer has line of site of supply that is already onshore (reduced tariff risk)
- Connecting to distribution system means no interconnection delay
- Permitting – simple zoning certification and site storm water review

- **Contract Structure**

- Tolling agreement
 - RPU pays developer to build, own and maintain the BESS
 - RPU responsible for dispatch as market participant

- **Next Steps**

- Confirm pricing
- Determine SMMPA coordination
- Assist developer permitting & safe harboring
- Perform distribution interconnect analysis
- Return to Board with comprehensive analysis





Questions