

Ameren Illinois Demand Response

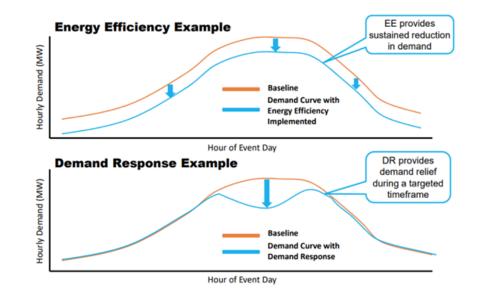
# Robyne Black Senior Program Supervisor, Energy Efficiency



## **Difference Between Energy Efficiency & Demand Response**

**Energy Efficiency** refers to using less energy to perform the same task or achieve the same result, leading to reduced energy consumption, lower costs, and a smaller environmental impact.

**Demand Response** refers to balancing the demand on power grids by encouraging customers to shift electricity demand to times when electricity is more plentiful or other demand is lower, typically through prices or monetary incentives.



## **Demand Response - Customer Benefits**





#### Incentive Payments:

Customers can earn money or receive rebates for participating in demand response programs, which incentivize them to reduce energy consumption during peak demand periods

#### **Potential Lower Energy Costs:**

By reducing energy usage during peak periods, customers may avoid paying for expensive energy during those times, potentially leading to lower overall energy bills

#### **Reduced Infrastructure Costs:**

By shifting demand, demand response programs can help utilities defer the need to expand the grid and/or build new generation resources, which can translate to lower costs for all customers in the long run

#### Ease of Participation:

Many demand response programs are straightforward to participate in, with minimal effort required from customers

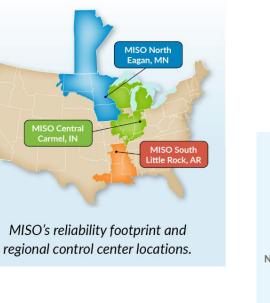
# **Fact Sheet**

MISO is an independent, not-for-profit, member-based organization responsible for keeping the power flowing across its region reliably and cost effectively. MISO focuses on three critical tasks:

- 1 Managing the flow of high-voltage electricity across 15 U.S. states and the Canadian province of Manitoba
- 2 Facilitating one of the world's largest energy markets with more than \$33 billion in annual transactions
- 3 Planning the grid of the future

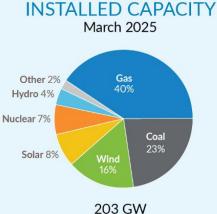
#### **KEY FACTS**

Area Served	15 U.S. States and Manitoba, Canada
Population Served	45 Million
Transmission Line	77,000 Miles
Generating Units (Commercial Model)	1,460
Record Demand	127.1 GW 7/20/2011
Wind Peak	25.6 GW 1/12/2024
Solar Peak	11.5 GW 2/21/2025
Members	55 Transmission Owners
	168 Non-transmission Owners
Market Participants	>550
Carbon Reduction	Approximately 32% since 2014



**MISO** 

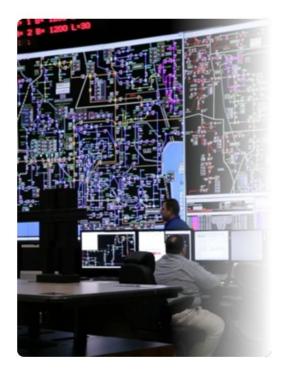




## **MISO Changes**



- 2023-2024
  - MISO went from an annual capacity construct to a seasonal (Summer, Fall, Winter and Spring) construct
- 2025 (March)
  - MISO filed a plan to establish an Expedited Resource Addition Study (ERAS) process to accelerate the study of generation projects to help get more generation online quicker for reliability concerns
- 2025-2026
  - Implementing their Reliability Based Demand Curve (RBDC), (a.k.a. sloped demand curve), to replace their vertical demand curve
  - Forming a new demand response team to analyze MISO registrations in more detail
  - o Proposed rule changes to stem market fraud and gaming





# Peak Time Savings

The Peak Time Savings program from Ameren Illinois is an easy way to reduce demand on the energy grid, leading to fewer outages and a more sustainable energy future across the region. This program applies both to residential and business customers to participate and earn savings.





### For Your Home

For Your Business



### **Program overview**

Program period & hours	Year Round, 24x7, Summer, Fall, Winter, and Spring Seasons
Payments	Capacity & Energy
Dispatch notification	2 hours
<b>Dispatch duration</b>	4 hours maximum
Dispatch frequency	Need to be available for up to 16 dispatches per year, historically there have been 1 – 2 per year
Participation requirements	100 kW minimum obligation across zonal portfolio
Generator eligibility	Properly permitted generators are eligible
Audit requirement	Annual testing required; test counts towards availability requirement



# **Residential Program**

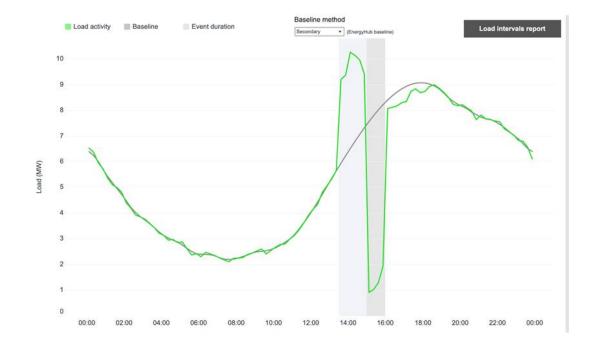


- Peak Time Savings is a voluntary program for customers with qualifying smart thermostats
- Participants agree to brief adjustments of 4 degrees or less to their thermostats during peak electric demand periods throughout the year.
- Adjustments last no more than 4 hours and will typically occur between 1-7pm CT
- Participants will receive a one-time \$50 incentive per device after successfully enrolling in the program.
- Participants will receive an additional \$25 incentive per device each year following the anniversary of their enrollment in the program



### Ameren Illinois 2024 Test Event





# **The Future of Demand Side Management**



