I&M-MI 2027 IRP

Michigan's 2023 Clean Energy Laws: IRP Implications

INDIANA MICHIGAN POWER
An AEP Company

Purpose & Agenda

Purpose

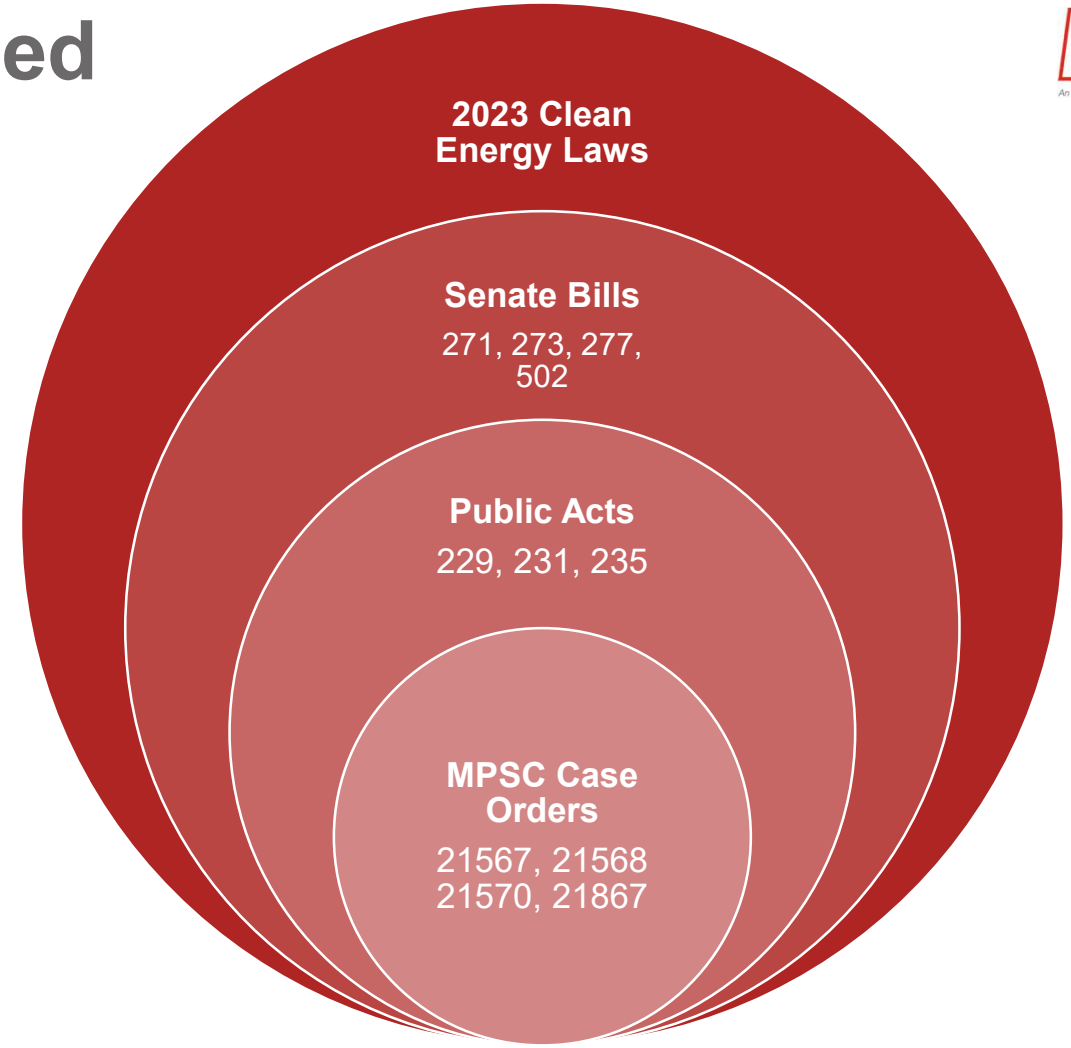
- Help our customers navigate the Integrated Resource Plan process
- Enable a communication and participation channel with our customers

Agenda

- Michigan's 2023 Clean Energy Laws
- Integrated Resource Plan Process
- Modeling
- Regulatory Process

website where you can send us comments

Michigan's Integrated Resource Plan & Clean Energy Laws



Minimum Renewable Energy Targets

What is a renewable energy resource?

A resource that naturally replenishes over a human, not a geological, time frame and that is ultimately derived from solar power, water power, or wind power. Renewable energy resources do not include petroleum, nuclear, natural gas, industrial waste, post-use polymers, tires, tire-derived fuel, plastic, or coal.

Renewable Energy Targets & Timing

- 50% renewable energy by 2030
- 60% renewable energy by 2035

Clean Energy Standard

What does clean energy system mean?

An electricity generation facility or system or set of electricity generation systems that produces low or no greenhouse gas emissions.

That includes electricity from:

- Power sources that do not emit greenhouse gases, including nuclear generation;
- Natural gas power plants that capture most of their emissions, using technology that removes at least 90% of the carbon before it is released;
- Other Commission-approved clean energy technologies.

Clean Energy Standard Targets & Timing

- 80% clean energy portfolio by 2035
- 100% clean energy portfolio by 2040

Statewide Energy Storage Target

What is an energy storage system?

Any technology that is capable of absorbing energy, storing the energy for a period of time, and redelivering the energy.

Utility obligation

By December 31, 2029, each electric provider whose rates are regulated by the commission shall petition the commission for any necessary approvals, and each alternative electric supplier shall submit a plan to the commission, to construct or acquire eligible energy storage systems or enter into eligible energy storage contracts to meet its share of a statewide energy storage target of a combined capacity of at least 2,500 megawatts.

I&M Share

- Estimated to be approximately 3% of the statewide target (70 MW)

IRPs Post-2023 MI Clean Energy Laws

New Integrated Resource Plan Considerations after PA 231

Updated filing requirements to include analysis of:

- Compliance with the Clean Energy, Renewable Energy, and Energy Waste Reduction standards
- Affordability Impacts
- Projected Emissions/Pollutants
- Environmental Justice Impacts

Preferred plan subject to compliance with Michigan Law and MPSC approval.

Integrated Resource Plan

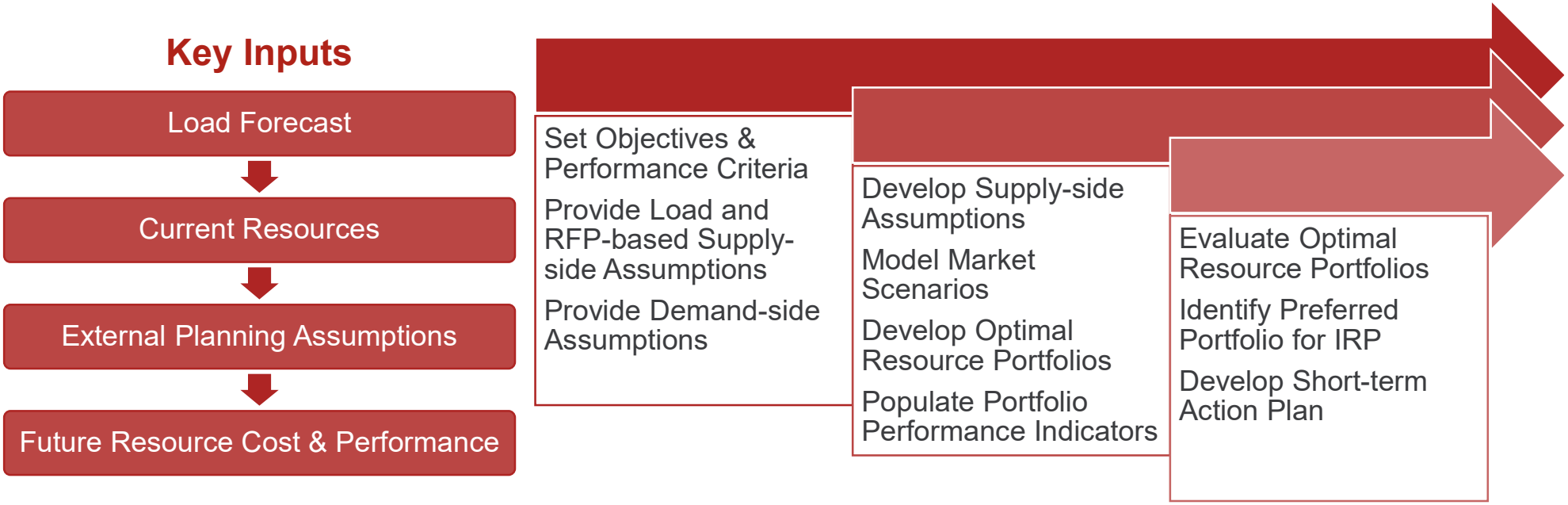
What is an Integrated Resource Plan (IRP)?

A long-term, forward-looking planning process through which an electric utility evaluates and selects a portfolio of supply-side and demand-side resources to meet projected customer demand reliably, at the lowest reasonable cost, while accounting for risk and uncertainties, environmental requirements, and public policy objectives.

- Long-term roadmap
- Balance supply and demand
- Process-driven portfolio selection
- Future stress-testing

Integrated Resource Plan Process

The IRP process is built around industry-defined best practices for optimizing future resource additions based on expected customer load and a range of future scenarios. Stakeholder engagement through the process ensures understanding of the analytical decisions and builds support for conclusions.



Integrated Resource Plan Modeling

What is a modeling scenario?

A scenario is a potential “what-if” version of the future.

Why we use scenarios in an IRP?

Scenarios allow us to test plans under different possible conditions.

Why we use multiple scenarios?

We analyze many scenarios together to cover a wide range of possible outcomes.

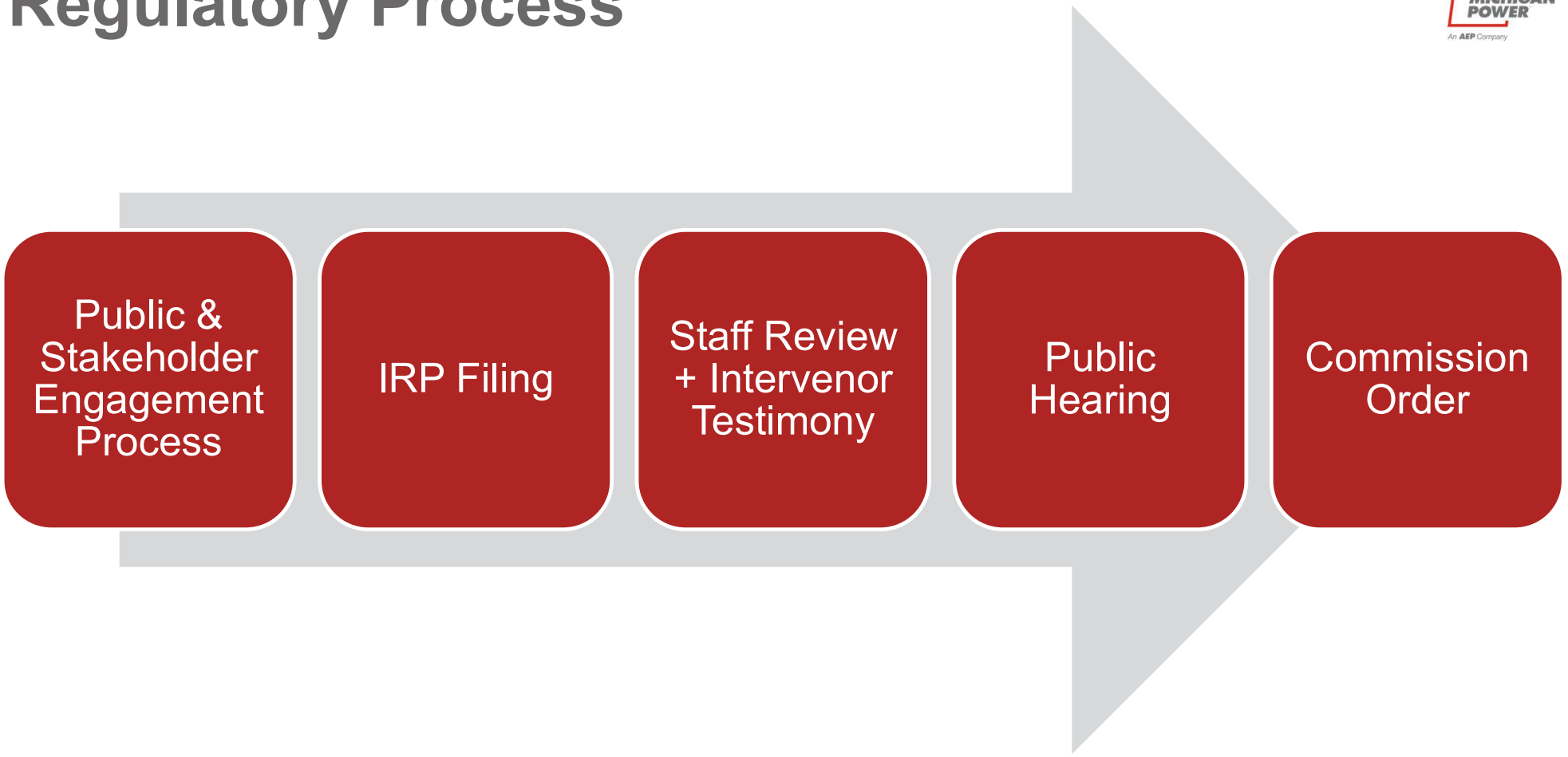
How scenarios support better planning decisions?

Scenarios act like stress tests.

Integrated Resource Plan Modeling

Scenario	Description
Business as Usual	Shows what the future could look like if current trends continue, such as expected electricity use, fuel prices, and available technologies. This serves as the baseline for comparison.
Higher Electricity Use	Shows what the future could look like if electricity use grows faster than expected due to population growth, new businesses, or electrification.
Lower Electricity Use	Shows what the future could look like if electricity use grows more slowly than expected.
Stricter Environmental Rules	Shows what the future could look like if environmental rules become stricter over time.
Delayed Environmental Rules	Shows what the future could look like if major environmental rules are delayed or take effect later than expected.

Regulatory Process



How to Participate & Stay Informed

Survey/Questionnaire

MI IRP Website

Submit Feedback

How to contact the MPSC

- **Mail** (be sure to include case number):
  Executive Secretary
  Michigan Public Service Commission
  P.O. Box 30221
  Lansing, Michigan 48909
- **E-mail:** mpscefilecases@michigan.gov


Questions?
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