MPSC Michigan Public Service Commission

Issue Brief

Renewable Energy

1. What is renewable energy?

Renewable energy is power generated by a resource that is **replenished within a human timeframe**. In Michigan, renewable energy is primarily generated from wind, sunlight, water (hydroelectric), woody biomass, municipal waste and landfill gas.

2. What is a renewable portfolio standard?

A renewable portfolio standard (RPS) requires utilities to **procure a percentage** of the electricity they sell from renewable resources. Public Act 295 of 2008 (PA 295) outlined Michigan's first RPS and required electric providers to procure 10% of the generation required to meet their retail sales from renewable resources by the end of 2015. PA 295 was amended in 2016 by Public Act 342 (PA 342), which updated Michigan's RPS. Under PA 342, electric providers are required to achieve a **12.5% RPS for 2019-20**, and meet an RPS of **15% by the end of 2021**.

3. What is a renewable energy credit?

A renewable energy credit (REC) is the means by which energy produced from renewable resources is measured and credited to the owner or producer of the energy. **One REC equals one megawatt-hour of energy that has been generated from renewable sources** and delivered to the electric grid.[1]

4. How much of Michigan's energy supply comes from renewable sources?

According to the Feb. 15, 2018, Michigan Public Service Commission (MPSC) report on the implementation and cost-effectiveness of the PA 295 renewable energy standard, utility-acquired or generated RECs were equal to 10.8% of retail sales in 2016. According to the same report, the RPS enacted in PA 295 can be credited with spurring the development of **more than 1,670 megawatts of new renewable energy projects**.

5. How much renewable energy is produced by customers in Michigan?

Since 2009, Michigan has seen a significant increase in the number of customers producing their own electricity by participating in net metering programs offered by electric providers. Michigan has more than 3,000 net metering customers who have installed nearly **30 megawatts of distributed generation** on the electric distribution system.

6. What is a renewable energy plan?

A renewable energy plan (REP) is a plan submitted by an electric provider to the MPSC describing **how the provider will meet the RPS**. Section 22 of PA 342, describes what must be included in an electric provider's plan. The current plans describe how the electric provider will meet its RPS for the remainder of the plan period ending 2029.

7. What is included in the REP?

In MPSC Case No. U-18409, the MPSC approved **filing requirements** for REPs that require an electric provider to include:

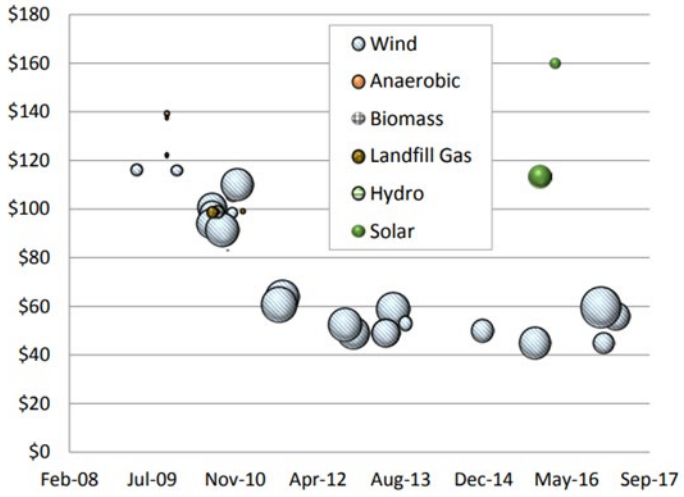
a) How it will **meet the RPS**
b) How the provider anticipates **calculating the required RECs**
c) The expected **incremental cost of compliance** with the renewable energy standards for the plan period ending 2029.
d) How the electric provider's plan is consistent with the **state's goal of procuring 35%** of its energy needs from renewable energy and energy waste reduction by 2025.

[1] https://www.michigan.gov/documents/mpsc/mcl-Act-295-of-2008_579268_7.pdf

8. How have the costs of renewable energy in Michigan changed since the implementation of PA 295?

Since the enactment of PA 295 **the cost of utility scale contracts have significantly decreased**, as show below. As solar photovoltaic efficiencies improve, and manufacturing and construction costs decrease, it can be expected that the cost of solar will continue to decline. **Renewables are becoming more cost-effective with time**.

Levelized Cost of Renewable Contracts ($/MWh) over time[2]



Source: Report on the Implementation and Cost-Effectiveness of the P.A. 295 Renewable Energy Standard

9. What is the approval process for a REP?

Renewable energy plans filed by rate-regulated providers (such as investor-owned utilities) are reviewed by the MPSC in accordance with the process for a contested administrative proceeding. The case is presided over by an Administrative Law Judge and the parties submit testimony and evidence. Interested parties may request to be part of the case. After the hearing process, **the MPSC can approve the plan along with any changes consented to by the electric provider, or reject the plan**.

10. How will REPs correspond with future utility integrated resource plans?

An integrated resource plan (IRP) is a comprehensive road map developed by an electric utility which outlines its future resource strategy – how the electric utility will provide reliable, cost-effective electric service to its customers while addressing the risks and uncertainties inherent in the utility industry. Sec. 6t of PA 341 requires all rate-regulated utilities to file IRPs with the MPSC by April 20, 2019, and within five years thereafter. An electric provider's IRP will serve as the broad planning tool that encompasses not only renewable energy but also demand response, energy waste reduction (EWR) and other demand and supply-side resources. Accordingly, the MPSC expects that in the future, once IRP proceedings are completed, the filing requirements will include a description of how the REP correlates with the approved IRP.[3]

For more information, visit:
www.michigan.gov/mpsc

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[2] Circle size denotes project capacity size
[3] https://mi-psc.force.com/sfc/servlet.shepherd/version/download/068t0000001UYbyAAG