



Integrated Resource Planning Schedule

Doug Buresh

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Indicative RFP

Intermediate Capacity and Energy

- **KYMEA is issuing a Request for Proposal (RFP) for intermediate Capacity and Energy.**
- **Start: June 1, 2022**
- **Term: 5 to 20 years**
- **Size: 30 to 60 MW**
- **Expected Products: Market-Based Capacity and Energy, RICE, Aero-Derivative CTs, LM6000, CC, Solar, Solar+Storage, Wind, Wind+Storage**

IRP Key Tasks Timeline - 2020

2020

MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC

Development of Inputs and Framework accompanied by Model Simulations

Community
Focus Group
Session

Possible Site Visits with the Board of Directors

Analysis and Evaluation

Indicative RFP

Presentation of
Initial Results

Community Comment Period

Community
Focus Group
Session

Additional
Analysis

Preliminary Plan

Board Action

Preparation
IRP Report

Still On Schedule

Focused on:

- **Model Simulations**
- **Analysis**
- **Evaluation**

Reserve Margin

MISO Reserve Margin

- **MISO reserve margin has steadily increased each year and is now at 18% (ICAP) for the 2020/21 planning year.**
- **In setting the reserve margin for its entire footprint (125 GW), MISO considers the load distribution, load forecast, resource forced outage rate, resource number, and resource size.**

KYMEA Reserve Margin

- **While KYMEA looks to MISO as well as LG&E/KU for reserve margin guidance (peer comparison), KYMEA is in a different situation as we have no reserve sharing partners.**

Loss of Load Probability (LOLP)

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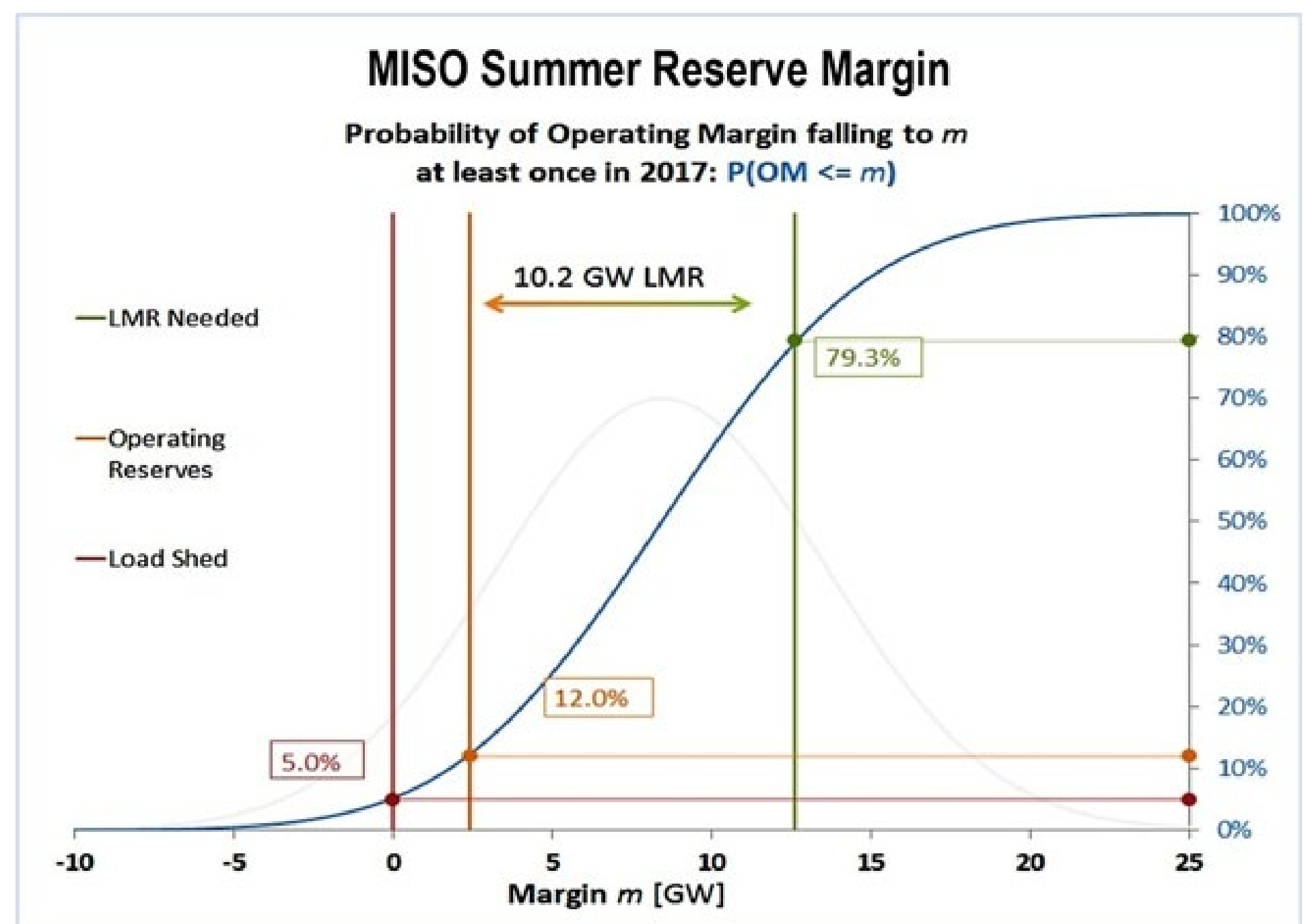
- **LOLP analysis is performed to determine the amount of capacity and/or firm transmission that needs to be installed to meet the desired reliability target.**
- **Commonly expressed as an expected value (loss of load expectation, LOLE) of 0.1 days/year (2.4 hours unserved).**

MISO Operating Margin

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In its LOLP, MISO considers the range(s) of load and resource forced outages; and balances the probability of being able to serve the MISO load.

1. MISO considers system load modifying resources (LMR) such as demand response and interruptible load.
2. Load shedding occurs when all resources have been exhausted.



KYMEA IRP Reliability Analysis

Reliability Modeling

- **KYMEA is modeling the unique conditions of our system.**
- **MISO Firm Transmission**
- **Resource availability and forced outages rates.**
- **Ashwood Solar I hourly expected output and uncertainty due to time of day, hourly irradiance, and season.**