



Board Action

BOARD OF DIRECTORS

August 17, 2021

ITEM

SD-9: Resource Planning – Monitoring Report

PURPOSE

To ensure full Board review, discussion and acceptance of SD-9: Resource Planning – Monitoring Report

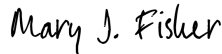
FACTS

- a. The Board confirmed the Corporate Governance Initiative Charter in December 2014, in order to assess and refine OPPD's corporate governance infrastructure.
- b. The first set of Board policies was approved by the Board on July 16, 2015. A second set of Board policies was approved by the Board on October 15, 2015.
- c. Each policy was evaluated and assigned to the appropriate Board Committee for oversight of the monitoring process.
- d. The System Management and Nuclear Oversight Committee is responsible for evaluating Board Policy SD-9: Resource Planning – Monitoring Report on an annual basis.
- e. The System Management and Nuclear Oversight Committee has reviewed SD-9: Resource Planning – Monitoring Report and is recommending that OPPD be found to be sufficiently in compliance with the policy as stated.


ACTION

The System Management and Nuclear Oversight Committee recommends Board approval of SD-9: Resource Planning – Monitoring Report.

RECOMMENDED:

DocuSigned by:

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Mary J. Fisher
Vice President – Energy Production and Nuclear Decommissioning

APPROVED FOR BOARD CONSIDERATION:

DocuSigned by:

AC399FDCE58247E...
L. Javier Fernandez
President and Chief Executive Officer

Attachment: Exhibit A – Monitoring Report Resolution



Exhibit A

Monitoring Report SD-9: Resource Planning System Management Committee August 17, 2021

Brad Underwood

Director, Financial Planning & Analysis

SD-9 Resource Planning Strategic Directive

The Board of Directors recognizes that the District will have to adapt to the rapidly changing electric utility business environment. The OPPD resource planning process will provide the resources and analytical capability to adequately assess OPPD's Integrated Resource Portfolio (or Supply and Demand Portfolio) to ensure reliable, competitive, cost-effective and environmentally sensitive service for our customers.

To attain this goal, OPPD shall:

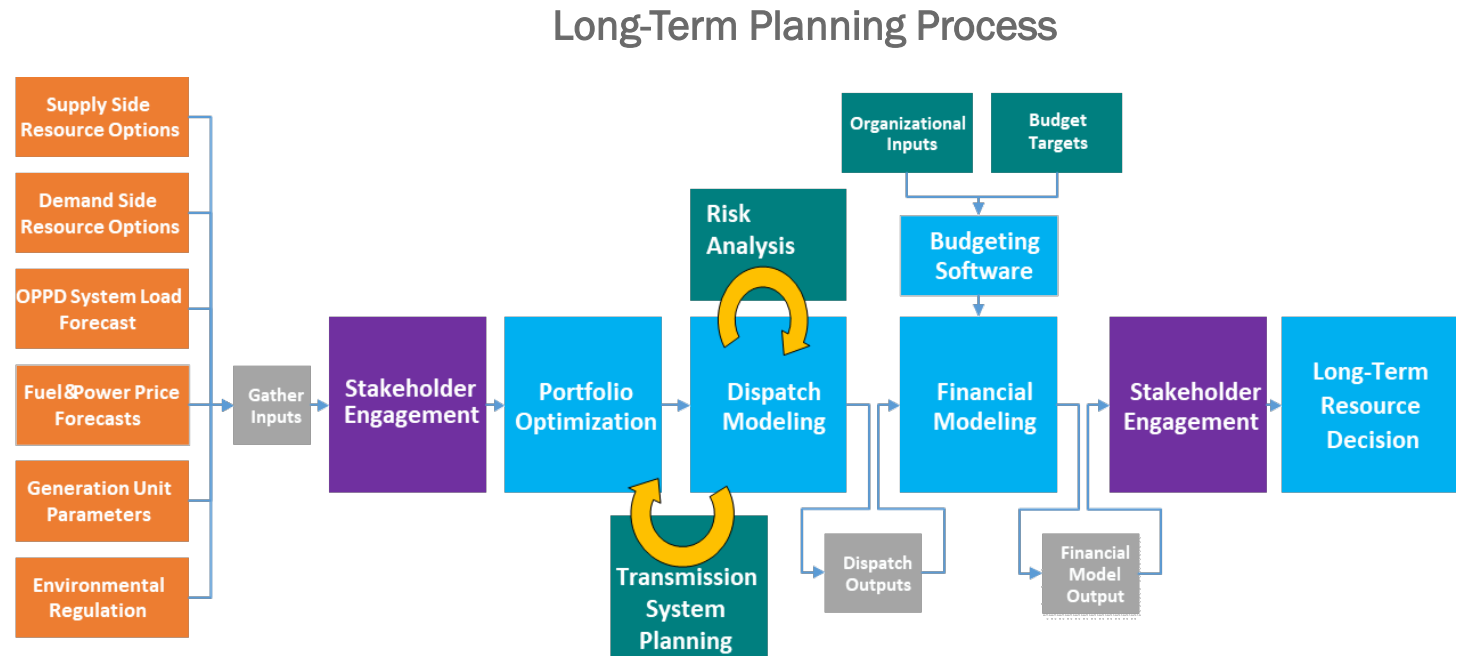
- Periodically assess, for strategic and integrated resource plans, OPPD's mix of generation assets, demand-side management programs, purchased power agreements and renewable energy resources.
- Utilize multiple scenarios to properly evaluate the range of risks posed by varying future assumptions such as, but not limited to fuel costs, economic growth, regulations and emerging technologies.
- Ensure all integrated resource strategic plans support and align with OPPD's Strategic Directives.

SD-9 Resource Planning Strategic Directive

The Board of Directors recognizes that the District will have to adapt to the rapidly changing electric utility business environment. The OPPD resource planning process will provide the resources and analytical capability to adequately assess OPPD's Integrated Resource Portfolio (or Supply and Demand Portfolio) to ensure reliable, competitive, cost-effective and environmentally sensitive service for our customers.

Resource Planning

- OPPD maintains a dedicated staff who monitor market and technology trends and facilitate **both short and long-term planning** resource portfolio planning efforts (more later).
- OPPD uses **sophisticated and progressive tools and processes** to support resource planning and load forecasting (AURORA, ITRON, PROMOD, etc).
- Processes incorporate **robust supply and demand side resource evaluations** which ensure reliable, competitive, cost-effective, and environmentally sensitive solutions.



SD-9 Resource Planning Strategic Directive

Periodically assess, for strategic and integrated resource plans, OPPD's mix of generation assets, demand-side management programs, purchased power agreements and renewable energy resources.

Short-Term Planning

- **Summary:** Performed at least quarterly and is used to derive near-term (usually 5 years) worth of expected load, fuel budgets, generation volumes, off system sales as well as fuel and purchase power and is a critical input to the rate setting process and the process includes:
 - Near term optimization of existing supply and demand resources
 - Update market outlooks including commodity and power price trends
 - Incorporates load forecast updates from customers or events
 - Simulates OPPD's energy portfolio over a 5-year horizon

Long-Term Planning

- **Summary:** Performed less frequently than quarterly and is used to derive the same outputs as the Short-Term process but on a much longer duration and usually involves longer term resource decisions and can be initiated by the following events:
 - Meaningful changes to Southwest Power Pool accreditation policy or reserve requirements
 - Alterations of current environmental regulations and proposed new environmental regulations
 - Bulk Electric System reliability/resiliency changes
 - Western Area Power Administration filings
 - Significant load changes
 - Combination of some or all of the above

SD-9 Resource Planning

2022 Integrated Resource Plan (IRP)

- An Integrated Resource Plan (IRP) is a legal requirement which outlines a utility's supply and demand resources to meet customer load over time.
- OPPD is required to submit a 5-Year IRP to Western Area Power Association (WAPA) every 5 years, with the next submission due February 28th, 2022.
- OPPD will use the Pathways to Decarbonization stakeholder process and study results to inform its 2022 IRP filing. If the Energy Portfolio project extends beyond the IRP deadline, OPPD would file its current 5-Year resource plan and file an update after completion of the Energy Portfolio Project.

Decarbonization: Energy Portfolio planned completion is December 2021

- Due date is set by OPPD's Senior Management Team(SMT) and Board of Directors (BOD)

5-Year Integrated Resource Plan (IRP) planned completion is February 2022

- OPPD is legally required to submit a 5-Year IRP to Western Area Power Administration (WAPA)
- Requirements outlined by 10 Code of Federal Regulations 905 (10.CFR.905)
- Is not always a decision to add or retire assets

SD-9 Resource Planning Strategic Directive

Periodically assess, for strategic and integrated resource plans, OPPD's mix of generation assets, demand-side management programs, purchased power agreements and renewable energy resources.



Pathways to Decarbonization: Energy Portfolio Highlights

The Energy Portfolio Project is studying actionable pathways to eliminate or significantly reduce greenhouse gas (GHG) emissions from the OPPD energy portfolio, while balancing impacts on reliability, resiliency, and affordability.

In pursuit of OPPD's mission of Affordable, Reliable, and Environmentally Sensitive energy services, OPPD launched its Pathways to Decarbonization Strategic Initiative to develop a range of pathways for how OPPD's energy portfolio would pursue our SD-7 goal of net zero carbon by 2050.

- The initiative is supported by a large, multi-disciplinary internal team as well as outside expertise specializing in electric system modeling for decarbonization.
- Exploration of a broad set of mature and emerging supply and demand side technologies.

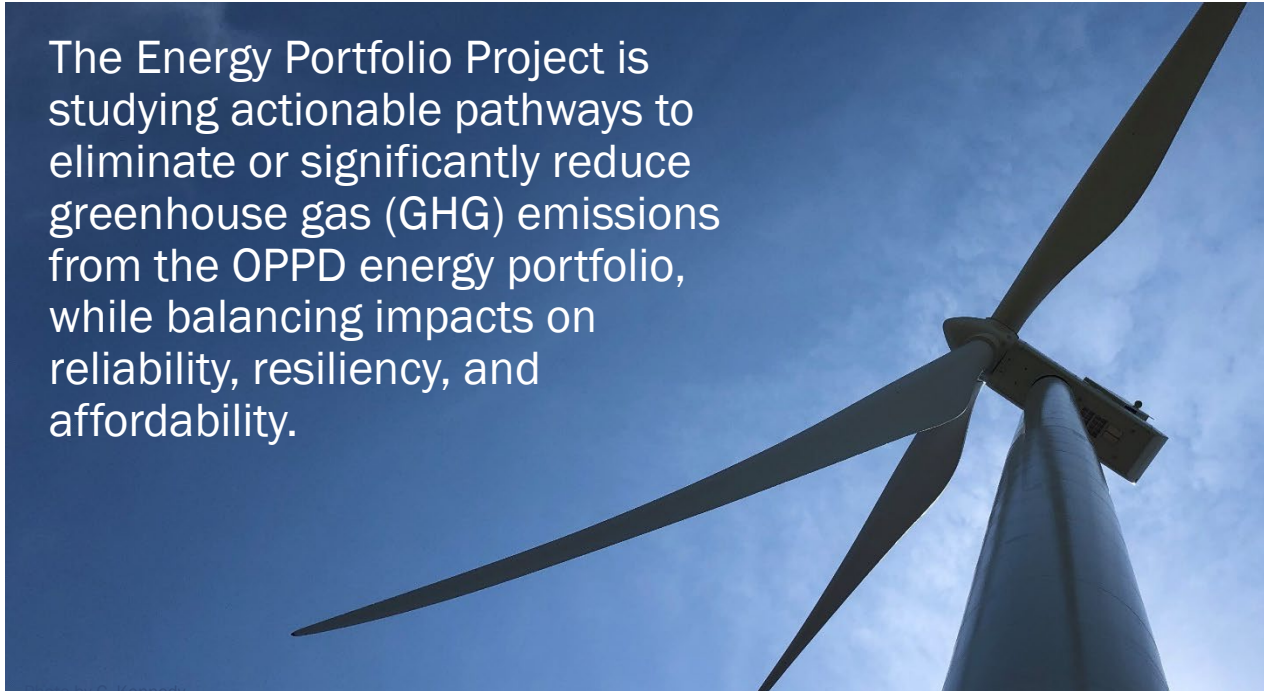


Photo by C. Kennedy

SD-9 Resource Planning Strategic Directive

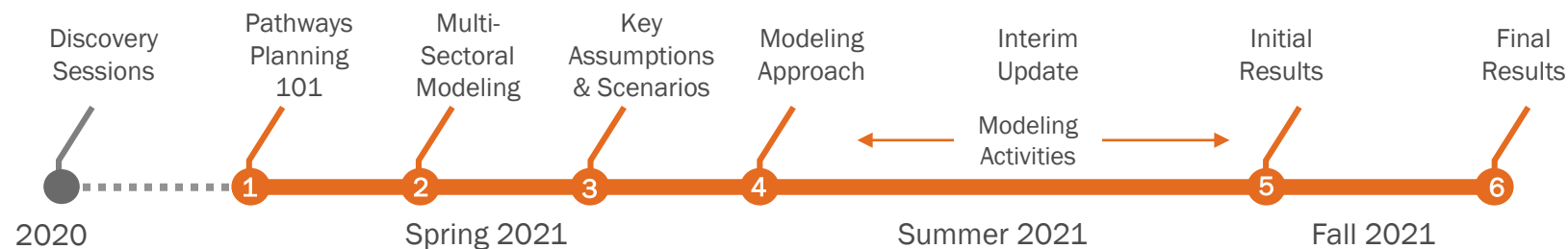
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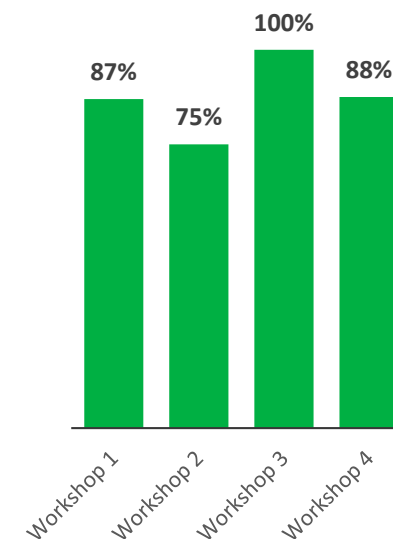
Pathways to Decarbonization: Energy Portfolio Highlights

Significant investment is being made throughout the Pathways to Decarbonization: Energy Portfolio project to engage both internal and external stakeholders

- A series of 6 public workshops allowing meaningful interaction with stakeholders, listening to their comments, answering questions, and incorporating their thoughts on future scenarios
- Public release of modeling data and assumptions, with time for stakeholder to provide feedback
- Stakeholders wanting to learn more can engage on [OPPDCommunityConnect.com](https://www.oppd.com/CommunityConnect)



Workshop Satisfaction Scores
(Satisfied + Very Satisfied)



SD-9 Resource Planning Strategic Directive

Utilize multiple scenarios to properly evaluate the range of risks posed by varying future assumptions such as, but not limited to fuel costs, economic growth, regulations and emerging technologies.



Pathways to Decarbonization: Energy Portfolio Highlights

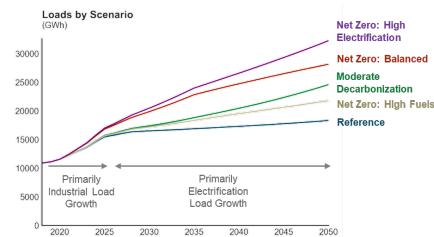
Scenario analysis is embedded into OPPD's Pathways to Decarbonization: Energy Portfolio modeling, including scenarios around fuel costs, load growth, pace of decarbonization, availability and cost of emerging technologies.

Additional scenarios are considered around extreme weather scenarios such as extreme heat, cold, extended periods of low renewables, and local events. These are influenced by both historical data and projected changing weather conditions.

Economy-Wide Scenarios

A detailed study of decarbonization across the economy and impacts to OPPD's load

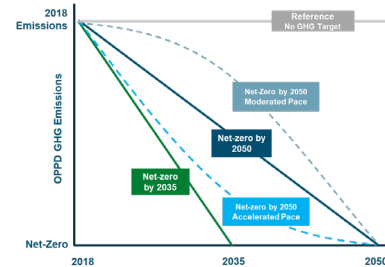
Multi-Sector Modeling Load Scenarios



Pace of Decarbonization

A range of speeds of decarbonization from a reference case, to accelerated, straight-line, and delayed scenarios

Pace of Decarbonization Scenarios



Other Factors

- Emerging technology availability and cost projections
- Carbon Policy
- The speed of carbon reductions required by regulators
- Fuel prices sensitivities simulating different types of future market conditions
- Resiliency scenarios driven by heat, cold, low renewable periods, and localized events

SD-9 Resource Planning Strategic Directive

Ensure all integrated resource strategic plans support and align with OPPD's Strategic Directives.

The planning process considers the diverse and unique requirements of the following Strategic Directives and embraces the competing interests and tradeoffs that must be made when making resource decisions:

- SD-2: Rates
- SD-4: Reliability
- SD-5: Customer Satisfaction
- SD-7: Environmental Stewardship
- SD-9: Resource Planning
- SD-11: Economic Development
- SD-13: Stakeholder Outreach and Engagement
- SD-15: Enterprise Risk Management

Recommendation

- The System Management Committee has reviewed and accepted this Monitoring Report for SD-9 and recommends that the Board find OPPD to be sufficiently in compliance with Board Policy SD-9.



Williams/Fisher

DRAFT
RESOLUTION NO. 64xx

WHEREAS, the Board of Directors has determined it is in the best interest of the District, its employees, and its customer-owners to establish written policies that describe and document OPPD's corporate governance principles and procedures; and

WHEREAS, each policy was evaluated and assigned to the appropriate Board Committee for oversight of the monitoring process; and

WHEREAS, the Board's System Management and Nuclear Oversight Committee (the "Committee") is responsible for evaluating Board Policy SD-9: Resource Planning on an annual basis. The Committee has reviewed the SD-9: Resource Planning Monitoring Report and finds OPPD to be sufficiently in compliance with the policy as stated.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Omaha Public Power District accepts the SD-9: Resource Planning Monitoring Report, in the form as set forth on Exhibit A attached hereto and made a part hereof, and finds OPPD to be sufficiently in compliance with the policy as stated.