MISSION STATEMENT

To build an economical green energy future for our stakeholders through reliable, operable, and maintainable generation and transmission with the safety of the people, the environment, and our communities as our number one priority

VISION

To make IPP an example of Green Energy for the world
Who is IPP?

- 35 Total Participants
- 23 Utah Municipalities
- 6 Utah Cooperatives
- 6 California Municipals
  - Los Angeles
  - Anaheim
  - Riverside
  - Pasadena
  - Burbank
  - Glendale
THE INTERMOUNTAIN POWER PROJECT

• LOCATION: DELTA, UTAH
• OWNED BY THE INTERMOUNTAIN POWER AGENCY (IPA)
• 35 PROJECT PARTICIPANTS (23 UTAH AND 6 CALIFORNIA MUNIS, 6 UTAH COOPS)
• TWO COAL UNITS – 1,800 MW NET CAPACITY
• NORTHERN AND SOUTHERN TRANSMISSION SYSTEMS
• CURRENT LADWP WIND INTERCONNECTIONS
  - MILFORD WIND: 287 MW
  - PLEASANT VALLEY: 82 MW
• COAL CLOSURE BY 2025
• LADWP IS THE PROJECT MANAGER AND OPERATING AGENT
• Coal units will be replaced by two combined-cycle power generation trains totaling 840 MW
• Provides dispatchable energy required to maintain reliability and support HVDC transmission
• Units capable of integrating with renewable resource variability
• DC Converter stations to be replaced
• Needed to meet LADWP’s 100% Renewable Goals
Utah’s Renewable Hub

- IPP sits in a confluence of renewable resources
- Currently interconnected about 400 MW of wind generation and geothermal
- 2,300 MW of current solar interconnection requests in queue
- 1,500 MW of Wyoming wind interconnects currently being discussed
- Considered the “Western Renewable Energy Hub”
Unlocking IPP’s Green Hydrogen Potential
Green Hydrogen Future

The hydrogen pathway at IPP represents a first-of-its-kind opportunity for the western energy grid. Utilizing its existing transmission capabilities to power hydrogen-generating electrolyzers, the fuel can be either stored in the massive geologic salt formation or burned in the existing combustion generators.

<table>
<thead>
<tr>
<th><strong>Renewables</strong></th>
<th><strong>Electrolysis</strong></th>
<th><strong>Storage</strong></th>
<th><strong>Combustion</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Solar and wind resources from Wyoming, Utah, Nevada, and California</td>
<td>• Using renewable energy, electrolyzers change water into hydrogen gas</td>
<td>• Hydrogen fuel is stored in underground salt caverns</td>
<td>• Combustion technology is capable of mixing hydrogen with natural gas</td>
</tr>
<tr>
<td>• NTS and STS required for transmission</td>
<td>• Allows for seasonal shifting on renewable energy</td>
<td>• New IPP generators will have this capability at 30% on COD</td>
<td></td>
</tr>
</tbody>
</table>
Salt Dome at Intermountain: A Unique Opportunity

- Underground salt dome beneath Intermountain
- Suitable for storing green hydrogen
- Created by solution mining
- 1 cavern = 5,500 tons H₂ storage
  - “Equivalent” to 1 million fuel cell cars
  - “Equivalent” to 14,000 tube trailers
- Over 100 caverns possible near Intermountain
- Allows for SEASONAL SHIFTING of energy storage
Surplus and Deficit Signal Need for More Storage Options

At just 30% renewable integration, peak monthly curtailment exceeds 300,000 MWh

Seasonal surplus and deficits signal need for long-duration energy storage “beyond the duck curve”
Energy Storage Potential

- Batteries
- Compressed Air Storage
- Pumped Storage
- Hydrogen

Source: Wood Mackenzie
IPP Hydrogen Timeline

- **2022**
  - Site Mobilization by Cavern Contractor
  - Construction Start

- **2024**
  - Conversion & Storage Facility Substantial Completion

- **2026**
  - 2026 IPP Switchyard Upgrade

- **2025**
  - IPP Coal Units Retired

- **2028**
  - 2025 IPP RENEWED ONLINE

- **2030**
  - 55% RPS Target

- **2032**
  - 2032 1st Unit Major - Hydrogen Upgrade

- **2034**
  - 2035 100% RPS Target

- **2038**
  - 2040 2nd Unit Major - 100% Hydrogen Upgrade

- **2042**

- **2044**

- **2045**
  - SB100 Mandate - 100% Clean Energy

**Key Dates**

- **2025**
  - 55% RPS Target
  - IPP Coal Units Retired
  - IPP RENEWED ONLINE

- **2030**
  - 80% RPS Target

- **2035**
  - 100% RPS Target

**Key Events**

- Major Overhaul Updates w/ Latest Hydrogen Capability
- Mitsubishi Power working to accelerate implementation of 100% H2 turbines