

November 2022

Intermountain Power Agency

- Organized in 1977 by 23 Utah Municipalities
- Governed by 7-member Board of Directors
- Owns the Intermountain Power Project (IPP)

Intermountain Power Project

- **Electrical generating and transmission properties and facilities**
  - Generating capacity to serve 1.5 million households
  - Two transmission systems
  - Commenced commercial operations in 1986

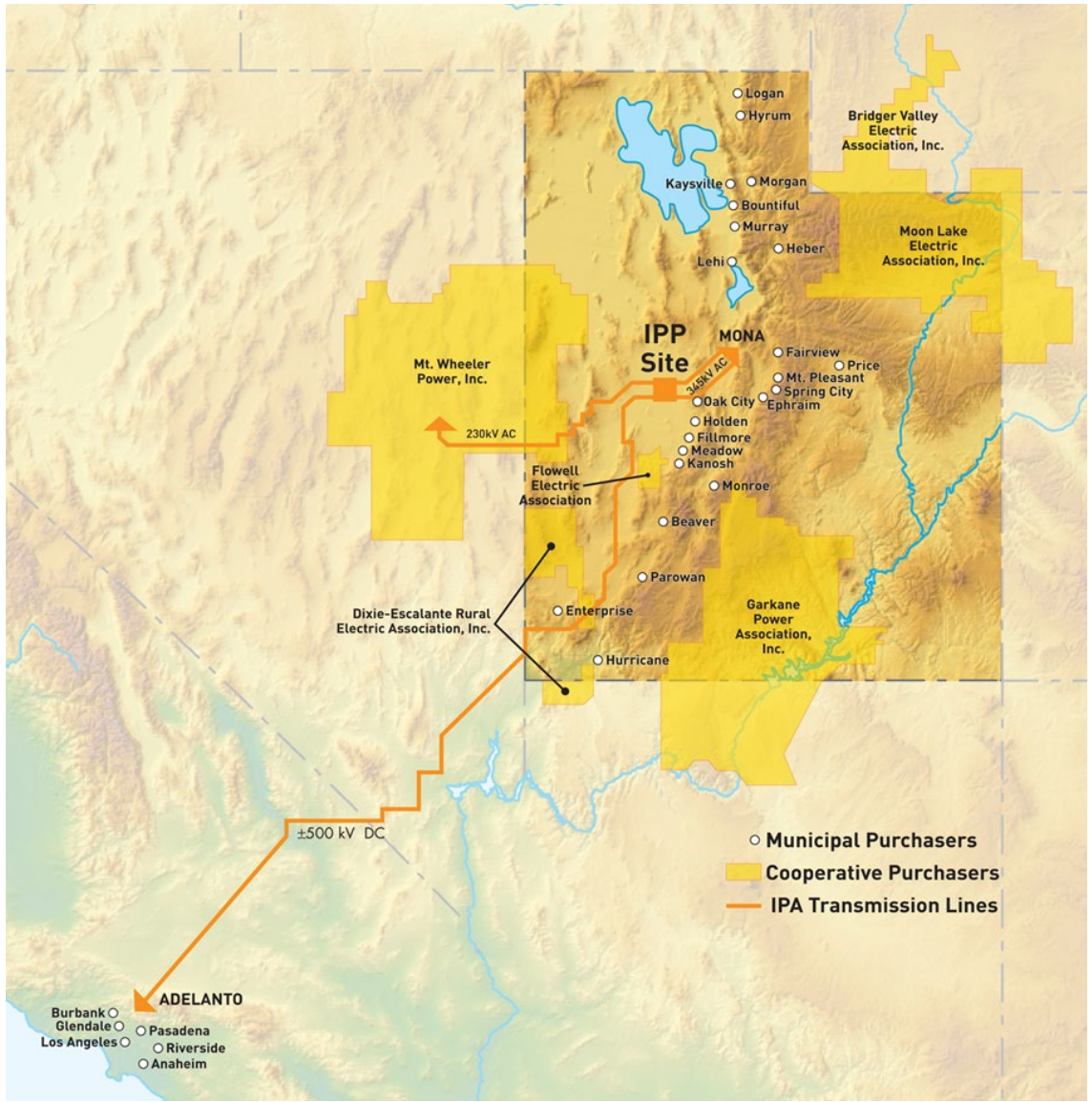


ipautah.com

IPP Renewed

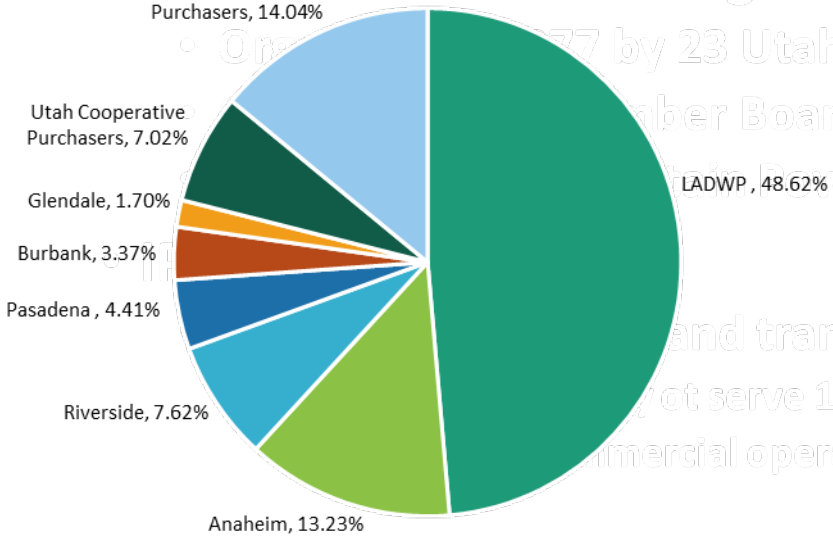
Project Participants

- Capacity Contracts to 2027
- Utah Purchasers
  - 23 IPA Members
  - 6 REA's
- 6 California Purchasers



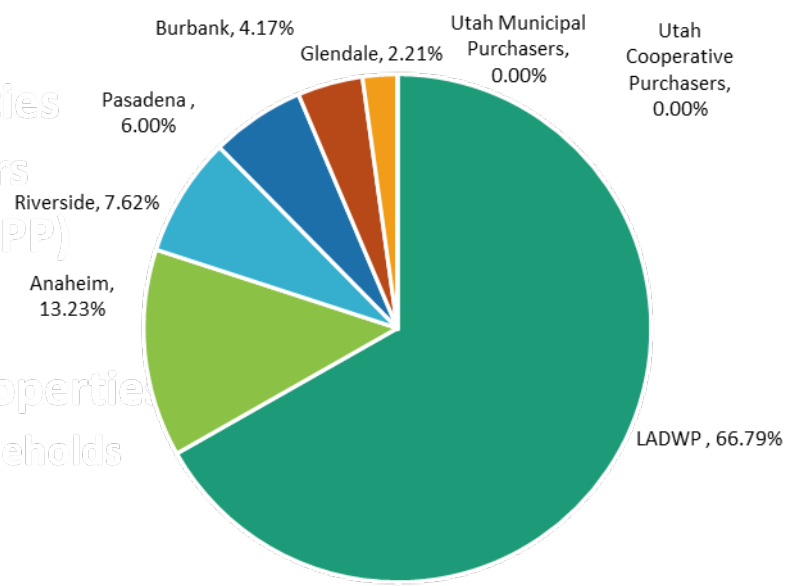
Project Participants and Entitlement Shares

Utah Purchasers 21.06%



Percentages of Capability of Generation 100% Utah Layoff to California

Utah Purchasers 0.00%



California Purchasers 100.00%

Project Economic Benefits

- Average annual direct employment of 400 highly skilled and compensated workforce for over 35 years
- Most recent annual payroll of over $45 million
- From inception:
  - $6 billion paid to Utah coal suppliers
  - $1.5 billion paid for transportation services
  - $250 million in royalties paid to Utah public entities
- Annual indirect Utah economic multiplier effect
  - $866 million in economic activity to the State
  - $222 million in household earnings

Project Tax Benefits

- Agreement to pay taxes uncharacteristic of an Interlocal entity
- From inception:
  - Fee in lieu of ad valorem tax (property tax) >$500 million
  - Gross receipts tax (State income tax) ≈ $154 million
  - Sales and use tax ≈ $64 million
  - Total taxes ≈ $720 million
  - $45 million paid to address construction impacts on communities and school districts
- No tax or other economic incentives offered by or received from the State of Utah

Loss of Existing Customers

- California Senate Bill 1368
  - Limits electrical generating sources both within and imported to California to an Emissions Greenhouse Standard for CO2e of 1,100 pounds per megawatt hour
    - IPP coal generation produces approximately 2,000 pounds per megawatt hour
    - Power Sales Contracts grandfathered in until expiration in 2027
    - California Purchasers could not renew power sales contracts beyond 2027 for coal fueled energy

Weak Market for Coal-fueled Electricity

- Purchasers for IPP coal-fueled electricity beyond 2027 could not be found
  - Other regional utilities unwilling or unable to invest in additional coal energy
  - Magnitude IPP capacity (sufficient to power 1.5 million households)
  - Transmission constraints
  - Increasing Renewable Portfolio Standards and weak regional load growth
  - Persistently low natural gas prices and declining cost for renewable energy

Regulatory Obstacles to Continuing Coal

- EPA efforts to require significant additional investments in environmental controls at IPP
- EPA regulations for Coal Combustion Residuals
- Continuing federal regulatory efforts to limit greenhouse gases emissions

A Tale of Two Plants

Coal-fueled power plants of similar age, size, rural location, and customer composition.

Intermountain Power Project

- Opportunity to leverage existing infrastructure to provide energy sources desired by customers and continue project benefits to state.



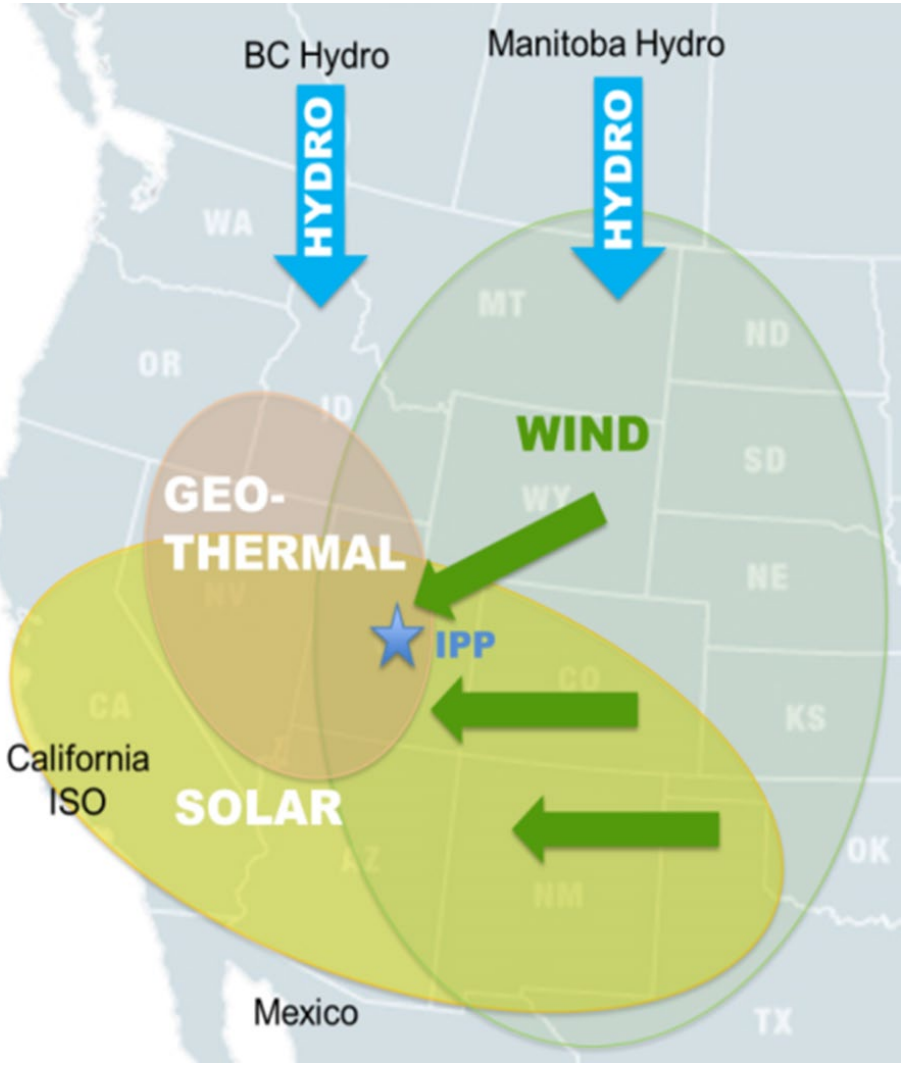
Navajo Generating Station

- Already demolished. Employees offered transfer to Phoenix.



Unlocking IPP's Potential

- Proximity to regional renewables
- Existing transmission systems
- Over 4,000 acres of land
- Unique underground salt formation ideal for energy storage
- Highly skilled workforce at IPP
- History of successful regional energy cooperation



Extending IPP's Life with IPP Renewed

- Decision to shutter coal-fuel generation in 2025 announced in May 2017
- Successful approval of amendment to Power Sales Contracts for reconfiguring the Project to natural gas combined cycle units in replacement of coal-fueled generation
- Execution of Renewal Power Sales Contracts terminating in 2077
- New contracts retain favorable excess power sales terms for Utah participants

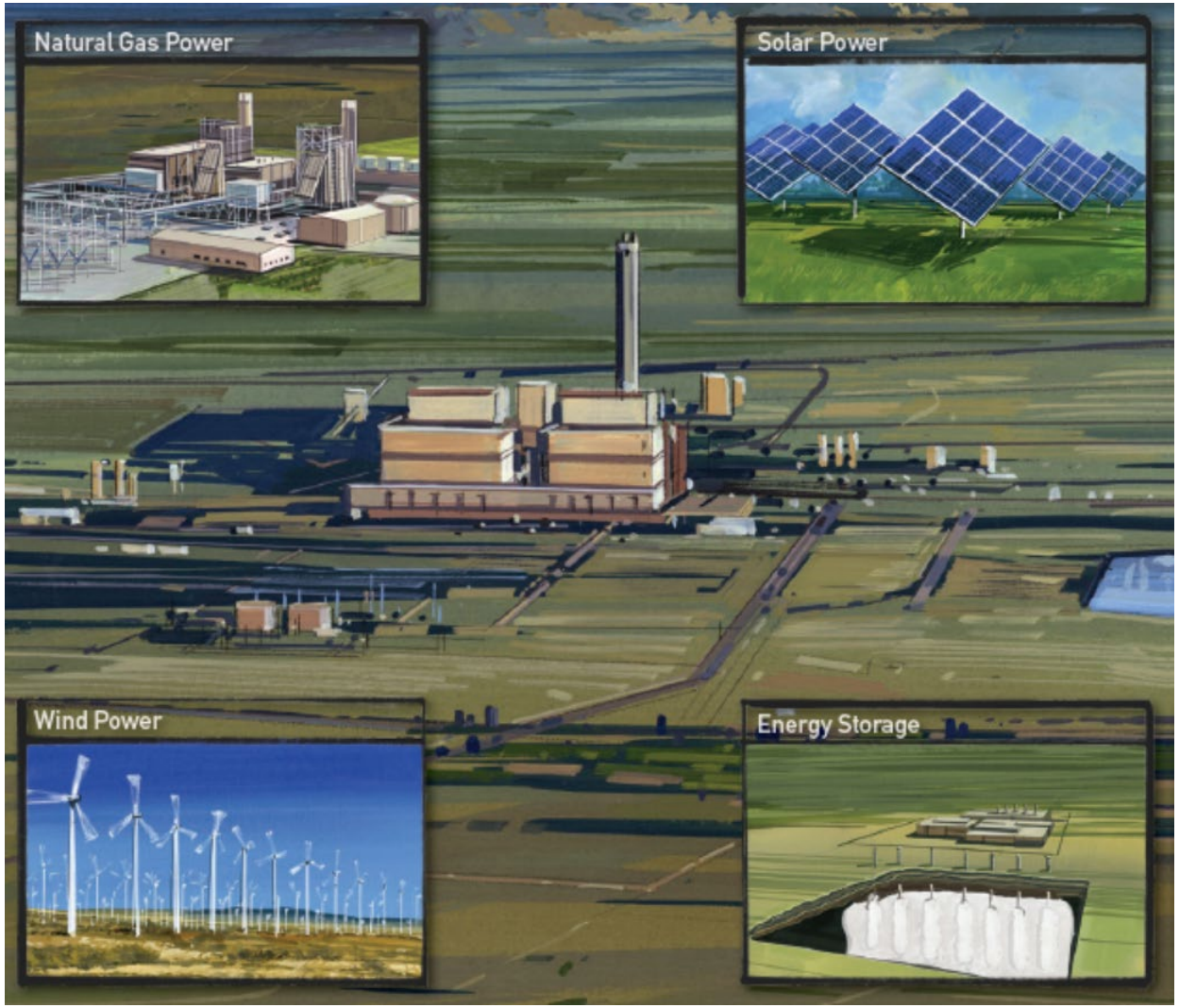
IPP Renewed

IPP Renewed

- Renewal Contracts to 2077
- Over $2 billion investment for construction of new natural gas-fueled electricity generating units and upgrades to transmission facilities
- Facilitate development of hydrogen production and long-term storage capabilities attracting further development

Energy Hub at IPP

- Milford Wind
  - Additional renewables development likely
- Advanced Clean Energy Storage (ACES) project for hydrogen production and seasonal storage
  - Additional $2 billion+ investment
  - Already attracted DOE loan guarantee support



Hydrogen Use Attracting International Attention

- IPP Renewed generating units will operate on 70% natural gas / 30% green hydrogen at start up in 2025; transitioning to 100% green hydrogen by 2045
- Contracts in place with ACES for green hydrogen production and storage
- **Initial financing completed and construction has commenced on both IPP Renewed and ACES components of the project!**

Hydrogen by the Colors

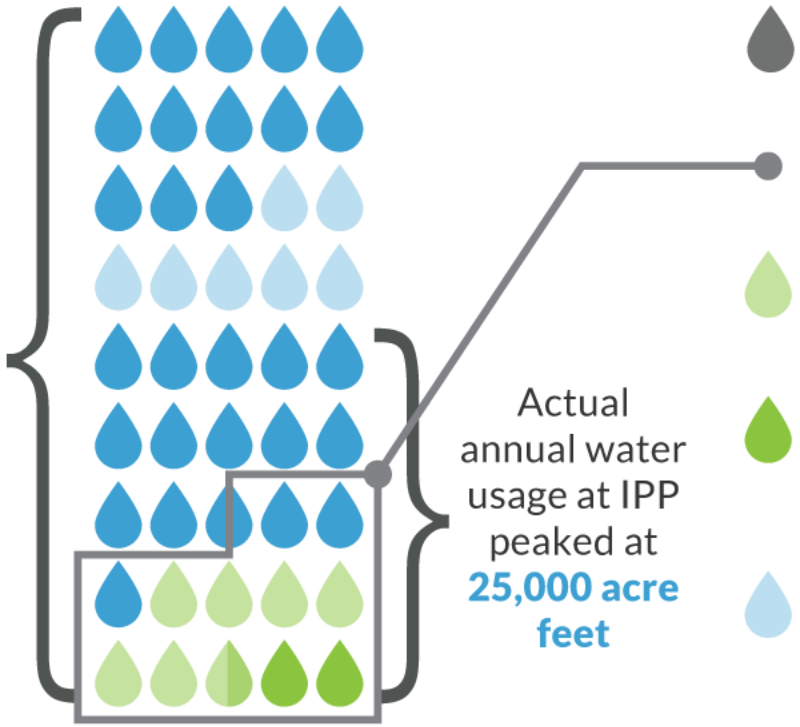
- Grey hydrogen – Most common production method today using steam methane reforming of natural gas
  - Water demand 16.3 liters per 1 kg. hydrogen
- Blue hydrogen – Production from fossil fuels with carbon capture and storage added
  - Water demand additional for carbon capture processes
- Green hydrogen – Production using electrolysis powered by renewable energy to split water molecules
  - Water demand 9.1 liters per 1 kg. hydrogen

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Intermountain Power Agency
Energy for Today & Tomorrow

IPP Renewed

Reducing consumption of one of Utah's most precious resources

In 1979, prior to construction of the Intermountain Power Project, the Project acquired water rights averaging 45,000 acre feet annually at a cost significantly above its agricultural value. Because IPP eventually constructed only two of the originally anticipated four coal-fueled generating units, the project has never consumed all of its water directly. Instead, IPP has acted as a diligent steward of the resource by leasing excess water to local farmers and beneficially using it in every year of the Project's history.



= 1,000 acre feet of water

Current water usage of IPP's coal-fueled generating units is approximately **12,500 acre feet** annually

Projected water usage for the IPP Renewed gas-fueled units is approximately **6,500 acre feet** annually

Projected water usage for producing enough hydrogen from electrolysis to supply 100 percent of IPP Renewed's fuel needs is approximately **2,500 acre feet** annually

Development of long-term salt cavern storage for hydrogen would require approximately **7,000 acre feet** of water annually for **only two years**

Construction is Under Way!

- Site preparation complete
- Underground installations under way
- Salt cavern construction under way





Conclusions

- IPP Renewed leverages existing infrastructure to provide energy products desired by the Intermountain Power Project's customers
- No state tax support or economic development incentives
- Continues positive economic contributions to state and local entities
- **Continues favorable entitlement "layoff" structure for Utah municipalities**
- Significant reductions in carbon emissions and solid waste
- **Significant reductions in water use**
- Provides an "anchor tenant" supporting additional energy development


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