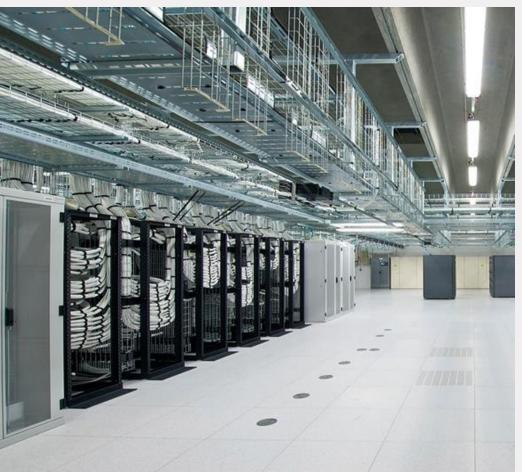


Data Center Impacts in New Mexico: Policy Solutions for Water and Energy

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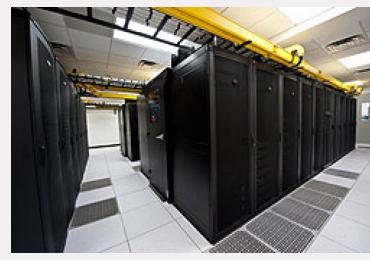
What is a Data Center?





Facility with physical infrastructure including servers and networking equipment to store, process, manage, and distribute large amounts of data.





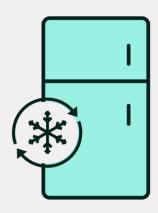




- Enterprise
 - Owned by an entity to support its own storage and computing needs
- Colocation
 - Multiple data center tenants
- Edge data center
 - Supports lower latency applications
- Hyperscaler
 - Extremely large data centers, often supporting big data storage, cloud computing, and AI applications



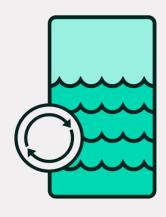




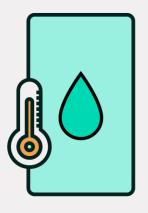
Refrigeration cooling systems use an air handler, circulate either cool air or water in the data center, and remove hot air.



Adiabatic- or directevaporative-cooling systems use water to cool air that is circulated in the data center.



Free-cooling systems take advantage of outdoor ambient air or water temperatures to cool the air that is circulated in a data center.



Liquid-cooling systems directly absorb heat from computer components, rather than cooling the air around the computers.

Economic Impacts



Tax payments

- Property taxes
- Sales tax

Job creation

- Construction
- On-site technicians and security once

facility is completed

All data centers create exceptionally few jobs compared to the tremendous amount of power they consume. I&M recently disclosed that the All data centers coming to its Indiana service territory will only create an estimated 0.26 jobs per megawatt of power used. Other industries that have located or expanded operations in Indiana recently have averaged 41 jobs per megawatt of power used.

"I can't think of a site selection or placement decision that was decided on a set of tax incentives," said Bo Williams, the executive responsible for Microsoft's data centers in North America.



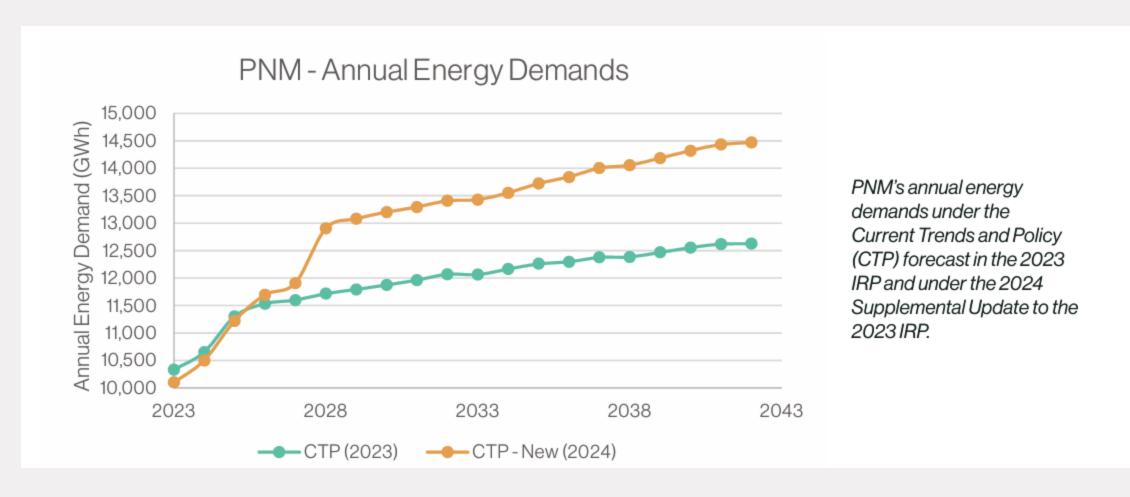


- "Phantom" load complicates forecasting for utilities
- Stranded assets
- Cost allocation methodology and socialized costs
- Special contracts





Data Centers in New Mexico



Current Policy Impacts in NM: "Microgrid" Legislation / HB93



- 2025 HB93 (originally on grid enhancing technologies, amended to include this microgrid provision) provides for new ways for data center customers to generate and sell power.
- Behind-the-meter large-scale customer generation
- Option to sell to a utility excess energy sold does not count toward the RPS until
 2035
- Microgrids under HB93 become subject to the 2045 zero-carbon requirement.

Minnesota HF16/SF19



- Water use considerations explicit in project approval
- Large customer class directive for the commission
- Criteria for approval of tariffs or electric service agreements for large customers
- Clean energy and capacity tariff required for all public utilities
- Requirement for data centers to meet sustainable design or green building standards

"Data centers will use less electricity in Minnesota, because Minnesota is colder," said <u>Rep. Duane Quam</u> (R-Byron). "That's why so many would like to put them here."







Defines large load as 20 MW or above



Different class of service from other industrial and commercial classes



Commission must consider whether the rate structure impedes the state's clean energy goals, if the costs of serving the class are represented and mitigate the risk of other classes having increased costs



10-year minimum contract term and obligation requiring the retail electricity consumer to pay a minimum amount or percentage, based on the projected electricity usage





- Reforming economic development rate guidelines in statute
- Implementing clean transition tariffs
- Requiring contract provisions for large loads to prevent stranded assets
- Load forecasting reform specific to data centers
- Changes in cost allocation methodology
- Separate rate classes specifically for data centers
- Requirements for water reporting and large water user policies

Questions?

