



# Large Loads: Interconnection, Tariff Designs and State Actions

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**ENERGY TECHNOLOGIES AREA**  
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# Agenda

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- Load forecasting and large load interconnection
- Load forecasting and large load tariffs
- Elements of large load tariffs
  - 1. **Eligibility Requirements**
  - 2. **Cost Recovery and Rate Design**
  - 3. **Risk Mitigation Provisions**
  - 4. Customer Programs
  - 5. **Flexibility Provisions**
  - 6. Backup and Behind-the-Meter Generation
- State actions to address large loads

# Load forecasting and large load interconnection



# How electricity demand forecasts are changing

- Electricity forecasters from many different types of organizations (utilities, RTO/ISOs) are starting to adapt their forecasting methods
- These efforts vary widely in terms of improvement techniques and the level of maturity of the effort
- Several utilities and RTO/ISO have made changes to their forecast approaches to incorporate new demand drivers, resulting in sometimes substantial changes in their load forecasts over the course of a few vintages
- Only a few entities include forecasts of these Type B drivers at the distribution level

## INCORPORATION OF MAJOR DEMAND DRIVERS BY VARIOUS FORECASTING ENTITIES

		Demand-Side Resources			Type B Load		Type A Load			
		EE	DR	DG	EVs	Electric Heating	Data Center	Indoor Agriculture	Electrolyzer	Industrial Onshoring
AZ	Arizona Public Service (APS)	✓	✓	✓	✓		✓			✓
AZ	Salt River Project (SRP)	✓	✓	✓	✓	✓	✓			
CA	City of Palo Alto	✓	✓	✓	✓	✓				
CA	CleanPowerSF	✓	✓	✓	✓	✓				
CA	Los Angeles Department of Water and Power	✓	✓	✓	✓	✓				
CA	Pacific Gas & Electric (PG&E)	✓	✓	✓	✓	✓				
CA	Southern California Edison (SCE)	✓	✓	✓	✓	✓				
CA	San Diego Gas & Electric (SDG&E)	✓	✓	✓	✓	✓				
CA	Sacramento Municipal Utility District (SMUD)	✓	✓	✓	✓	✓	✓	✓*		
CO	Black Hills	✓	✓	✓			✓*			
CO	Colorado Springs Utilities (CSU)	✓	✓	✓	✓	✓				
CO	Public Service Company of Colorado (PSCO)	✓	✓		✓	✓				

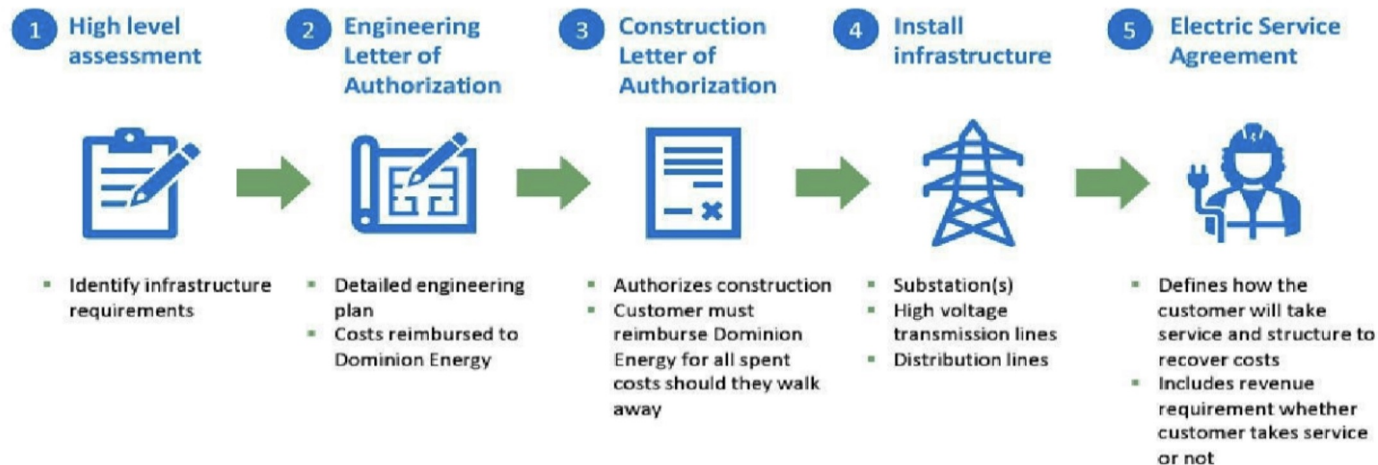
# Large load interconnection

- There number of large load interconnection requests is rapidly increasing.
- Interconnecting large loads can be complex, intersecting with distribution system planning, integrated resource planning and utility or RTO transmission planning.
- Often, there is not a publicly available description of a standardized process to interconnect a large load to a utility system. Information may be available, with varying degrees of specificity in a variety of proceedings (e.g., integrated resource plan, rulemaking, tariff).
- Speculative load interconnection requests have contributed to difficulties in developing load forecasts.
- Standardized and transparent processes can assist with incorporating large load service requests into load forecasts.

# Dominion Energy (1)

## Data center interconnection request process

### Typical data center request process from contact to connection



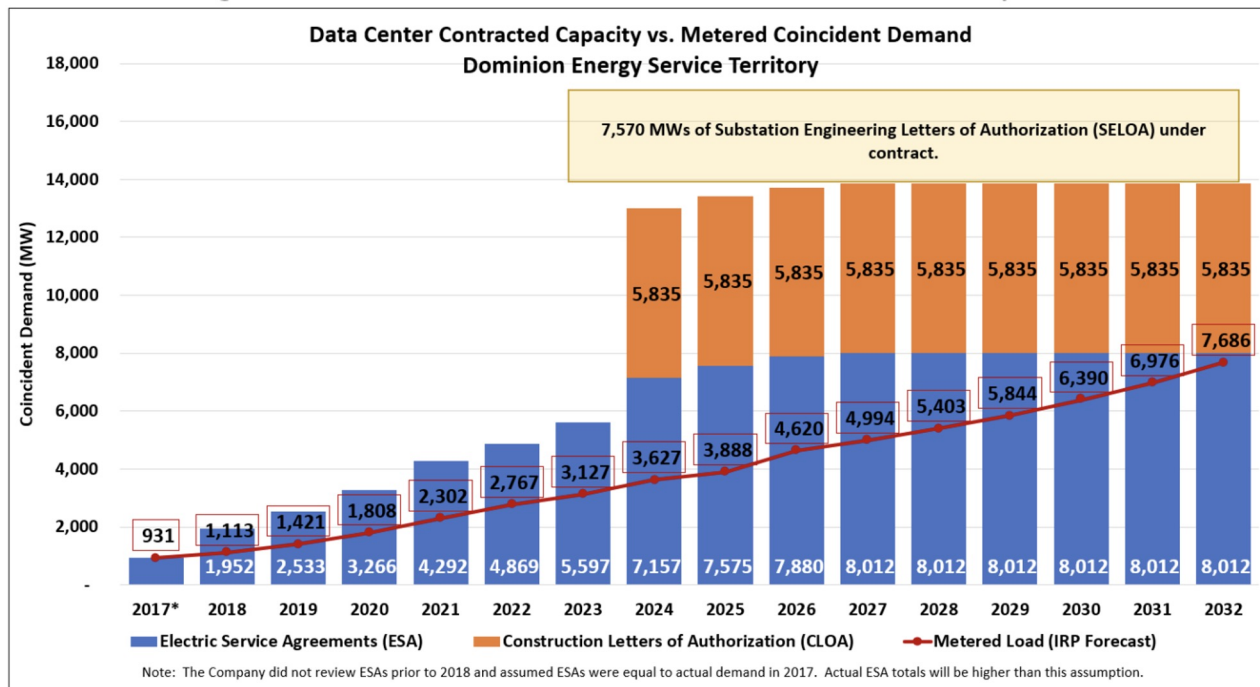
*Development and infrastructure costs are incurred by the customer*

## Dominion Energy (2)

Dominion provides information on the quantity of load in different stages of interconnection in their IRP.

Construction Letter of Authorization are less certain (orange bars)

Electric Service Agreements are certain (blue)





# California energization process

California PUC decision expedites the process of connecting homes, businesses, electric vehicles and other loads to the grid.

- Provides transparency to process
- Adopts timelines
- Supports early engagement between customers and utilities

## Energization Process Steps & Responsibilities

Step #	Step Name	Description	Responsibility
1	Customer Intake	Customer submits energization request; IOU reviews and establishes "Application Final Submittal" date (AFS); energization clock starts when application is deemed complete and approved.	Shared: Customer initiates, IOU reviews/approves
2	<b>Engineering &amp; Design</b>	<b>IOU conducts field visits, engineering study, develops project design, determines project cost.</b>	<b>IOU</b>
3	Customer Dependencies	Customer obtains necessary permits, easements, signs contracts, pays fees, completes 3 <sup>rd</sup> party approvals.	Customer
4	<b>Utility Dependencies</b>	<b>IOU obtains its own permits, easements, approvals from authorities having jurisdiction (AHJ).</b>	<b>IOU</b>
5	Customer Site Readiness	For non- Rule 29/45: Customer requests pre- construction meeting/ inspection and completes customer- side construction. For Rule 29/45: Customer requests pre- construction meeting.	Customer
6	<b>IOU Site Readiness</b>	<b>For non- Rule 29/45: IOU conducts pre- construction meeting and inspection.</b> <b>For Rule 29/45: IOU preforms site readiness work as required by the tariff.</b>	<b>IOU</b>
7	<b>Construction</b>	<b>IOU schedules and completes utility-side construction (including traffic control, outages, equipment install, etc.).</b>	<b>IOU</b>
8	<b>Service Energization Provided to Customer</b>	<b>Final inspections scheduled/ completed as required. IOU energizes service- project clock stops.</b>	<b>IOU</b>

Source: [CPUC](#)



## Speculative High Density Load Interconnection Process

- Once a request for new [Schedule 20](#) (Speculative High-Density Load) service is received, Idaho Power will perform a study or studies to determine what equipment or upgrades are necessary to interconnect the customer's load to Idaho Power's system.
- The customer pays the actual cost of all required interconnection studies.
- Any difference between the deposit and the actual cost of the study will be paid by or refunded to the customer. If a deposit of amount sufficient to pay for the completion of the study is not maintained, the Company may suspend work on the study.

- Proposed Large Load Power Service Rate Plan includes an interconnection timeline.
- Begins with initial assessment of the customer project and goes through final interconnection.
- “The LLPS Rate Plan is designed to consolidate and streamline the interconnection process, while also driving equity and transparency in rate offerings for new large load customers.”

## The Path to Power



### Initial Evaluation

During this typically two-to-four-week phase, the Company provides an assessment of the customer's project in relation to the system based on anticipated load ramp. The Company explains its study and interconnection process, then advises on next steps. The Company provides no formal cost estimates at this phase.

### Project Details Phase

During this typically two-to-three-month phase, the customer submits necessary information and requirements including proof of land rights. The customer signs an Letter of Agreement and remits a \$200,000 deposit. After executive approval, Evergy provides an indicative price estimate and a construction timeline.

### AQ Study Phase

Once details including the prospective customer's forecasted load ramp are finalized, the customer signs an Initial Project Activities agreement and Evergy submits the project to the Southwest Power Pool for an Area Qualification study. This phase typically takes 90 days to complete.

### Completion of Project Phase

This phase may run parallel with the AQ study phase and takes two to six months. In this phase, the Company works with the customer to negotiate and execute project agreements needed to support the project including Interconnection Agreements, Right-of-way Agreements and Facilities Extension Agreements.

### SPP Submittal and Evaluation Phase

During this stage, the Company submits the formal load request to SPP reflecting the new load and its ramp schedule.

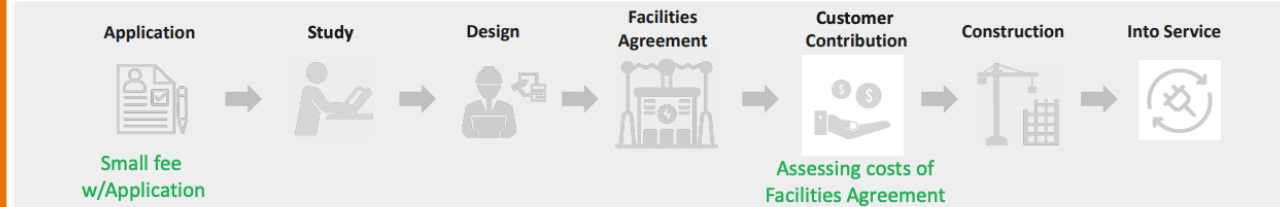


# Grant Public Utility District

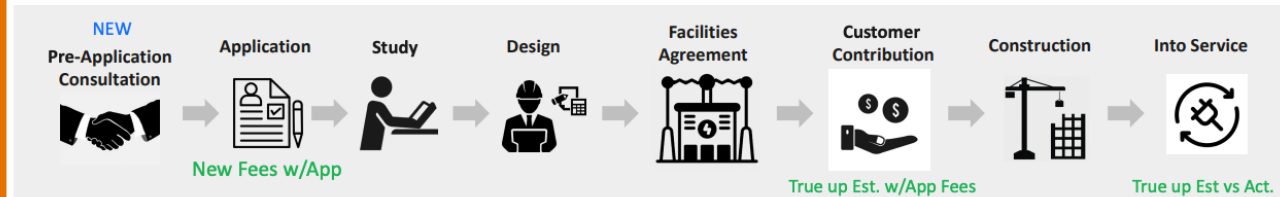
Proposed changes include:

- Applicants must submit load ramping plan
- Utility schedules pre-application meeting
- Revised application fees
- Added true-up

## The Existing Process



## The Proposed Process



Source: [Grant PUD](#)

# Load forecasting and large load tariffs

# Reasons for introducing a large load tariff

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## Traditional Approaches to Large Customer Tariffs

- **Standard tariff:** Recover embedded costs through tariff-based prices, with some customer-specific assignment of T&D costs
- **Special contract:** Prices tailored to individual customers based primarily on recovering incremental costs, sometimes with a discount to promote economic development



## Common Reasons for Introducing Large Load Tariff

- Mitigate **concerns about shifting costs** caused by very large new loads to other customers
- Reduce **risk of stranded assets**
- Provide large customers with improved options for **renewables procurement**
- Create a **standardized mechanism** to quicken and strengthen the process of signing up and interconnecting new loads

## Other (less common) reasons

- Promote **economic development**
- Enhance **demand flexibility**

# Timeline of large load tariff proceedings

## 2022 and Earlier

### Cheyenne Fuel Light & Power

Wyoming commission approves CFLP's Large Load Tariff (December 2017)

### New York Municipal Power Authority

NY commission approves NYMPA's Cryptocurrency Tariff (June 2018)

### Entergy Mississippi

Mississippi commission approves new Large Load Tariff (December 2018)

### Xcel Minnesota/Northern States Power

MN commission approves proposed changes to Xcel MN's Competitive Response Rider (December 2018)

### Dominion

Virginia commission approves Dominion's market-based rate, an optional tariff available to large load customers (March 2020)

### Idaho Power

Idaho commission approves Idaho Power's Large Load Tariff (January)

### Entergy Arkansas

Arkansas commission approves Entergy Arkansas's Large Load Tariff (December)

### Duke Indiana

Special retail service agreement for a data center in Indiana is approved by the commission (February)

### Tucson Electric Power

Arizona commission approves special contract (ESA) for large battery manufacturing facility (June)

### PacificCorp

Oregon commission approves proposal to penalize data centers for inaccurate forecasting (December)

## Q1 & Q2

### Georgia Commission

Approves rules to protect other customers from cost increases from data center investment (January)

### AEP/Indiana & Michigan

Indiana commission approves new "Large Load Tariff" (February)

### Salt River Project

Board approves changes to E-67 rate for Large Load General Service (February)

### AEP/Appalachian Power and Wheeling Power

West Virginia Commission approves new "Large Load Tariff" (March)

### NV Energy

Nevada commission approves Clean Transition Tariff (March)

A new large load tariff has been proposed or approved in every month of 2025

## Q2

### Georgia Power

Georgia commission approves revised TOU-SC-15 tariff for >100 MW customers (April)

## Q3

### AEP Ohio

Ohio commission approves "Data Center Power" tariff addressing data centers and crypto mining facilities with >25 MW load (July)

2023

2024

2025

COMMISSION APPROVALS

APPLICATIONS

COMMISSION REJECTIONS

### AEP Ohio

Proposes "Data Center Power" tariff targeting data centers with >25 MW load (May)

### AEP/Appalachian Power and Wheeling Power

Files new large load tariffs (August)

### PG&E

Proposes Rule 30, requiring large loads to pay for electric grid upgrades in advance (November)

### Basin Electric (ND)

FERC rejects Basin Electric data center & cryptocurrency tariff (August)

## Q1

### Energys (MO/KS)

Proposes new large load tariff (February)

### Florida Power & Light

Proposes new large load contract service rates (LLCS-1 and LLCS-2) (February)

### Wisconsin Electric

Files new "Very Large Customer" tariff (March)

## Q2

### Dominion

Files revised GS-5 rate addressed at large loads and data centers (April)

### East Kentucky Power Cooperative

Files new "Data Center Power" tariff, which is later suspended by Kentucky commission to allow for a longer review (April)

### Ameren Missouri

Files revised large load tariff containing new subsection with specific terms for customers with ≥100 MW (May)

### ComEd

Files changes to General Terms & Conditions that increase the upfront costs for large load customer applications (June)

### APS

Files proposed changes to its Extra High Load Factor rate to more clearly address data centers (June)



# Short-term tactics to serve large customers

Short-Term Tactic	Example
1. Use an existing tariff for large customers	<b>Portland General Electric</b> relies on Schedule 90, Large Nonresidential Standard Service; <b>Xcel Energy</b> Northern States relies on existing Competitive Response Rider (CRR)
2. Introduce minor updates to existing tariffs to accommodate larger customers	<b>Ameren Missouri</b> embedded new requirements for large loads ( $\geq 100$ MW) in its existing Large Primary Service rate (ongoing proceeding)
3. Rely on one-off energy service agreements (ESA) and contracts	<b>Duke Energy Indiana</b> and Meta (through “Blocke, LLC”) entered into a special ESA with a PPA & market-based rates
4. Microgrid/on-site generation configurations to bring data centers online quickly, and optionally connect them to the grid later	<b>Entergy TX</b> partnered with Enchanted Rock, a microgrid developer, to deploy on-site backup generation for a large commercial customer. The generator will be run synchronously with the grid and can also operate in island mode.
5. Create more transmission headroom	<b>PG&amp;E</b> relies on transmission line tap and remedial action scheme to create more headroom on the transmission system in the short-term

While short-term tactics can serve as stop-gap solutions, bringing an increasing number of large customers online efficiently will require durable solutions, **including changes/additions to tariff offerings**

# Fundamental options for moving forward with large load rates/tariffs

## 1 Cost recovery approach

**Direct assign:** Transparent demonstration of cost causation; customer-specific flexibility

**System average:** Reduced risk of disallowance if customer exits; consistent with philosophy of power system as a shared resource

## 2 Basis for recovered costs

**Marginal/incremental costs:** Ensures no cost shift to other ratepayers; may attract load if marginal cost < embedded cost

**Embedded costs:** Consistent with pricing basis for most existing customers; benefits ratepayers if marginal cost < embedded costs

**Hybrid option:** Recover incremental cost for all demand above a threshold level

## 3 New or existing tariff

**Propose new tariff:** Provides more flexibility in rate design; avoids “baggage” associated with existing rates

**Leverage existing tariff:** Potentially less regulatory and administrative burden; less “fear of the unknown”

**Hybrid option:** Update existing rate and introduce new option

## 4 Standardized or special contract

**Special contract:** Provides customer-specific flexibility

**Standardized approach:** Streamlined negotiations and approval

**Hybrid option:** Default to standardized approach, with special contract option

## 5 Available Customer Programs

Optional customer programs include: **clean energy program** to help customers achieve their decarbonization goals, **load flexibility programs** and **behind-the-meter generation** to accelerate interconnection, support resource adequacy, and reduce power system costs

## 6 Risk Mitigation

Tools to reduce stranded cost and cost shifting risks include: collateral requirements, minimum charges, exit fees, minimum term lengths, and “hold harmless” provisions

# Key elements of large load tariffs

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1. Eligibility Requirements
2. Cost Recovery and Rate Design
3. Risk Mitigation Provisions
4. Customer Programs
5. Flexibility Provisions
6. Backup and Behind-the-Meter Generation

# Emerging trends

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## Non-Discriminatory Tariff Design

Utilities are mostly moving away from tariffs that single out data centers and instead establish eligibility criteria that focus on large customers, including data centers (e.g., using minimum load requirements)

## Risk Mitigation Mechanisms

Utilities rely on a multi-prong approach to mitigate stranded cost risks: high credit ratings and collateral requirements, minimum (demand) charges, exit fees based on minimum charges, and longer contract terms (10-15 years). State legislation is beginning to impose these requirements as well

## Premium

Some tariffs require customers to pay a premium to reflect the cost of accelerating new energy supply procurement. Customers can also pay a premium to be supplied by more expensive clean energy

## Cost-Recovery

Generation charges reflect the market structure and how the energy resource is procured (e.g., from an organized market, utility-owned, customer-owned), while **transmission costs** are typically recovered in the same manner as in the “standard rate”, with some customer-specific costs directly assigned

## BTM Resources and Load Flexibility

Surveyed tariffs typically allow **BTM generation** as backup or to offset contract capacity, by incorporating elements of **standby rates** (e.g., customers contract for their remaining capacity needs). **Load flexibility** is typically addressed through demand response programs or BTM generation

# Large load tariffs: Demand flexibility

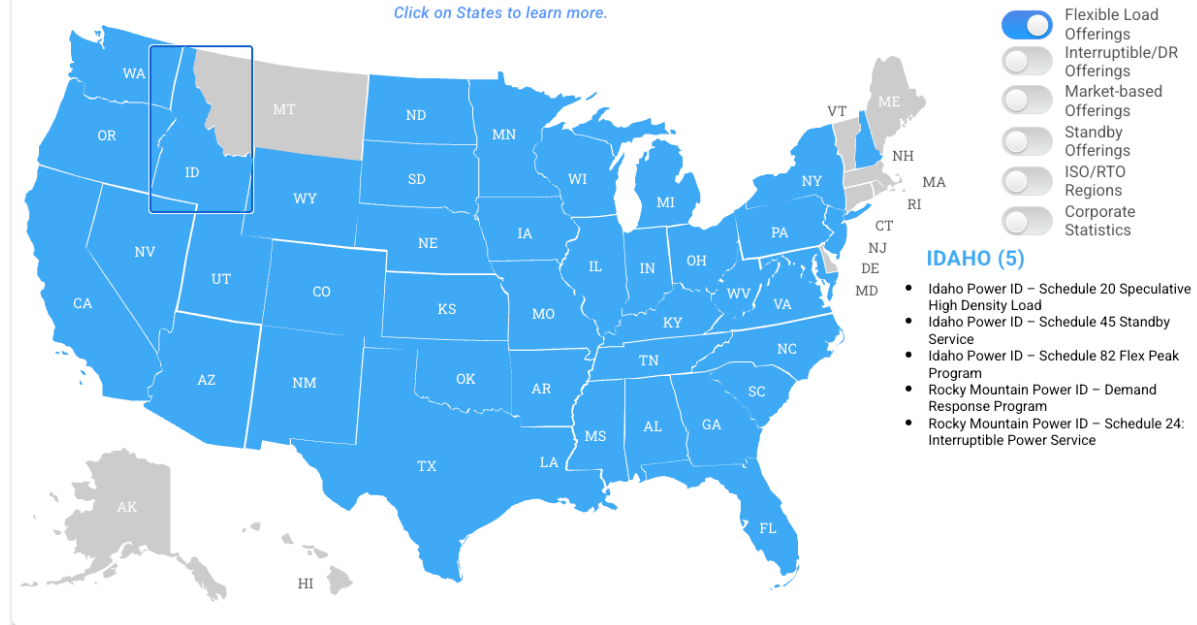


# Demand flexibility tariffs

The [Electric Power Research Institute](#) has identified flexible load tariffs in almost every state.

Many of the examples are interruptible service or load curtailment which are not focused on data centers but can apply to large loads.

## DCFlex Workstream 2: US Retail Flexible Load Tariff Dataset and Wholesale Markets





## Demand flexibility tariff examples (1)

- Idaho Power can call interruption events and remotely disconnect electric service to [Speculative High Density Load](#) customers up to 225 hours annually:
  - June 15- September 15
  - 1-11 pm; M-F
  - Max 10 hour interruption
  - 2 hour notification
- Entergy Arkansas requires [Large Power High Load Density](#) customers to enter into a customer service agreement for interruptible service as part of the tariff. Maximum interruptions range from 10-20 events per year depending on curtailment notice time.
- Montana Dakota Utilities' [High Density Contracted Demand Response](#) tariff allows the utility to interrupt the customer's service for up to 200 hours annually (or as included in electric service agreement).

## Demand flexibility tariff examples (2)

- [Ohio Power's Data Center Tariff](#) requires customers with behind-the-meter generation to be capable of instantaneously curtail load equal to or greater than the behind-the-meter generation output.
- [Texas passed a law](#) in June that requires utilities to develop protocols to install equipment before loads are interconnected for remote disconnection during firm load shed event, starting in 2026. See appendix for additional information.
  - It also requires ERCOT to develop a threshold at which a large load customer with an on-site backup generator may be called upon to curtail load in the event of an emergency.

## Demand flexibility special contract examples

- Google and Indiana Michigan Power (I&M) filed a special contract with the Indiana Utility Regulatory Commission on July 30, 2025 that has two components
  - Clean Capacity Arrangement (CCA) – an agreement to transfer long-term generation capacity from Google to I&M
  - Demand response – Google will provide interruptible capacity to I&M
  - Much of the filed contract is redacted and it is not clear what the quantity or price is of the resources Google are offering to I&M.

# State actions



# Informational proceedings

- New Mexico PUC opened an inquiry docket (2024) to evaluate grid readiness and economic development ([Docket 24-00257-UT](#)). Concurrently, a new law was passed to promote economic development in the state.
- Pennsylvania PUC requested responses (2025) to [14 questions](#) on the design of a large load customer model tariff.
- Arizona Corporation Commission (ACC) [opened a docket \(2025\)](#) to review existing rate classifications and explore creating more transparent rates for data center customers and the public.
- North Carolina opened [proceeding opened to receive](#) information and develop recommendations as how to fairly and efficiently integrate large electric load additions ([Docket E-100 Sub 208](#)).
- See appendix for more details.

## Request additional information

- Entergy Arkansas must file [annual reports](#) regarding their Large Power High Load Density Service.
- North Carolina [required](#) Duke Energy to file semiannual [reports](#) on large loads in Docket [E-100 Sub 207](#), addressing changes to the proposed large electric load additions in the advanced stage of development.
- Georgia PSC [required](#) Georgia Power to continue providing [quarterly large load economic development reports](#) and include additional information.
- See appendix for additional details.



## Studies on the impact of large energy consumers

- [North Dakota](#) (2025) passed a law requiring the Legislative Management to study the impact of large energy consumers, including data centers, on the electricity grid.
  - It will evaluate grid reliability and infrastructure requirements, regulatory consistency throughout the state, economic impacts, costs and impacts of regulated and exempt utilities and regulatory and exemption criteria (among other topics).
- [Virginia](#) published the Joint Legislative Audit and Review Commission study reviewing the impacts of the data center industry in the state (2024).
  - Policy [recommendations](#) included to consider:
    - Requiring utilities to establish a demand response program and require data centers to participate in the program
    - If utilities have the authority to delay service (but not deny) to customers if load cannot be supported by the transmission or generation capacity.
  - The report included a [review of rate impacts of data centers](#) in Virginia by E3. See appendix for additional information.

## Leveraging state resources and supporting economic development (1)

- [Colorado \(2025\)](#) allows transmission developers to co-locate within a state highway right-of way, and requires the state Department of Transportation to provide transmission developers “the best available information” on potential future state highway development plans that could impact (i.e., be suitable for) the placement of transmission lines in the state highway right-of-way.
- [New Mexico \(2025\)](#) authorizes the commission to approve utility applications for special rates to attract new customers and promote economic development and requires that special rates or tariffs must be designed to recover at least the incremental cost of providing services to the customer.
- [West Virginia \(2025\)](#) built on its Certified Microgrid Development program to attract data centers to the state, and requires the Department of Commerce to assist projects in developing or operating a certified microgrid.
  - Local governments can not slow the creation of a certified microgrid

## Leverage state resources and support economic development (2)

- Pennsylvania – offers [fast track permitting data centers](#) program and [plans for legislation](#) to accelerate Department of Environmental Protection permitting for data centers
- Kansas created [sales tax exemption on goods to build and equip data centers](#)
- [Kentucky](#) and [Arkansas](#) expanded pre-existing data center tax exemptions
- [Michigan](#) created sales tax exemption with consumer protections
- [Utah](#) and [Oklahoma](#) (see next two slides) made it easier for data center developers to procure their own power supply without going through grid
- [South Carolina](#) eased regulations to build power plants to meet demand for data centers

# Develop alternative processes for providing electric service

Utah established an alternative processes for providing electric service to customers with large electrical loads. The new law:

- Creates procedures for submitting, evaluating, and contracting for large-scale electrical service requests between utility and large load customer
- Requires the commission to conduct proceedings to establish transmission cost allocation and the feasibility of a large load flexible tariff
- Requires large load customers to pay incremental costs necessary to receive electric service including generation resources, distribution system upgrades, transmission system improvements and service and other infrastructure costs
- Requires the commission to conduct periodic reviews of the program and report to the Legislature

## Refine definition of a public utility

- Oklahoma [exempted](#) power producers from public utility regulation under certain conditions. To be exempt, the power producer must:
  - Use the power directly for themselves; or use the power indirectly to serve a specific customer; or be an exempt wholesale generator.
  - Utilize a natural gas component in their generation capacity.
  - Not sell power to the public.
- Regulated utilities do not have to serve customers that receive electricity from an exempt power producer.

## Resources for more information

- [Large Load Literature Review](#) - summaries of ~60 reports and large load resources, grouped into 11 categories (Load forecasting, Reliability and resource adequacy, Large load interconnection, Demand flexibility, Generation, Co-location, Data center location/infrastructure, Large load tariffs, Policy options, Maps and tools, Design and operations)
- [Electricity Rate Design for Large Load: Evolving Practices and Opportunities](#)
- [Center of Expertise in Data Centers – datacenters.lbl.gov](https://datacenters.lbl.gov)



# Presented By

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Dr. Long Lam is an expert in the development and implementation of decarbonization strategies and in the design and analysis of clean energy policy.

His work for large companies and governments with net-zero commitments and for regulated utilities, market operators, and regulators focuses on several areas, including:

- Emissions reduction strategies and implementation program development for entities pursuing large-scale decarbonization
- Granular accounting of Scope 2 emissions and clean energy procurement, including defining future-ready contractual arrangements and policies
- The design and evaluation of smart rates, distributed energy resources, and load flexibility programs

Dr. Lam has led projects to develop greenhouse gas abatement cost curves and abatement measure prioritization, analyze programs to effectively integrate clean energy resources, and evaluate the economic benefits of grid modernization and transportation electrification programs.

Thank you

## Contact

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## For more information

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# Appendix



- [Texas SB6](#) requires the PUC to establish standards for large load electricity users in ERCOT on interconnection and cost recovery (among other topics). Examples include:
- Disclose information about back-up generation that can provide 50% of customer load, and may be required to use back-up generation or curtail load during energy emergencies
- Requires large load interconnections that occur after 2025 allow load to be curtailed during firm load shed
- Requires creation of long-lead demand response program, compensating large loads that reduce demand with 24 hours' notice during grid emergencies.
- Evaluate whether the current methodology, including the Four Coincident Peaks (4CP) methodology, for allocating transmission costs by transmission and distribution utilities in the ERCOT power region results in a just and reasonable cost allocation.

## Informational proceedings – New Mexico

- New Mexico PUC opened an inquiry docket (2024) to evaluate grid readiness and economic development ([Docket 24-00257-UT](#)). [Concurrently, a new law was passed to promote economic development in the state.](#)
- The Commission has issued three requests for information:
  - Required the utilities to respond to 13 questions to examine their ability to meet new load from customers larger than 500kW.
  - Required responses to 17 follow-up questions focused on the utility's readiness to serve new demand and potential barriers to serving new demand, broken into three areas:
    - Integrated resource planning
    - Certificates of Public Convenience and Necessity (CPCN) and
    - Other commission rules
  - The number of new resource applications the utility anticipates it will file in CY2025 (updated in October) and Q1 CY2026.

## Informational proceedings (2)

- Pennsylvania PUC requested responses (2025) to [14 questions](#) on the design of a large load customer model tariff (responses were due June 6).
  - The questions posed to consumer advocates include:
    - What safeguards do you believe are essential to prevent cost-shifting from speculative or short-lived data center investments onto existing ratepayers?
    - How can we ensure tariff structures are transparent enough to allow meaningful public input on what constitutes fair cost allocation, especially when commercial contracts are confidential?

## Informational proceedings (3)

- Arizona Corporation Commission (ACC) [opened a docket \(2025\)](#) to review existing rate classifications and explore creating more transparent rates for data center customers and the public.
- The ACC identified other topics that may be discussed in the docket including:
  - “Review of utility mechanisms being implemented with data center customers,
  - behind-the-meter and in-front-of-the-meter solutions,
  - User-funded utility scale generation to help large customers such as data centers meet their power needs”





## Informational proceedings (4)

- North Carolina opened [proceeding opened to receive](#) information and develop recommendations as how to fairly and efficiently integrate large electric load additions ([Docket E-100 Sub 208](#)).
- Utilities responded to questions posed by the commission in July 2025 on topics related to large loads including:
  - **Generation:** Types of back up generation, co-location
  - **Cost allocation:** issues associated with cost allocation, stranded cost issues
  - **Interconnection:** Potential modifications for generation interconnection procedures
  - **Tariff design:** Need for new tariffs, minimum demand for tariff, terms and conditions for tariff, value of allowing self supply in tariff, whether tariff should address voltage ride-through, sensitivity to transient disturbances, and ramp rate limitations for large load reconnection
- The commission will hold a technical conference in October 2025.

## Required filings for additional information (1)

- Entergy Arkansas must file [annual reports](#) regarding their Large Power High Load Density Service. Information includes:
  - Number of utility-called curtailments
  - Number of MISO-called curtailments
  - Compliance and performance of the Large Power High Load Density Service (LPHLDS) customers during each curtailment period
  - Contribution of all current LPHLDS customers, in the aggregate, to the utility's system peak in megawatts and as a percentage (if the utility continues to file its annual report under seal)
- North Carolina [required](#) Duke Energy to file semiannual [reports](#) on large loads in Docket [E-100 Sub 207](#), addressing changes to the proposed large electric load additions in the advanced stage of development.

## Required filings for additional information (2)

- Georgia PSC required Georgia Power to continue providing quarterly large load economic development reports and include additional information:
  - Date in which a new project entered the large load pipeline,
  - Announced load of the project when it first entered the large load pipeline,
  - New large load projects that have entered into a Contract for Electric Service
- Staff recommended additional information be included in the quarterly filings, but the Commission did not agree.
  - Whether the customer is considering sites outside of Georgia, and
  - A description and quantification of financial commitments provided by each large load customer.

# Virginia rate impacts study

The Virginia [Joint Legislative and Audit and Review Committee](#) commissioned a study examining “electricity system infrastructure and associated investments costs, under a wide range of potential data center-driven load growth scenarios” to “determine if current rate and fee structures lead to equitable distribution of costs between data centers and other customers.”

## Approach to Assessing Rate Impacts

Utility tariffs and cost-of-service studies informed how cost shifting may occur with escalating forecasts of costs and load

1. Relevant tariffs for each utility were reviewed to determine current methods of revenue collection
2. Cost-of-service studies were examined to determine basis of volumetric and fixed costs
3. Compare volumetric revenue and cost components against each other and across rate classes
4. Calculate total cost and revenue by rate class using load forecast data
  - Determine where total cost/revenue values do not align within classes
5. Compare and highlight specific impacts for **Residential** customers served by **Dominion Virginia** under various cost recovery scenarios
  - Extension of existing cost allocations
  - Updated cost allocations using current methodology to adapt to anticipated load growth

Revenues	
Values	Description
\$ / kW	Demand charges (if applicable)
\$ / kWh	Delivery + supply + other volumetric adders
Fixed charges	Customer or minimum monthly charges
Data Sources	Utility Tariffs



Costs	
Values	Description
\$ / kW	Capacity-driven investment / Coincident demand
\$ / kWh	Consumption-driven costs (e.g., generation)
Fixed costs	Utility billing, overhead, etc.
Data Sources	Project forecasts, cost of service studies, etc.

