



BRAKEY ENERGY
OHIO'S ENERGY EXPERTS

Cost of Electricity in Ohio

Legislative and Regulatory Threats and Savings Opportunities for Commercial & Industrial Electric Users

Workshop Outline

1. Active Energy Legislation
2. Anticipated Energy Legislation
3. Future of Interruptible Programs
4. Future of Utility Transmission Pilot Programs
5. Alternative Method to Establish Capacity and Transmission Tags

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1. Active Energy Legislation

Energy Legislation Introduced in 134th General Assembly

- **Senate Bill 10**
  - Introduced by Senator Romanchuk on January 21, 2021
  - Referred to the Energy and Public Utilities Committee on January 26, 2021
- **Senate Bill 29**
  - Introduced by Senator Hoagland on January 27, 2021
  - Referred to the Energy and Public Utilities Committee on February 3, 2021
- **Senate Bill 44**
  - Introduced by Senators Rulli and Circine on February 2, 2021
  - Referred to the Energy and Public Utilities Committee on February 3, 2021
- **House Bill 10**
  - Introduced by Representative Leland on February 3, 2021
  - Referred to the Public Utilities Committee on February 4, 2021
- **House Bill 18**
  - Introduced by Representative Lanese on February 3, 2021
  - Referred to the Public Utilities Commission on February 4, 2021
- **House Bill 57**
  - Introduced by Representatives Skindell and O'Brien on February 3, 2021
  - Referred to the Public Utilities Commission on February 4, 2021
- **House Bill 58**
  - Introduced by Representatives Skindell and O'Brien on February 3, 2021
  - Referred to the Public Utilities Commission on February 4, 2021

Senate Bill 10

- Bill seeks to repeal the legal basis for all revenue decoupling charges, included those authorized by Amended Substitute House Bill 6 (HB 6).
  - Any amounts collected through the current decoupling mechanisms would be promptly refunded to customers.
  - FirstEnergy (FE) has now terminated collection of its decoupling rider in exchange for state officials pausing lawsuit proceedings to block provisions of HB 6 from taking effect.
- Bill also would also repeal a provision enacted by House Bill 166 that impacts how the Public Utilities Commission of Ohio (PUCO) administers the Significantly Excessive Earnings Test (SEET).
  - Affiliated Electric Distribution Utilities (EDU) would be required to separately calculate their return on equity for the SEET test.

Table 1. Estimated Collections and Monthly Impact of Current Decoupling Mechanisms		
EDU	Total Anticipated Rider Collections in 2020, All Customer Classes	Monthly Residential Rider in 2020
AEP Ohio	$21,132,830	$1.24
Cleveland Electric Illuminating	$9,327,089	$1.01
Dayton Power and Light	$0	$0
Duke Energy Ohio	$6,281,206	67¢
Ohio Edison	$4,704,326	44¢
Toledo Edison	$3,088,997	79¢
Total	**$44,534,448**	**83¢**

Source: PUCO Case Nos. 19-2080-EL-ATA (FirstEnergy's EDUs), 20-0530-EL-RDR (AEP Ohio), and 20-0574-EL-RDR (Duke Energy Ohio)

Senate Bill 29

- The bill would prohibit the automatic enrollment of customers in governmental/non-voluntary electric and natural gas aggregation programs.
- Aggregation programs are limited to non-mercantile customers.
  - Customers under contract with a retail electric supplier cannot be aggregated.

Senate Bill 44

- The bill would repeal the nuclear resource credit payments provisions and related customer charges provided for in HB 6.
  - This would save customers $150 million a year.
- The bill would also amend the renewable resource credit payment by renaming it as "solar resource."
  - SB 44 would retain the $20 million per year revenue requirement but would permit payment to only solar resources.
  - The PUCO would be given authority to determine the revenue allocation for each EDU, subject to rate caps.
    - Rates for residential customers would be capped at 10¢ per month.
    - Rates for customers that self-assess the kWh tax would be capped at $242 per month.
    - Rates for all other customer classes would be established in a manner that "avoids abrupt or excessive total net electric bill impacts for typical customer."

House Bill 10

- The bill would establish a program for customer-sited energy waste reduction projects.
  - The program would be administered by retail suppliers.
  - EDUs would recover costs from residential and non-mercantile customers as part of the monthly distribution bill and remit monies collected to suppliers.
    - All residential customers and non-residential customers that used less than 700,000 kWh per year would be subject to the EDU charge unless they opt-out of the program.
  - A mercantile customer may elect to enroll in the program
    - By participating, these customers can avoid the EDU cost recovery mechanism for transmission and instead source transmission directly from PJM based on the customer's 1CP load.
- The bill may provide a platform for discussing the need to provide customers with direct access to PJM billing for transmission.

House Bill 18 and House Bill 57

- These bills are identical and would repeal all provisions of HB 6 and revive prior law.

House Bill 58

- Bill would repeal a provision enacted by House Bill 166 that impacts how the Public Utilities Commission of Ohio (PUCO) administers the Significantly Excessive Earnings Test (SEET).
  - Affiliated Electric Distribution Utilities (EDU) would be required to separately calculate their return on equity for the SEET test.

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2. Anticipated Energy Legislation

Anticipated Legislation for 2021

- Repeal or Replace HB 6
  - HB 6 was passed by Ohio’s General Assembly and signed into law by the Governor on July 23, 2019.
  - Effective date was October 22, 2019.

Summary of Key HB 6 Provisions

- HB 6 created Ohio's Clean Air Program to provide $170 million per year in out-of-market support to the state's nuclear and select solar resources.
- HB 6 implemented a state-wide mechanism for the recovery of costs related to the state's legacy coal generation resources.
- HB 6 reduced the state's renewable portfolio standards (RPS).
- HB 6 terminated the state's energy efficiency and peak demand reduction (EEPDR) mandates.

Other Provisions in HB 6

- Decoupling provisions allow FE to separate kWh sales from revenues.
  - FE recently filed an application with the PUCO to end collection of the decoupling revenues permitted by HB 6.
    - Charges terminated on February 9, 2021.
  - The decoupling mechanism, which FE refers to as the Conservation Support Rider, would have cost customers approximately $102 million in 2021.
- Other provisions related to low-income weatherization programs, rate schedules for county fairs, small wind farms, net metering, and property tax exemptions for energy projects.
  - Limited impact on commercial and industrial customers.

New Customer Charges Related to HB 6

- Legacy Generation Rider (LGR) funds guaranteed cost recovery for Ohio utilities' interests in two coal plants owned and operated by the Ohio Valley Electric Corporation.
  - Charges began January 1, 2020 and continue through December 31, 2030.
  - LGR costs are capped at:
    - $1.50 per month for residential customers, and
    - $1,500 per month for nonresidential customers.
  - LGR replaces utility-specific recovery mechanisms for AEP, DP&L, and Duke.
    - Prior mechanisms were approved by the PUCO to run through 2024.
    - Prior mechanisms did not include cost caps and resulted in higher charges.

New Customer Charges Related to HB 6 (2)

- Clean Air Fund (CAF) Rider charges are intended to fund out-of-market payments to Ohio’s nuclear and select solar generation facilities.
  - But for litigation, these charges would have begun on January 1, 2021 and continue through December 31, 2027.
- FE’s Conservation Support Rider (CSR) recovers costs related to the decoupling provisions of HB 6.
  - This rider is only applicable to Residential and General Service Secondary customers served by FE’s Ohio operating companies.
  - Charges began on February 1, 2020 and were terminated by FE on February 9, 2021.

New Customer Savings Related to HB 6

- HB 6 revised the state's RPS and terminates RPS after 2026.
  - Cumulative RPS reduced from 12.5% to 8.5%.
  - Solar carve-out removed.
- Customers that self-assess the state's kWh tax were granted automatic exemption from RPS-related charges.

New Customer Savings Related to HB 6 (2)

- HB 6 expanded the EEPDR streamlined opt-out mechanism to include all mercantile customers, effective January 1, 2020.
  - HB 6 also repealed the opt-out reporting requirements mandated by former law.
- HB 6 reduced the state's EEPDR benchmarks and terminated the state's EEPDR mandates effective December 31, 2020.
  - Replaced the savings benchmark with a state-wide cumulative benchmark of 17.5%.
  - By the end of 2021, EDUs were found to be in full compliance with the EEPDR benchmarks provided in HB 6.
  - PUCO ordered EDUs to terminate the collection of EEPDR charges, effective December 31, 2020.

Net Impact of HB 6

- In a May 2020 document, the Ohio Legislative Service Commission estimated that HB 6 provides net savings to Ohio ratepayers of more than $2.3 billion compared to prior law.
  - This does not include the $102 million in savings from FE's agreement to end collection of decoupling revenues for 2021.
  - Also does not include the fact that EEPDR compliance costs were set to double beginning in 2021.
  - Does not include the potential savings that has resulted from the injunction, and possible termination, of CAF charges.
- Savings are the result of reforms related to:
  - EEPDR mandates,
  - RPS, and
  - Costs caps on charges related to guaranteed cost recovery for legacy coal generation resources.

Legislation Introduced in 2020 to Repeal/Replace HB 6

Full Repeal

- Senate Bill 346
- House Bill 738
- House Bill 746

Partial Repeal

- House Bill 772
  - Bill would have only repealed the provisions related to the Clean Air Program.

Delay and Revise

- House Bill 798
  - Bill would have delayed the collection of CAF charges until January 1, 2022.
  - Bill included additional audit provisions and would have given the Ohio Air Quality Development Authority the authority to reduce or cease payments if certain criteria are met.

What's New for 2021?

- The General Assembly did not act on any of the HB 6 repeal/replace legislation introduced in 2020.
- The 133rd legislative session ended on December 31, 2020.
  - All bills still pending expired at the end of the session.
- Several members of the General Assembly have indicated that repealing or replacing HB 6 is a priority for the new session.

Legislation Introduced so far in 2021 to Repeal/Replace HB 6

Full Repeal

- **House Bill 18**
  - Sponsor testimony tomorrow, February 17, at 11:00am
- **House Bill 57**
  - Sponsor testimony tomorrow, February 17, at 11:00 am

Partial Repeal and/or Revise

- **Senate Bill 10**
  - Bill would repeal only the provisions of HB 6 relating to decoupling.
  - Bill has had three committee hearings to-date: sponsor, proponent, and interested party testimony.
- **Senate Bill 44**
  - Bill would repeal the provisions of HB 6 relating to the nuclear resource credits and charges and would amend the renewable resource credit by renaming it as “solar resource.”
  - Proponent testimony today, February 16, at 10:00 am

Injunctive Relief

- The Ohio Attorney General and the Cities of Columbus and Cincinnati filed lawsuits against FirstEnergy Corp and Energy Harbor.
- On December 21, 2020, the Franklin County Court of Common Pleas granted a request for a preliminary injunction to block the collection of CAF charges from customers beginning on January 1, 2021.
  - Injunction is temporary but will likely remain in place throughout the court case.
  - The General Assembly must take action to permanently repeal or replace provisions of HB 6.
- The Ohio Attorney General has agreed to pause further proceedings in the lawsuits in exchange for FE’s agreement to not charge customers the $102 million decoupling revenues for 2021.

Threats & Opportunities of Possible HB 6 Repeal/Replace Efforts

- Full repeal of HB 6 would eliminate the cost savings provisions of the legislation along with the controversial CAF provisions.
  - “Throwing the baby out with the bathwater” option.
- Legislation that delays the implementation of the CAF program and adds additional audit requirements may not go far enough to address customers’ concerns with the program.
- A partial repeal or replacement of HB 6 would permit legislators to address the CAF program without sacrificing the savings opportunities presented in the other provisions of HB 6.

3. Future of Interruptible Programs

Interruptible Programs

- An interruptible program provides bill credits in exchange for a customer’s interruptible (aka “curtailable”) power.
- Interruptible power helps to maintain balance on the electric grid.
  - Participants agree to drop non-firm load during times when the grid is under stress and at risk of brown/black outs.
  - This helps to “keep the lights on.”
- Interruptible programs are particularly beneficial to customers with load flexibility who are subject to very high monthly demand charges.
  - The ELR credit offsets some of the high demand charges.

Current Interruptible Programs

- FE’s program is called the Economic Load Response (ELR) Program.
  - Participants receive total credits equal to $10 per kW of curtailable load per month.
  - The ELR Program is authorized through FE’s current Electric Security Plan (ESP IV), which ends on May 31, 2024.
- AEP’s program is called the Interruptible Power-Discretionary- Legacy (“IRP-D Legacy” or “Legacy Customer”) Program
  - Participants receive credits equal to $9 per kW of interruptible power per month.
  - The Legacy Customer Program is authorized through AEP’s current Electric Security Plan (ESP III) which ends with the June 1, 2024 billing cycle.
- ELR and Legacy Customer credits are funded by firm customers.
- DP&L and Duke do not have interruptible programs available.

Uncertain Future of Interruptible Programs

- Unless authorized in future ESPs, interruptible programs may end at the end of May/beginning of June 2024.
- Loss of interruptible programs will create electric rate shock for participants.
- The PUCO Staff has previously recommended phasing out of interruptible programs.
- Ohio needs a continued mechanism to help these customers remain competitive.

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4. Future of Transmission Pilot Programs

Transmission Service

- Transmission is:
  - The service for moving electricity across high voltage lines;
  - Included as a charge in your monthly electric bill; and
  - Regulated exclusively by the Federal Energy Regulatory Commission.
- PJM Interconnect (PJM) oversees operation of transmission systems in much of the eastern US, including Ohio.
  - PJM is the transmission service provider.
  - PJM bills Load Serving Entities (LSEs), such as EDUs and retail suppliers, for transmission and remits revenue to transmission owners.
  - LSEs pass transmission costs on to customers.

Transmission Service (2)

- EDUs pass on the cost of transmission as a surcharge on monthly electric bills.
- Method in which EDUs pass on costs to customers is often different than how PJM bills the EDU.
  - The method used most often is monthly demand-based, which reduces the value of demand response for customers.

Transmission Charges for Ohio EDU Customers

FirstEnergy

- Non-Market-Based Services (NMB) Rider
  - Based on monthly billing demand

AEP

- Basic Transmission Cost Rider (BTCR)
  - Monthly billing demand component
  - Monthly kWh usage component

DP&L

- Transmission Cost Recovery Rider-Nonbypassable (TCRR-N)
  - Monthly billing demand component
  - Monthly kWh usage component
  - Monthly billing reactive demand component (for voltages over secondary)

Duke

- Base Transmission Rider (BTR) charge
  - Based on monthly billing demand
- Regional Transmission Expansion Plan (RTEP) credit
  - Based on kWh usage

Transmission Pilot Programs

- FE, AEP, and DP&L currently have pilot programs in place.
- These programs permit eligible customers to pay for transmission based primarily on how they use power during specific one-hour intervals of the year when demand on their respective zonal grids peak.
  - These one-hour interval peaks are referred to as “Coincident Peaks” (CPs).

Transmission Pilot Programs (2)

- FE uses a customer's load during 5 CPs to determine the customer's transmission tag for the following calendar year.
- AEP and DP&L use a customer's load during 1CP to determine the customer's transmission tag for the following calendar year.
- Transmission tags are used to calculate transmission costs, not monthly billed kW demand.

Benefit of Transmission Pilot Programs

- Customers that operate off-peak or that are not weather-sensitive may have PJM-based transmission tags that are significantly lower than their monthly billed demands.
- Customers that can curtail demand in response to potential zonal grid peaks can lower their transmission tags.
- There is the potential for these types of customers to save significantly on their transmission costs.

Uncertain Future of Transmission Pilot Programs

- Current Transmission Pilot Program end when the ESPs that authorized them end.
  - FE's ESP IV ends on May 31, 2024.
  - AEP's ESP III ends with the June 2024 billing period.
  - DP&L's ESP could end as early as December 31, 2023.
- Loss of transmission pilot programs will create electric rate shock for participants.

5. Alternative Method to Establish Capacity and Transmission Tags

Capacity and Transmission

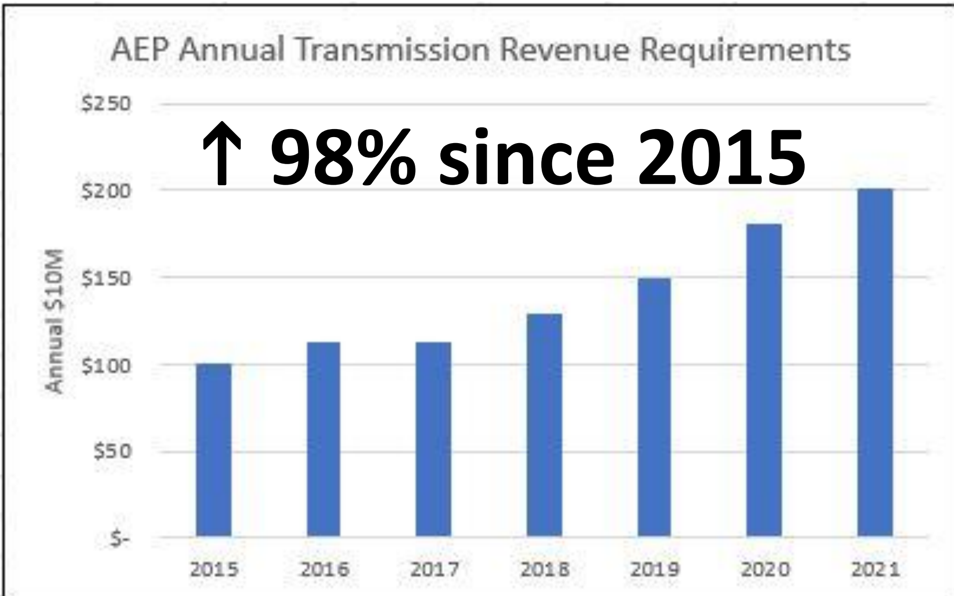
Capacity

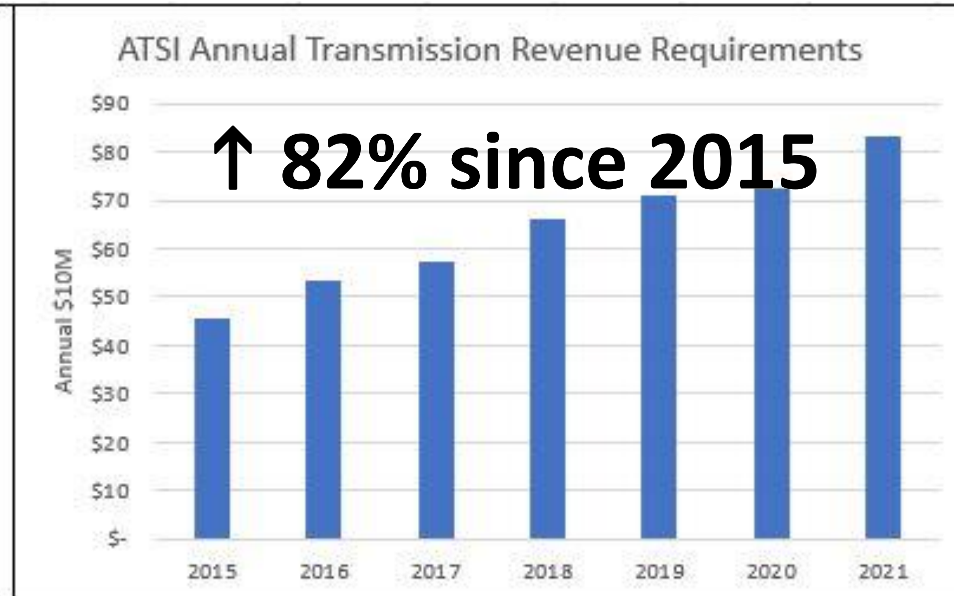
- Capacity is a subcomponent of electric generation.
- Customers pay capacity charges to ensure that there is sufficient power available to the grid at any time to meet peak demands.
- A customer's capacity obligation is determined by how a customer uses power during the five hours of the summer when PJM's regional grid peaks.
  - "Capacity Tag"

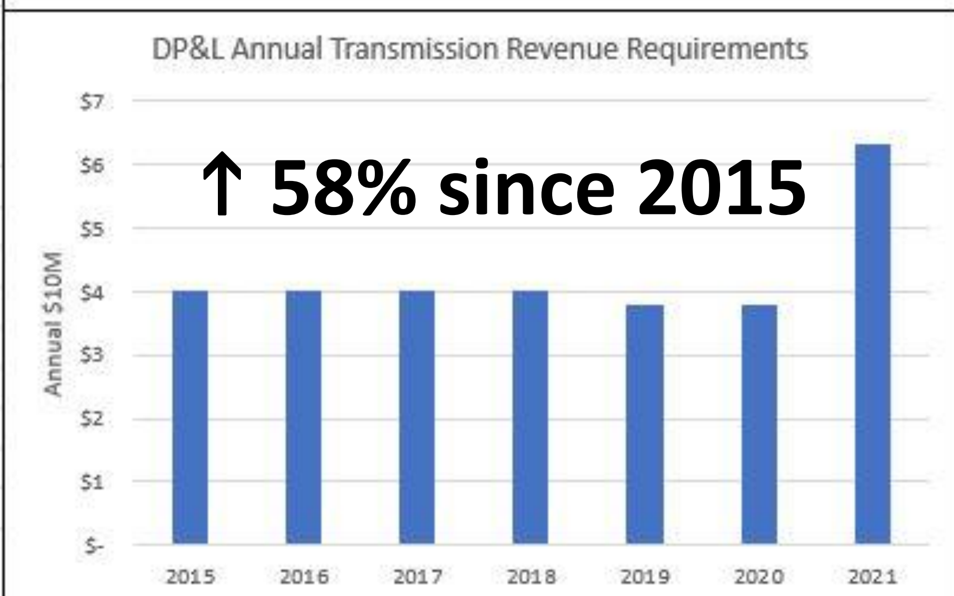
Transmission

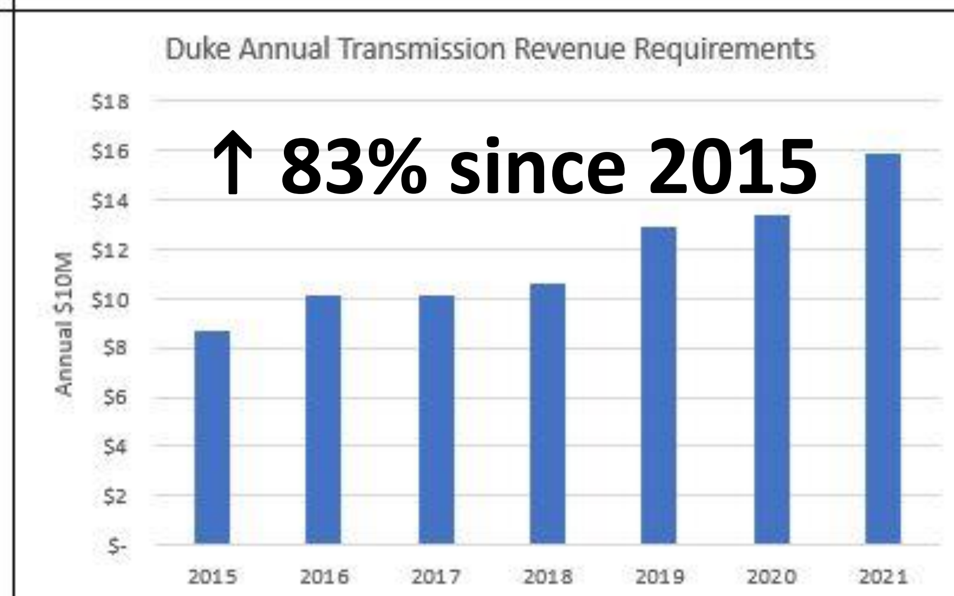
- Transmission is the service for moving electricity across high voltage lines.
- For a customer that participates in a transmission pilot program, transmission charges are largely determined by how the customer uses power during the hours of the year when the zonal grid peaks.
  - "Transmission Tag"
    - FE- five peaks
    - AEP and DP&L- one peak

Transmission Revenue Trends









“Chasing the Peaks” Problem

- Customers that actively manage capacity and transmission tags must take steps to reduce load in advance of potential grid peaks.
  - This may require the customer to drop load for up to six hours, 10-15 times a year.
  - Curtailments are often problematic in that they interrupt customer operations and result in lost productivity.
    - These occur when there are no physical limitations on the electric grid.
- The PUCO has expressed an interest in finding a solution to the chasing the peaks problem.
  - There is particular interest in a solution which could also address concerns surrounding the continuation of the interruptible programs.
  - PUCO held a workshop and invited customer groups to present possible solutions.

Purchasing Firm Demand Option

- In December 2019, IEU-Ohio submitted a proposal to the PUCO that they refer to as the "Purchasing Firm Demand Option."
- This option would permit a customer to set its own capacity and transmission tags based on a specified firm service level.
  - Participating customers would be required to curtail to firm levels only in the event of physical limitations on the grid.
  - Customers that fail to curtail load to firm service levels during such times would be subject to disconnection and/or penalties.
- This option could be expanded to permit a customer to set its own monthly billing demand based on a firm service level.

IEU-Ohio's Recommendations

- IEU has recommended that the Purchasing Firm Demand Option be used to expand the options that are available to customers.
- IEU has also recommended that:
    1) The option be offered as a voluntary alternative to the chasing the peaks method, and
    2) The PUCO retain other programs, such as the transmission pilot programs and demand response programs.

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Closing Thoughts and Questions

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