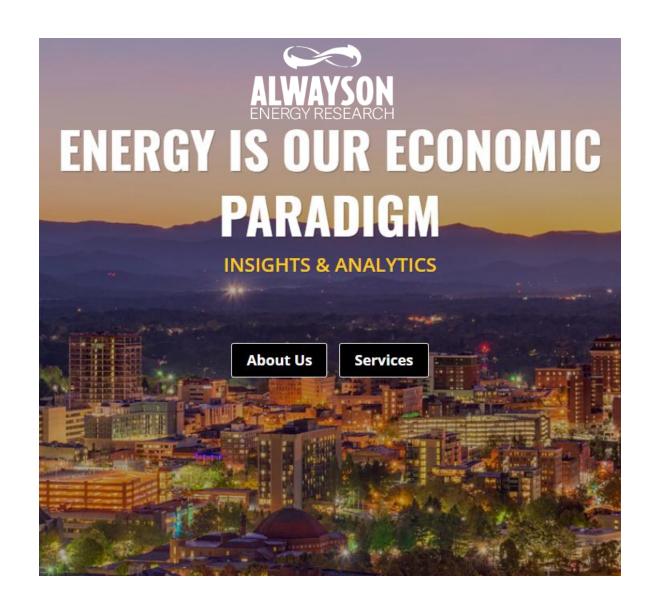
MN House File 1311

The Only Pay for What You Get Act
February 25, 2025
Isaac Orr
Vice President of Research
Always On Energy Research

About Always On Energy Research

- Always On Energy Research believes all Americans deserve access to reliable, affordable energy.
- Our clients include state agencies, industry stakeholders, and public policy organizations throughout the United States.
- Our modeling brings quality data to policy debates that are sorely lacking it.
- We assess the reliability and financial implications of federal and state policies and work with decision makers to enact common sense energy reforms.



Benefits of H.F. 1311

- Promotes a reliable and low-cost electricity by giving utilities the incentives they need to build the power plants that provide the highest reliability value to the grid.
- Under H.F. 1311, utilities will only profit on the reliable portion of a power plant.
- This saves customers billions of dollars in unnecessary expenses by changing the way that utilities make corporate profits when they build new infrastructure.
- It's a win-win for the Minnesota families and businesses that rely on reliable, low-cost electricity.

The State of the Grid: Reliability

 The North American Electric Reliability Corporation (NERC) shows the Midcontinent Independent System Operator (MISO) region is at the highest risk of rolling blackouts in the country.

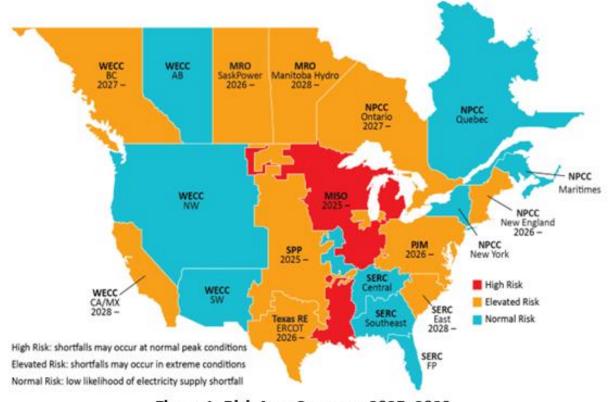


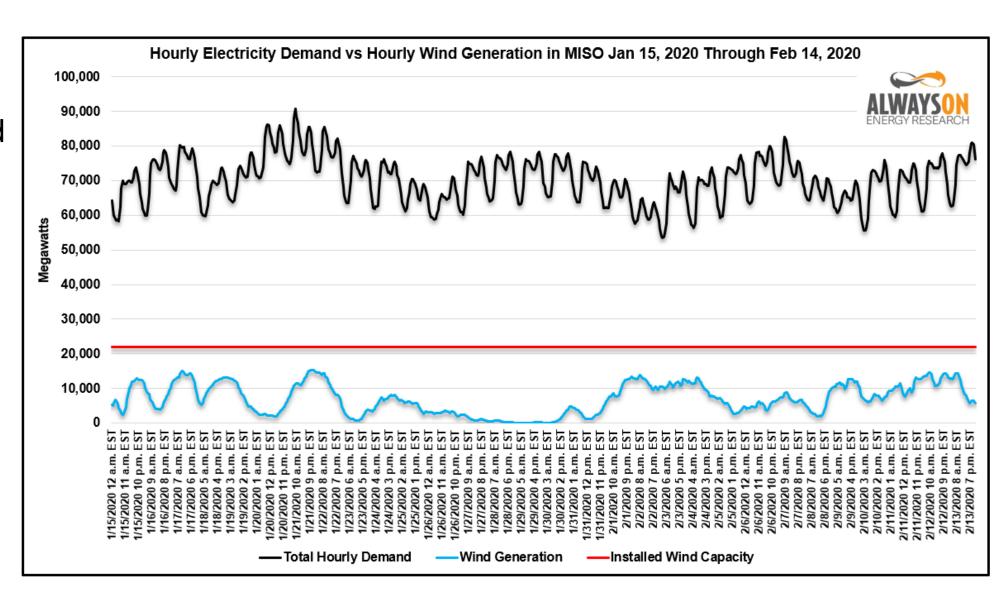
Figure 1: Risk Area Summary 2025–2029

The State of the Grid: Reliability

- In the 2024 LTRA, NERC finds that most of the North American BPS faces mounting resource adequacy challenges over the next 10 years due to:
- Surging demand growth.
- Thermal generators announce plans for retirement.
- New solar PV, battery, and hybrid resources continue to flood interconnection queues, but completion rates are lagging behind the need for new generation.
- Furthermore, the performance of these replacement resources is more variable and weather-dependent than the generators they are replacing.
- As a result, less overall capacity (dispatchable capacity in particular) is being added to the system than what was projected and needed to meet future demand.

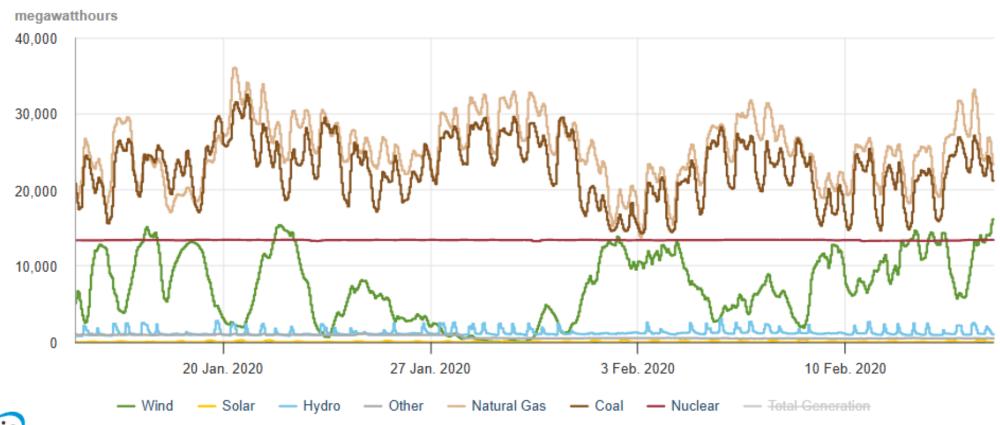
A Case in Point: The Great 2020 Wind Drought

- 80-straight hours of wind operating at less than 10% of its installed capacity.
- 42 hours below 1.5%.



A Case in Point: The Great 2020 Wind Drought

Midcontinent Independent System Operator, Inc. (MISO) electricity generation by energy source 1/15/2020 – 2/14/2020, Eastern Time



The Reliability Value of Power Plants

- Different types of power plants have different operational characteristics and abilities.
- As a result, each type of power plant offers a different reliability value to the grid during times of peak electricity demand.
- Each type of power plants receives a reliability rating from the Midcontinent Independent System Operator (MISO). These reliability values are called a capacity value or capacity accreditation.
- MISO uses these capacity values to determine whether there are enough reliable power plants on their system to meet their projected peak demand, plus a margin of safety.

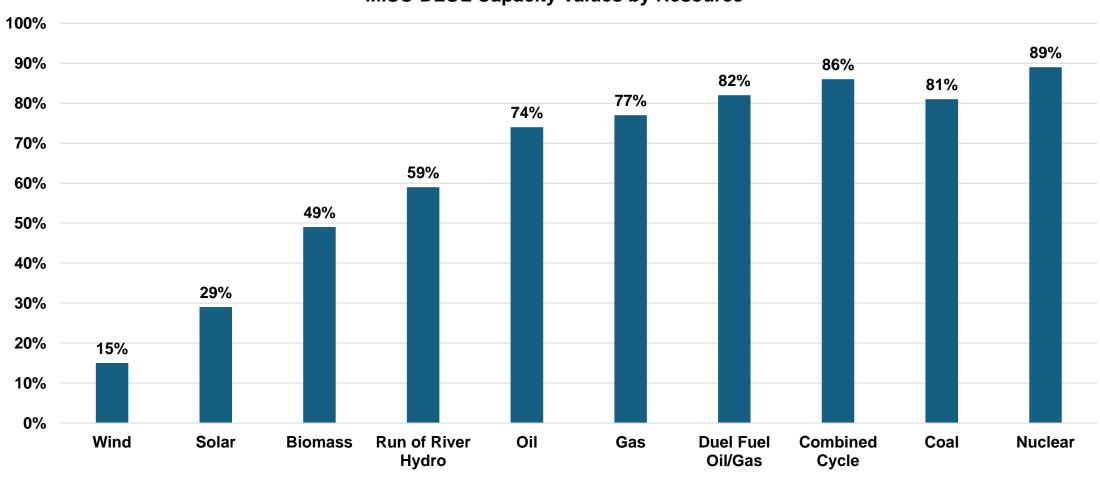
MISO Capacity Accreditation DLOL

MISO is adopting a
 Direct Loss of Load
 (DLOL) calculation for
 the reliability of
 different power plants
 to better measure each
 resource's reliability.

| PY 2025-2026 | Summer | Fall | Winter | Spring | Average |
|--------------------|--------|------|--------|--------|---------|
| Biomass | 50% | 46% | 50% | 49% | 49% |
| Coal | 89% | 84% | 76% | 73% | 81% |
| Dual Fuel Oil/Gas | 87% | 83% | 79% | 78% | 82% |
| Gas | 88% | 84% | 65% | 69% | 77% |
| Combined Cycle | 95% | 91% | 77% | 79% | 86% |
| Nuclear | 94% | 90% | 90% | 82% | |
| | | | | | 89% |
| Oil | 77% | 74% | 74% | 72% | 74% |
| Pumped Storage | 98% | 89% | 76% | 67% | 83% |
| Reservoir Hydro | 89% | 80% | 76% | 70% | 79% |
| Run-of-River Hydro | 62% | 52% | 58% | 63% | 59% |
| Solar | 38% | 21% | 24% | 32% | 29% |
| Wind | 8% | 15% | 22% | 14% | 15% |
| Storage* | | | | | |
| Status Quo** | 39% | 46% | 66% | 25% | 44% |
| Blended | 50% | 55% | 70% | 25% | 50% |
| Even Loss | 62% | 57% | 71% | 25% | 54% |

MISO Capacity Accreditation DLOL

MISO DLOL Capacity Values by Resource



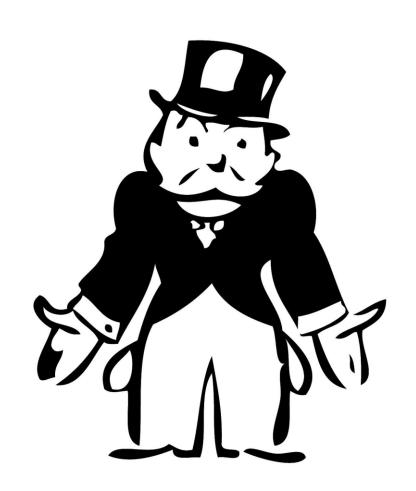
How "Only Pay" Works

- Only pay ties the rate of return formula for utilities to the reliability value that the plant provide to the grid and the utility's customers.
- Utility shareholders are asked to bear some of the financial burden for all generation assets, especially those with low reliability values.



Background: There is No Free Market for Electricity

- There is no free market for electricity, and there may never be.
- Electric utilities like Xcel Energy <u>are not private</u> <u>companies</u>, they are government-approved monopoly utilities with the exclusive right to sell electricity in its service territory.
- Because customers have no choice but to buy their power from the monopoly, it would be unfair to let the utility charge whatever it wishes for electricity.
- As a result, electricity prices are set by government regulators using a mathematical formula called the Cost-of-Service formula.

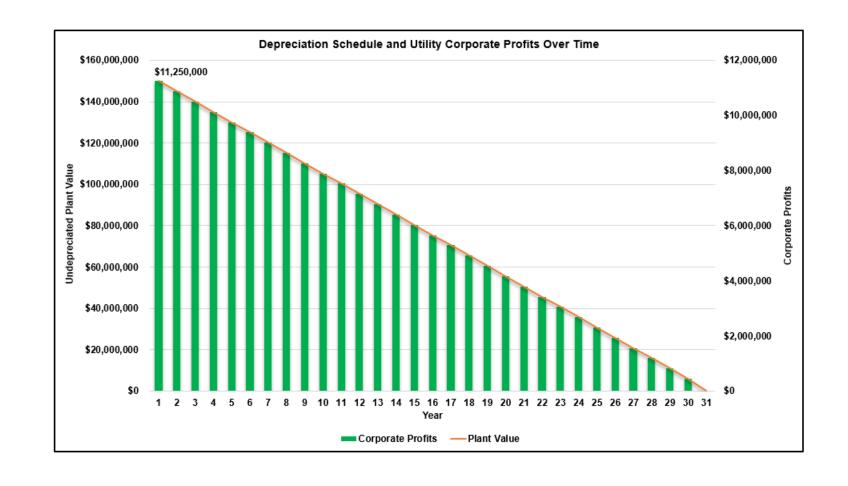


How Utilities Make Money, The Cost-of-Service Formula

- In its most basic form, the formula states that utilities like Xcel are allowed to charge enough for their electricity to recover the cost of providing the service to everyone in their service territories, plus a government-approved profit, often five to ten percent, on their capital investments.
- As long as the expenses are approved by the regulator, utilities make a profit on every dollar they spend on new builds such as wind turbines, solar panels, natural gas plants, or even renovating corporate offices.
- The more money monopoly utilities spend, the more money they make.

Cost of Service Continues: Depreciation

- Every year, the company pays off a little bit more of the plant, and as a result, they no longer profit from this depreciated capital expense.
- In this example, the utility would make \$11.25 million in year one, and no profit in year 31.

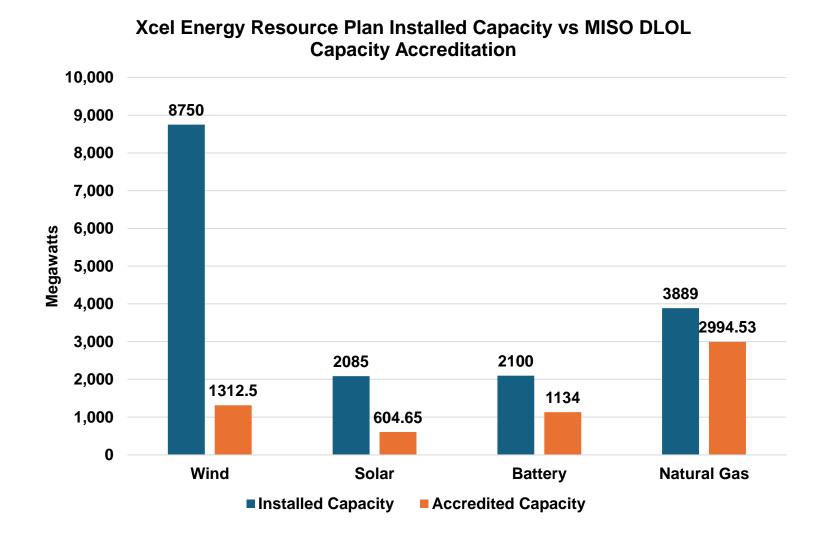


Consumer Protection

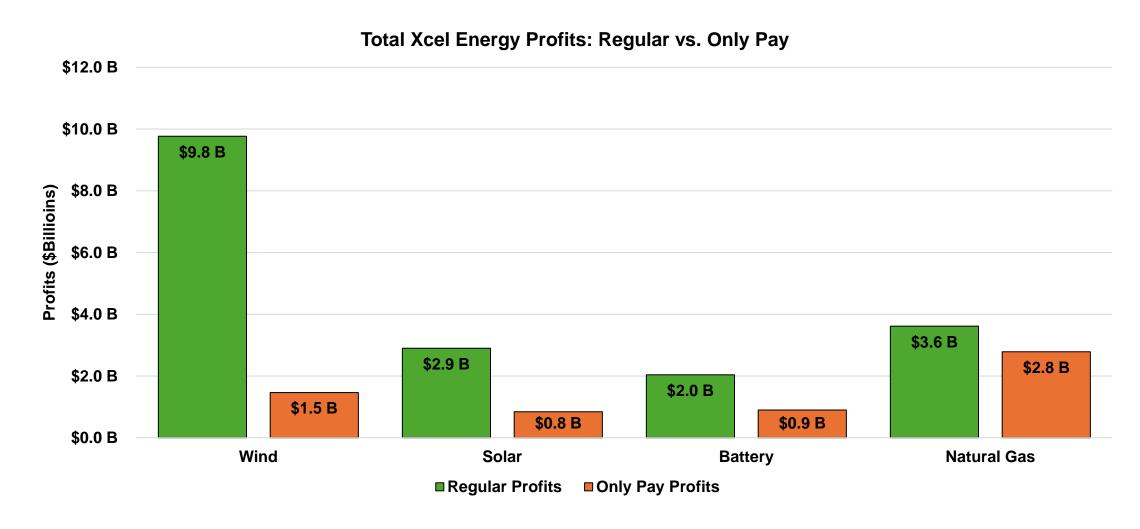
- From the perspective of customers, fully depreciated power plants offer some of the lowest-cost sources of electricity on the grid.
- From the perspective of the utility, they're no longer a means for growing earnings.
- As a result, utilities have a powerful financial incentive to work against the interest of their customers by retiring reliable, low-cost existing generators so they can spend as much money as possible building new infrastructure to put in their rate base, thus maximizing their government-approved profits.

The Xcel Energy Example

 Xcel Energy's latest resource plan proposes to close the utility's remaining coal plants, some gas, and replace it with an extensive buildout of wind, solar, batteries and "firm peaking" which we assume is natural gas.



Xcel Energy Profits After Accounting for Reliability Value with Only Pay



Conclusion

- Customers would save \$12.3 billion on Xcel Energy's latest resource plan under H.F. 1311.
- That would save the average Xcel Energy customer \$9,062, or \$453 dollars per year for 20 years.