— Pepple Moser PC —

November 7, 2025

Via Electronic Filing

Public Utility Commission of Oregon
Attn: Filing Center
201 High Street SE, Suite 100
Salem, OR 97301

Re: In the Matter of PORTLAND GENERAL ELECTRIC COMPANY, Investigation into Marginal Cost Study Treatment for Large Customers and Further Modifications to Portland General Electric Company's Rule C and Rule I.
Docket No. UM 2377

Dear Filing Center:

Please find enclosed the Rebuttal Testimony of Jeff Bladen on behlaf of Verrus, LLC in the above-referenced docket.

Please do not hesitate to contact me if you have any questions.

Sincerely,

/s/ Anna V. Congdon
Anna V. Congdon

Enclosure

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BEFORE THE

PUBLIC UTILITY COMMISSION OF OREGON

UM 2377

In the Matter of	)
	)
PORTLAND GENERAL ELECTRIC COMPANY,	)
	)
Investigation into Marginal Cost Study Treatment for Large Customers and Further Modifications to Portland General Electric Company's Rule C and Rule I.	)

REBUTTAL TESTIMONY OF JEFF BLADEN

ON BEHALF OF VERRUS, LLC

November 7, 2025

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EXHIBIT LIST

I. IDENTIFICATION, QUALIFICATIONS, AND PURPOSE

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jeff Bladen. I am the Head of Energy at Verrus, LLC, a developer of next-generation, flexible, grid-aware data centers. Verrus' primary business address is: 918 N Rengstorff Ave, Mountain View, CA 94043.

Q. PLEASE DESCRIBE YOUR PROFESSIONAL BACKGROUND.

A. I have more than 25 years of experience across the electric power sector, including utility operations, wholesale market design, corporate energy strategy, and regulatory proceedings. I have held executive leadership roles at the Midcontinent Independent System Operator (MISO), PJM Interconnection, DNV, Constellation Energy, Gamesa, Comverge, and Mark Group. And immediately before joining Verrus, I served as Global Director of Energy at Meta—the company that operates Facebook, Instagram, and other global platforms—where I managed a three-continent team responsible for planning, transacting, and asset-managing one of the world's largest private data center and electricity portfolios.

Q. PLEASE SUMMARIZE YOUR CURRENT RESPONSIBILITIES.

A. At Verrus, I lead the company's energy and regulatory strategy for developing large, grid-aware data centers that incorporate utility-scale storage and automated demand response. Our business model and next generation data centers are built to optimize both computing efficiency and grid reliability by reducing power draw during critical power grid conditions.

Q. HAVE YOU PARTICIPATED IN INDUSTRY ORGANIZATIONS OR POLICY FORUMS RELEVANT TO THIS PROCEEDING?

A. Yes. I serve on the Board of Directors of the Energy Systems Integration Group (ESIG) and am a U.S. National Committee Member of CIGRE International, serving as the US delegate to

its Markets and Regulation Committee. I regularly speak as an invited policy and technical expert at forums hosted by a broad array of organizations including the National Association of Regulated Utility Commissioners (NARUC), the Edison Electric Institute (EEI), and the Aspen Institute on topics including large flexible loads, tariff design, and energy system integration.

Q. WHAT IS YOUR EDUCATIONAL BACKGROUND?

A. I hold an MBA with honors from New York University's Stern School of Business, a BA in Public Policy from Syracuse University's Maxwell School, and a Fellowship in Political Leadership from Michigan State University.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY BEFORE REGULATORY BODIES?

A. Yes. I have provided testimony in many different states and proceedings focused on retail ratemaking and wholesale market design including the implications of large-load growth. My testimony has consistently emphasized the verifiable benefits of integrated flexible demand in achieving a more reliable and affordable electric system. I have also participated in many proceedings before the Federal Energy Regulatory Commission (FERC) addressing market design, demand response and distributed resources integration, and cost allocation.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. My purpose is to evaluate Portland General Electric's (PGE's) proposed Schedule 96, Peak Growth Modifier (PGM), minimum demand charges, and related Rule I changes from the perspective of a developer of energy-flexible, dispatchable data centers. I demonstrate that PGE's proposals do not differentiate between traditional, inflexible data centers and emerging, asset-backed flexible data centers that can curtail load during system peaks—a distinction that is essential to align costs with actual grid impacts and to realize the ratepayer benefits envisioned by HB 3546.

My testimony proposes specific modifications to ensure that Oregon's rates and interconnection policies reflect cost-causation accuracy and equitable treatment. In particular, I recommend that the Commission establish a distinct subclass—Schedule 96-F for Flexible Data Centers—so that customers capable of verified, asset-backed flexibility are not required to subsidize infrastructure driven by inflexible peers. This separation is necessary both to prevent cross-subsidization and to ensure that Oregon's regulatory framework properly values investments that enhance grid reliability and affordability.

Q. HOW DOES YOUR EXPERIENCE RELATE TO THE COMMISSION'S OBJECTIVES UNDER HOUSE BILL 3546?

A. HB 3546 directs the Commission to prevent unwarranted cost shifting and to allocate the costs of system growth proportionally to the data centers that cause it. Because my career has included substantial focus at the retail and wholesale level on how to design policies that align costs and market signals with causation, I can offer the Commission the benefit of that experience in applying the requirements of HB 3546. This includes how flexible demand and grid-interactive resources reduce peak growth and system costs. I am well-positioned to assist the Commission in crafting a framework that recognizes the distinct value and cost profile of flexible data centers within Schedule 96.

II. SUMMARY OF RECOMMENDATIONS

Q. PLEASE SUMMARIZE YOUR POSITIONS AND RECOMMENDATIONS IN THIS TESTIMONY.

A. My testimony makes five primary recommendations, each intended to align cost responsibility with actual grid impact and to establish a transparent, durable rate framework for asset-backed flexible data centers.

1. Create a Flexible Data Center subclass (Schedule 96-F).
    a. PGE's single Schedule 96 combines inflexible and flexible customers, forcing the latter to pay for system growth they do not cause.
    b. I recommend a dedicated subclass or rider limited to data centers with verifiable, asset-backed flexibility through installed infrastructure such as batteries, generation, UPS systems, or automated controls.
    c. Eligibility would require ongoing telemetry and measurement & verification (M&V). The subclass provides a transparent, standardized path for recognizing flexibility as a physical planning resource rather than a negotiated exception.
2. Revise the Peak Growth Modifier (PGM) to reflect true cost causation.
    a. The current PGM allocates growth costs based solely on historical class load growth without netting out verified curtailment.
    b. Within Schedule 96-F, the PGM should measure net-peak growth by crediting verified curtailments during coincident-peak hours or applying a Flexibility Factor based on annual performance.
    c. Flexible customers would continue to pay their share of embedded transmission and generation costs but receive proportional reductions in growth-related charges.
3. Tie minimum-demand charges to demonstrated backbone usage.
    a. An 80 percent minimum-demand floor ignores curtailment performance and creates a double-payment risk—customers invest in on-site assets that relieve grid stress yet still pay as if those assets did not exist.

b. Within Schedule 96-F, customers that meet certified curtailment targets should receive credits or waivers on growth-related portions of demand charges while continuing to contribute to fixed embedded-system recovery.

4. Clarify CIAC and credit-assurance treatment to align with actual system risk.
   a. Flexible data centers will still fund all dedicated facilities required to serve their non-coincident peak load.
   b. When asset-backed flexibility demonstrably defers or avoids shared or upstream upgrades, those avoided costs should be recognized through a Flexibility-Deferral Credit applied only to the growth-related portion of system investment.
   c. Credit-assurance requirements should be risk-based, scaled to actual at-risk utility cost rather than fixed revenue multiples.
5. Establish a separate "fast-lane" interconnection queue and study process for flexible data centers.
   a. Because asset-backed flexible data centers can be modeled with controllable demand and verified curtailment parameters, they should be studied under a dedicated queue that incorporates those capabilities into planning assumptions.
   b. This fast-lane interconnection process would enable PGE to connect grid-supportive data centers more quickly, unlock existing capacity without triggering new upgrades, accelerate downward pressure on rates more broadly, and align study timelines with measurable system benefits.
   c. Embedding this expedited pathway within a clearly defined rate subclass sends a transparent investment signal that Oregon values durable, grid-beneficial flexibility.

Q. WHAT IS THE OVERALL POLICY CONCLUSION OF YOUR TESTIMONY?

A. Oregon has an opportunity to lead the nation by recognizing and standardizing the treatment of large, asset-backed flexible data centers. By creating Schedule 96-F and aligning the PGM, minimum-demand charges, CIAC framework, and queue process with actual system and broader customer impacts, the Commission can protect existing ratepayers, reduce stranded-cost risk, and attract innovative, grid-supportive investment consistent with HB 3546.

III. VERRUS MODEL: WHAT "FLEXIBLE" ACTUALLY MEANS AND WHY IT MATTERS

Q. PLEASE DESCRIBE THE DESIGN AND OPERATING CHARACTERISTICS OF VERRUS' FLEXIBLE DATA CENTERS.

A. Verrus data centers are intentionally designed to provide grid-supportive flexibility rather than a fixed reserved load. Each campus integrates large-scale battery energy storage systems (BESS) and automated load-management controls that enable real-time curtailment during system stress events. The same BESS units that provide critical backup for computing operations also serve as dispatchable demand-response (DR) resources for the utility.

Q. HOW DOES VERRUS' APPROACH SUPPORT GRID RELIABILITY?

A. Verrus' design philosophy is centered on enhancing grid reliability, not on arbitraging energy markets. Our operations are structured around coordinated dispatch with the host utility or relevant control-area operator to support grid stability and efficient system utilization. When the grid experiences stress or local capacity constraints, our systems can automatically reduce consumption from the grid by discharging stored energy to relieve pressure on the network.

Any energy cost savings or price arbitrage that occur are incidental to that reliability-driven coordination. In practice, this means Verrus campuses act as controllable, grid-aware partners—helping utilities maintain reliability during peaks, integrate variable renewables

more effectively, and defer costly infrastructure expansion. The focus is on operational alignment, not market speculation: our value to customers lies in connecting to the grid faster because we are a dependable participant in real-time grid operations, not an opportunistic trader of energy price volatility.

Q. HOW DOES VERRUS' INTERNAL "POWER FLOW" DESIGN CONTRIBUTE TO EFFICIENT USE OF UTILITY-SUPPLIED CAPACITY?

A. Verrus' campuses are engineered with a proprietary internal power flow distribution network that allows flexible routing of electricity among computing/data halls, HVAC, battery storage, and other critical systems in real time. This internal design enables the site to maximize utilization of the power reserved by the utility while minimizing net draw from the grid during constrained periods.

Rather than treating the interconnection as a static feed, Verrus' control architecture continuously balances onsite storage, HVAC and computing load to maintain optimal efficiency. When grid conditions tighten, power can be automatically reallocated from non-essential loads to support grid relief or shifted internally to charge or discharge batteries as directed by the utility or system operator. The result is a closed-loop system that uses the same reserved capacity more effectively providing higher computational throughput for the same interconnection footprint while enhancing reliability and reducing strain on the grid.

Q. HOW DOES THIS MODEL DIFFER FROM TRADITIONAL "ALWAYS-ON" DATA CENTERS?

A. Traditional hyperscale and colocation facilities require utilities to reserve near-constant power availability equivalent to their nameplate peak load to ensure maximum compute uptime—regardless of grid conditions or whether the facility is drawing that much power at a given time. Although the utility's reserved capacity exceeds the facility's instantaneous demand

during most of the year , these loads still typically operate such that they contribute materially to the utility's system coincident peak, driving the need for new transmission and generation capacity.

In contrast, Verrus facilities are engineered to operate in dynamic coordination with the utility and grid operator to make the most efficient use of available capacity. Most of the year when the grid is not under stress, Verrus' facilities will utilize much more of the capacity reserved for it by the utility. The effect is to make Verrus data centers far more productive than traditional data centers. But when the grid is under stress Verrus facilities can shift or curtail load in response to grid conditions without compromising reliability to computing customers. This is done through automated controls and asset-backed flexibility; typically reducing grid draw by 25–100 percent during the few hundred highest-stress hours each year. As a result, Verrus campuses do not significantly drive new capacity additions or exacerbate the peak-growth drivers that underlie PGE's marginal-cost and PGM calculations, but instead unlock "underutilized" capacity already on the system while improving overall grid efficiency. The effect is to make the overall grid far more efficient without adding material operating stress in the process.

Q. WHAT IS THE PRACTICAL IMPACT OF THIS FLEXIBILITY ON SYSTEM COSTS?

A. Flexible data centers can meet the same annual energy needs while avoiding or deferring capital investment in peaking generation and backbone transmission. Because they reduce power consumption in "super-peak" periods, they help flatten system load profiles, increasing utilization of existing assets and exerting substantially more downward pressure on average rates.

Q. WHY IS SEPARATE RATE TREATMENT NECESSARY?

A. These operational and cost-causation differences are fundamental. When flexible and inflexible data centers are placed in the same rate class, the flexible operators subsidize the capacity costs created by their inflexible peers. A distinct subclass—Schedule 96-F—is therefore required to:

1. Measure and credit verified curtailment;
2. Apply allocators and minimum-demand rules that reflect actual backbone usage; and
3. Enable the Commission to track the cost-reduction benefits flexible data centers provide.

IV. RESPONSE TO PGE'S SCHEDULE 96 PROPOSAL

Q. WHAT ASPECTS OF PGE'S PROPOSED SCHEDULE 96 DO YOU SUPPORT?

A. I support PGE's effort to create a transparent rate structure for large data center customers consistent with HB 3546. Recognizing these facilities as a distinct class is a positive first step toward aligning costs with system impacts.

Q. WHERE DOES PGE'S PROPOSAL FALL SHORT?

A. The proposal establishes a single undifferentiated Schedule 96, grouping all large-load customers—flexible and inflexible—under one set of rates, allocators, and minimum-demand provisions. This approach fails to recognize the measurable difference in peak-period consumption patterns and infrastructure impacts between traditional "always-on" data centers and grid-responsive facilities like those developed by Verrus.

Q. WHAT MODIFICATION DO YOU RECOMMEND?

A. I recommend that the Commission direct PGE to establish two subclasses within Schedule 96:

- Schedule 96-S (Standard) – for inflexible, continuously operating data centers; and

- Schedule 96-F (Flexible) – for data centers that commit to and verify defined levels of dispatchable curtailment and/or on-site storage participation.

Eligibility for Schedule 96-F should be based on:

1. Demonstrated asset-backed dispatchable capability (e.g., MW of curtailable load via dischargeable storage or similar asset backing);
2. Telemetry and measurement-and-verification (M&V) protocols allowing the utility to confirm performance; and
3. Defined curtailment performance targets and non-performance provisions.

Q. HOW WOULD THE SUBCLASS FRAMEWORK OPERATE IN PRACTICE?

A. Customers electing Schedule 96-F would submit an annual flexibility plan detailing curtailment commitments and telemetry data access that meets or exceeds a defined minimum established at time of interconnection. PGE would evaluate compliance each year; customers maintaining verified performance remain in 96-F, while those failing to meet obligations revert to 96-S for at least three years. This ensures that only flexible data centers providing real grid benefits receive differentiated treatment.

Q. HOW DOES THIS RECOMMENDATION FURTHER HB 3546'S COST-ALLOCATION OBJECTIVES?

A. HB 3546 requires the Commission to prevent unwarranted cost shifting among customers. By distinguishing between flexible and inflexible operations, Schedule 96-F ensures that only those customers who actually drive new transmission and generation capacity pay for it. Flexible data centers that mitigate peak-driven new costs will, appropriately, avoid being charged for infrastructure they do not cause.

Q. PLEASE SUMMARIZE THE BROADER IMPORTANCE OF THIS SUBCLASS STRUCTURE.

A. Establishing Schedule 96-F creates a standardized, transparent framework that recognizes operational flexibility as a measurable and compensable grid service. It provides a foundation for subsequent refinements—such as PGM adjustments, minimum-demand credits, CIAC deferral mechanisms, and queue-priority rules—each of which depends on having a formally recognized flexible subclass. Without this subclass, every other proposed correction would remain ad-hoc or administratively infeasible.

V. RESPONSE TO PGE'S PEAK GROWTH MODIFIER (PGM)

Q. WHAT IS YOUR UNDERSTANDING OF PGE'S PROPOSED PEAK GROWTH MODIFIER?

A. PGE's proposed PGM is intended to allocate the costs of new transmission and generation investments to customer classes that contribute most to growth in system coincident-peak demand. The modifier functions as a variable, marginal-cost allocator layered on top of the fixed cost recovery already embedded in PGE's base demand charges. In other words, customers continue paying for the existing system through fixed charges, while the PGM recovers incremental costs of system growth.

Q. WHY IS THIS APPROACH PROBLEMATIC FOR FLEXIBLE DATA CENTERS?

A. The PGM as designed assumes that all incremental load is inflexible and coincident with the system peak. Flexible data centers, however, can reduce grid draw during those hours—by up to 100% as needed to support system reliability—using integrated battery storage and automated controls. When these curtailments occur during the same hours used to define the system coincident peak, the flexible load has no marginal impact on the transmission or generation upgrades that the PGM is intended to fund.

Applying the unadjusted PGM therefore over-allocates growth costs to flexible facilities and under-allocates them to inflexible peers. The result is a cross-subsidy that conflicts with HB 3546's requirement for proportional cost allocation.

Q. WHAT MODIFICATION DO YOU PROPOSE?

A. I recommend that the Commission direct PGE to modify its PGM methodology so that customers in the proposed Schedule 96-F subclass are charged only for the growth-related transmission and generation costs they actually cause, while continuing to pay their share of embedded system costs. Two implementation paths are available:

1. Net-Peak-Growth Allocator: Adjust each subclass's or customer's contribution to system peak by subtracting verified curtailment during the PGM measurement window. For example, if a 100 MW flexible data center curtails 30 MW at the coincident peak, only 70 MW counts toward the PGM calculation.
2. Flexibility-Factor Adjustment: Apply a multiplicative discount factor (e.g., 0.0 to 1.0) to the PGM allocator for 96-F customers based on annual, verified curtailment performance.

Both options require telemetry and measurement-and-verification (M&V) protocols but are administratively practical within a subclass framework.

Q. HOW WOULD THIS MODIFICATION FIT WITH RECOVERY OF PGE'S EXISTING TRANSMISSION SYSTEM COSTS?

A. Schedule 96-F customers would continue paying the fixed-demand portion of Schedule 96 that recovers PGE's embedded transmission and generation investments—the sunk costs of the current grid. The proposed PGM credit or adjustment would apply only to the marginal, growth-related component. This ensures PGE remains fully compensated for its existing

infrastructure while aligning new-build cost recovery with the data centers that actually cause it.

Q. WHY MUST THIS ADJUSTMENT BE TIED TO A SEPARATE SUBCLASS RATHER THAN APPLIED UNIVERSALLY?

A. Only customers capable of verified curtailment can meaningfully alter their contribution to peak growth. Administering a net-peak or flexibility adjustment across all data centers without a subclass structure would be unworkable. The dedicated Schedule 96-F subclass provides the accountability, metering, and compliance framework needed to implement the modified PGM correctly.

Q. HOW DOES THIS MODIFICATION ADVANCE HB 3546'S OBJECTIVES?

A. By separating embedded cost recovery from marginal growth recovery and adjusting the latter for verified flexibility, the modified PGM under Schedule 96-F precisely aligns costs with causation. It prevents flexible data centers from paying for transmission and generation expansion they do not drive, while ensuring all customers continue to contribute to the upkeep of the existing system. This structure fulfills HB 3546's mandate to prevent unwarranted cost shifting and to promote equitable, efficiency-enhancing investment in Oregon's grid.

VI. MINIMUM DEMAND CHARGES (TRANSMISSION AND GENERATION)

Q. WHAT MINIMUM-DEMAND PROVISIONS HAS PGE PROPOSED?

A. PGE proposes an 80 percent minimum billing demand for both transmission and generation demand charges. This means a customer's billed demand can never fall below 80 percent of its maximum demand, regardless of actual usage or curtailment during peak periods.

Q. WHAT ISSUES ARISE FOR FLEXIBLE DATA CENTERS UNDER THIS STRUCTURE?

A. For flexible facilities capable of significant curtailment, an 80 percent billing-demand floor effectively removes the economic signal to invest in flexibility. Even if a data center reduces load by 30–40 percent during system peaks—precisely when that reduction benefits all ratepayers—the customer still pays as if the curtailment never occurred. When combined with the PGM allocation, this structure results in a double payment: the customer invests in asset-backed flexibility on-site (batteries, controls, automation) that helps the grid avoid new transmission or generation build-outs, yet is still charged for those same incremental grid assets as if no flexibility existed. In other words, the customer both finances the solution and pays again for the avoided problem.

Q. WHAT MODIFICATION DO YOU PROPOSE?

A. Within the proposed Schedule 96-F subclass, the minimum-demand provisions should be replaced with a performance-based credit or waiver mechanism that differentiates between the embedded (fixed) portion of transmission and generation recovery and the marginal (growth-related) portion.

1. Fixed, embedded cost recovery: Schedule 96-F customers would continue to pay their allocated share of PGE's existing transmission and generation system costs through the fixed-demand charge component of Schedule 96. These embedded costs represent sunk investments in the current network and must be recovered from all customers who rely on that network.
2. Variable, growth-related recovery: Credits or waivers would apply only to the marginal or usage-sensitive elements—specifically, the portion of transmission and generation costs tied to peak-driven expansion (including the PGM allocator and any minimum-

demand adders). If a Schedule 96-F customer meets certified curtailment thresholds during designated peak-period hours, PGE would reduce or waive that growth-related portion for that billing cycle. Partial compliance could earn a prorated credit.

3. Verification: All credits would be contingent on verified telemetry and subject to audit under the same measurement-and-verification (M&V) protocols used for the PGM adjustment.

Q. WHY IS THIS DISTINCTION IMPORTANT?

A. It ensures PGE remains fully compensated for its existing system, while flexible data centers are charged only for the new infrastructure they actually cause. This separation between fixed embedded recovery and variable marginal recovery aligns with standard cost-of-service principles used in both state and FERC-jurisdictional frameworks.

Q. WHY IS A SUBCLASS STRUCTURE NECESSARY FOR THIS APPROACH?

A. Performance-based minimums and differentiated cost components require metering, verification, and annual true-ups that would be impractical to apply across all data centers. A dedicated subclass—Schedule 96-F—confines these provisions to customers capable of verifiable flexibility and ensures consistency with the PGM methodology.

Q. HOW DOES THIS MODIFICATION ADVANCE THE COMMISSION'S POLICY OBJECTIVES?

A. Allowing minimum-demand credits within Schedule 96-F ensures that customers who reduce peak usage still contribute their appropriate share toward recovery of PGE's existing transmission and generation system, while avoiding over-payment for growth assets they do not cause to be built. This approach avoids shifting costs to other ratepayers for PGE's new investments while helping to pay down the cost of embedded investments. Further it prevents cross-subsidization among fundamentally different data center types in line with the directives

of the legislation and produces a broader public-interest benefit: by increasing system utilization and spreading fixed costs over more kilowatt-hours without triggering new capacity additions, flexible data centers exert downward pressure on rates for all ratepayers. In doing so, the policy both rewards private investment in grid-supportive flexibility and advances HB 3546's central goals of reliability, affordability, and equitable cost allocation.

VII. CONTRIBUTIONS IN AID OF CONSTRUCTION (CIAC) AND COST CAUSATION

Q. WHAT IS YOUR UNDERSTANDING OF PGE'S PROPOSAL REGARDING CIAC IN SCHEDULE 96?

A. PGE proposes an optional Contributions in Aid of Construction (CIAC) mechanism under which large customers may contribute up to 50 percent of the cost of dedicated distribution facilities built to serve their sites, with potential credits over a ten-year period if load obligations are maintained. This tool protects existing ratepayers from stranded-asset risk when very large customers construct site-specific interconnections.

Q. HOW DOES THIS FRAMEWORK APPLY TO FLEXIBLE DATA CENTERS?

A. Flexible data centers, like any other large industrial facility, require dedicated feeders, transformers, and substation capacity sized to their non-coincident maximum load. That infrastructure must be constructed regardless of how flexibly the customer later operates. Therefore, flexibility does not reduce the customer's responsibility for the direct, dedicated facilities needed to connect it to PGE's system. However, flexibility can reduce or defer shared or upstream system upgrades—such as backbone transmission reinforcements or area-capacity additions—that would otherwise be driven by coincident-peak growth.

Q. WHAT MODIFICATION DO YOU RECOMMEND TO ADDRESS THIS DISTINCTION?

A. Within the proposed Schedule 96-F subclass, I recommend clarifying that:

1. Flexible customers remain fully responsible for dedicated CIAC associated with site-specific interconnection and delivery facilities sized to their non-coincident peak. Those are customer-caused costs.
2. Where verified flexibility demonstrably defers or eliminates shared or upstream network investments (for example, area-capacity additions or higher-voltage tie-lines), the customer should be eligible for a Flexibility-Deferral Credit applied to the growth-related component of those shared costs.
3. Such credits would be supported by engineering validation and the same M&V data used in the PGM and minimum-demand adjustments. They would not offset the cost of dedicated feeders, transformers, or other facilities constructed solely for the customer.

Q. WOULD THIS MODIFICATION AFFECT PGE'S RECOVERY OF EMBEDDED SYSTEM COSTS?

A. No. Schedule 96-F customers would continue to pay their share of existing system costs through fixed-demand and delivery charges, and would fund any dedicated interconnection facilities through standard CIAC. The only credit applies to avoided or deferred shared infrastructure, ensuring no other rate payers see costs shifted to them for any data center's dedicated facilities while aligning cost recovery with actual system impact. This adjustment is needed to align with the legislation's directives to avoid cost shifting among distinctly different customer types (e.g. flexible vs. inflexible data center customers).

Q. HOW DOES THIS MODIFICATION PROMOTE THE PUBLIC INTEREST?

A. Recognizing flexibility at the system level rewards customers who invest in technologies that improve grid efficiency without shifting costs to others. By reducing or deferring upstream capital additions while still contributing to both dedicated and embedded network costs,

flexible data centers place downward pressure on rates for all customers and advance HB 3546's objectives of proportional cost allocation, affordability, and reliability.

VIII. SPECIAL CONTRACTS

Q. WHAT PROVISIONS DOES PGE PROPOSE REGARDING SPECIAL CONTRACTS?

A. PGE's filing indicates that customers eligible for Schedule 96 may alternatively request individual special contracts approved by the Commission. These contracts could include customized pricing, term lengths, and curtailment provisions negotiated on a case-by-case basis. PGE presents this pathway as a means to accommodate unique customer circumstances or mitigate perceived cost-shift risks.

Q. WHAT CONCERNS DO YOU HAVE WITH RELYING PRIMARILY ON SPECIAL CONTRACTS TO ADDRESS FLEXIBLE-LOAD TREATMENT?

A. While contracting flexibility can be valuable, relying on special contracts as the primary mechanism for recognizing flexible operations has four major drawbacks:

1. Inconsistency: Each contract would be negotiated independently, producing uneven treatment of similarly situated customers and creating regulatory uncertainty.
2. Opacity: Negotiated contracts obscure the underlying cost-causation logic and make it difficult for other market participants or ratepayers to understand how system costs are assigned.
3. Investment deterrence: Potential entrants that do not already have established relationships with the utility may not realize that flexibility is even negotiable, or may be unwilling to undertake a costly and uncertain negotiation. The absence of a transparent, codified framework therefore discourages beneficial investment in grid-supportive flexibility.

4. Administrative inefficiency and regulatory risk: Managing flexibility exclusively through one-off negotiations invites procedural disputes and potential complaints before the Commission when parties disagree on terms or performance expectations. Establishing a standardized tariff and process—such as a dedicated Schedule 96-F—would greatly reduce this risk by providing a clear, Commission-approved pathway for both customers and utilities to follow. This approach promotes regulatory efficiency, consistency, and early resolution of issues without the need for case-by-case adjudication.

For these reasons, relying on special contracts as the sole vehicle for flexibility recognition results in a fragmented and inefficient policy as well as sending the wrong signal to the market.

Q. WHAT ALTERNATIVE APPROACH DO YOU RECOMMEND?

A. The Commission should direct PGE to recognize flexible operations within a standard tariff subclass—Schedule 96-F—rather than through ad-hoc special contracts. Schedule 96-F would establish clear eligibility criteria, measurement-and-verification (M&V) obligations, and performance-based billing adjustments for flexible customers. Special contracts would remain available but would no longer be the only route for cost-causation alignment.

Q. WHAT TYPE OF FLEXIBILITY SHOULD QUALIFY FOR THE SUBCLASS?

A. To ensure durability and reliability, eligibility for Schedule 96-F should require that flexibility be "asset-backed." This means that a customer's ability to reduce load during peak or contingency conditions is supported by physical, installed infrastructure—such as battery energy storage systems, uninterruptible power supplies, automated control systems, or equivalent on-site resources—that can sustain verified curtailments independent of short-term

business decisions.

This asset-backed requirement addresses a legitimate utility concern: that purely voluntary or software-based load management could disappear over time, undermining system-planning assumptions. Asset-backed flexibility, by contrast, represents verifiable, enduring capacity that can be modeled and trusted in both interconnection studies and cost allocation frameworks.

Q. WHY IS TRANSPARENCY AND PREDICTABILITY IN THIS PROCESS IMPORTANT?

A. Transparent tariff treatment is essential to encourage the kind of grid-beneficial investment that HB 3546 seeks to promote. A clear, codified subclass tells developers, investors, and utilities that flexibility—when it is verifiable and asset-backed—has recognized value, measurable standards, and predictable cost outcomes. This investment signal lowers the risk premium for flexible projects, supports efficient siting within constrained areas of the grid, and broadens participation beyond the few entities willing or able to negotiate bespoke agreements. In short, clarity in the tariff is the mechanism that converts policy intent into real-world capital deployment.

Q. HOW SHOULD THE TARIFF AND SPECIAL-CONTRACT FRAMEWORKS INTERACT?

A. I recommend the following delineation:

1. Schedule 96-F (standard subclass): Applies to customers with verifiable, asset-backed flexibility. Cost-causation adjustments—PGM, minimum-demand credits, and flexibility-deferral recognition—are standardized and transparent.
2. Special contracts (optional): Reserved for projects whose structure or financing differs materially from normal service, such as co-ownership of generation or pilot programs.

These contracts should still reference the same M&V and cost-netting principles used in Schedule 96-F to maintain consistency and avoid double recovery.

Q. HOW DOES ESTABLISHING A DISTINCT SUBCLASS ALSO IMPROVE INTERCONNECTION AND SYSTEM-PLANNING EFFICIENCY?

A. A distinct tariff subclass such as Schedule 96-F not only clarifies how costs are assigned but also enables PGE and the Commission to operationalize flexibility within the interconnection study process itself. Because asset-backed flexible loads can be modeled with controllable demand and defined curtailment parameters, they lend themselves to a separate, expedited, or "fast-lane" interconnection study track. This pathway would embed flexibility assumptions directly into planning models—recognizing that a verified, asset-backed flexible data center does not require the same level of transmission or generation expansion as a fully coincident, inflexible load.

Embedding this fast-lane option within a clearly defined rate subclass sends a powerful investment signal: developers that design and install asset-backed flexibility from the outset can secure both faster access to the grid and fairer cost treatment. Without a separate subclass, these process advantages are difficult to administer transparently, since current study protocols and cost allocators presume uniform, inflexible load behavior. Codifying the link between flexible-load rates and expedited interconnection therefore aligns regulatory efficiency, system planning, and economic development—further advancing HB 3546's goals of attracting beneficial, grid-supportive investment.

Q. HOW DOES THIS RECOMMENDATION ADVANCE THE PUBLIC INTEREST?

A. Standardizing flexibility treatment through Schedule 96-F ensures that all customers who provide measurable and asset-backed grid benefits are compensated consistently and transparently. It also sends a clear market signal that Oregon recognizes and rewards durable,

physical investments in flexibility. This transparency will encourage beneficial siting, attract private capital, and promote innovation while protecting ratepayers through disciplined cost-causation. Together, these outcomes advance HB 3546's goals of affordability, reliability, and equitable cost allocation.

IX. RULES C AND I: QUEUEING, EXCEEDANCE, AND CREDIT ASSURANCE

Q. WHAT CHANGES HAS PGE PROPOSED TO RULE I?

A. PGE proposes to raise the Large Load Customer Application (LLCA) threshold from 10 MW to 20 MW and to extend the required service-term commitment from 5 years to 10 years, consistent with HB 3546. PGE also introduces more stringent credit-assurance standards—including collateral equal to roughly three years of transmission-service revenue—and maintains existing exceedance-charge provisions that apply when a customer exceeds its contracted maximum demand. PGE is not proposing additional changes to Rule C beyond those previously approved in Docket UE 430 related to use of load banks.

Q. HOW DO THESE RULE I PROVISIONS INTERACT WITH FLEXIBLE, ASSET-BACKED DATA-CENTER OPERATIONS?

A. They are designed primarily for static, inflexible loads and therefore fail to reflect the risk characteristics of asset-backed flexible facilities. These customers are not speculative developers; they commit to durable infrastructure—including battery systems, uninterruptible power supplies, and automated controls—that can reduce load reliably during system stress. Such facilities lower system-planning risk rather than increase it. Applying identical queueing, exceedance, and credit rules to both flexible and inflexible loads overstates the financial risk posed by flexible projects and delays interconnections that would otherwise benefit the grid and other ratepayers.

Q. WHAT MODIFICATIONS DO YOU RECOMMEND?

A. The Commission should direct PGE to create within Rules C and I separate treatment for Schedule 96-F customers, incorporating three key reforms:

1. Fast-Lane Interconnection Queue: Establish an expedited interconnection-study process for verified asset-backed flexible loads. This queue would embed curtailment parameters and storage capabilities into the power-flow models from the outset, allowing engineers to evaluate system impact based on net-peak rather than nameplate load. Because these facilities can actively manage consumption during constrained hours, they can often interconnect using existing capacity, avoiding or deferring upgrades that would otherwise be required of standard inflexible data center loads.
2. Exceedance Provisions Aligned with Dispatch Behavior: Define exceedance not simply as any demand above a fixed contract limit, but as demand that exceeds the customer's verified curtailment baseline during designated control hours. When the customer responds to a dispatch or automated curtailment signal, those excursions should not trigger exceedance penalties. This adjustment recognizes that controlled ramping is an element of system reliability, not a violation of service terms.
3. Risk-Based Credit Assurance: Replace the blanket "three-years-of-revenue" collateral proxy with a risk-based credit-assurance model that reflects the lower default and stranded-cost risk of asset-backed flexible customers. Collateral should correspond to actual at-risk costs—for example, the incremental interconnection or network-upgrade costs that could not be recovered if the customer departed. This aligns financial security requirements with cost causation and frees capital for productive investment in flexibility assets.

Q. WHY MUST THE FAST-LANE QUEUE BE LINKED TO A DISTINCT RATE SUBCLASS?

A. Administering a separate queue requires consistent eligibility and performance criteria, which can only be established within a formal subclass. If all data centers remain in one undifferentiated class, PGE cannot transparently prioritize flexible projects or apply curtailment modeling in its interconnection studies. The Schedule 96-F subclass provides the administrative boundary needed to apply fast-lane processing, M&V protocols, and ongoing compliance oversight. It ensures that expedited treatment is available only to customers with verifiable, asset-backed flexibility—not to any load that merely pledges to be responsive, maybe for as little as a single year in practice.

Q. ARE THERE OTHER EXAMPLES OF FAST-LANE QUEUES FOR FLEXIBLE LOADS IN OTHER JURISDICTIONS?

A. Yes. During its 2025 legislative session, Texas came close. In the House committee-report version of Texas SB 6 (C.S.S.B. 6), lawmakers proposed an explicit expedited interconnection program for certain large loads (draft Utilities Code §37.0562). That late-stage language would have: (i) defined "flexible load" as a large load contractually obligated to curtail or run on backup generation at ERCOT's direction; (ii) allowed two routes to qualify for a fast track—either bringing behind-the-meter generation online within 180 days capable of serving the full load, or (for sites >75 MW) making a binding 10-year commitment to operate as a flexible load with required data/financial assurances; (iii) required priority in the interconnection queue over other large loads without such agreements; (iv) required parallel processing of any associated generation interconnection; and (v) permitted, if authorized, the use of approved third-party vendors to perform studies/procure/construct certain facilities to speed timelines.

However, those directives were softened in the enrolled law. The final version of SB 6 that passed did not include the fast-lane section and instead directs the Public Utility Commission of Texas (PUCT) to adopt interconnection standards for large loads "in a manner designed to support business development… while minimizing stranded costs and maintaining reliability" (Utilities Code §37.0561). In other words, Texas ultimately adopted broader, pro-development standards and left it to the PUCT's rulemaking to decide whether (and how) to reflect the House approach—e.g., differentiated treatment for loads that can verifiably reduce net-peak impact.[1]

Q. HAS THE UNITED STATES DEPARTMENT OF ENERGY PROVIDED ANY POLICY INDICATIONS REGARDING SPEED OF INTERCONNECTION FOR FLEXIBLE LOADS?

A. Yes. On October 23, 2025, the U.S. Department of Energy ("USDOE") issued an Advance Notice of Proposed Rulemaking ("ANOPR").[2] In the ANOPR, DOE recognizes the value of flexible loads to the system and concluded that "the interconnection study of large loads that agree to be curtailable and hybrid facilities that agree to be curtailable and dispatchable should be expedited." Although the ANOPR has implications for jurisdiction between the states and FERC and addresses additional issues, the value of flexible loads is recognized in USDOE's intent to expedite interconnection of large loads that provide value back to the grid. By adopting a fast-lane queue for asset-backed flexible data centers in Oregon, the Commission would be a leader in state solutions to address interconnection issues for large loads that provide value to the grid.

[1] https://capitol.texas.gov/tlodocs/89R/billtext/pdf/SB00006H.pdf

[2] https://www.energy.gov/sites/default/files/2025-10/403%20Large%20Loads%20Letter.pdf

Q. HOW DO THESE PROPOSED MODIFICATIONS BENEFIT RATEPAYERS AND SYSTEM PLANNING?

A. A fast-lane queue for asset-backed flexible data centers will accelerate the connection of dispatchable demand resources that can absorb off-peak energy and curtail during system peaks. By making more efficient use of existing infrastructure, these projects reduce or defer costly upgrades, thereby exerting downward pressure on long-term rates for all customers. Risk-based credit requirements further promote equitable cost recovery by aligning collateral with actual exposure rather than arbitrary proxies. Together, these reforms make Oregon's interconnection and rate-design processes mutually reinforcing: flexible data centers pay their share of embedded costs, avoid paying for growth assets they do not cause, and receive predictable, transparent access to the grid.

Q. HOW DOES THIS PROPOSAL ALIGN WITH THE OBJECTIVES OF HB 3546 AND THE COMMISSION'S BROADER POLICY DIRECTION?

A. HB 3546 emphasizes equitable cost allocation, system reliability, and proactive planning for large new loads. Embedding an asset-backed fast-lane interconnection pathway within Schedule 96-F translates those goals into practice. It allows Oregon to integrate large, flexible data centers more rapidly, at lower system cost, and with greater transparency than ad-hoc contracting or case-by-case exceptions can achieve. This alignment of regulatory clarity, engineering realism, and private-sector investment is precisely the outcome the statute was intended to deliver.

X. SYSTEM PLANNING AND RATEPAYER IMPACTS

Q. HOW DOES THE PROPOSED SCHEDULE 96-F SUBCLASS AFFECT PGE'S LONG-TERM SYSTEM PLANNING?

A. Schedule 96-F creates a transparent mechanism for integrating large, asset-backed flexible data centers into PGE's planning models. Because these customers can reliably reduce load during peak and contingency conditions, they enable PGE to plan around net-peak demand rather than gross nameplate load. This distinction matters: it allows engineers to defer or downsize transmission reinforcements, generation capacity additions, and area-capacity upgrades that would otherwise be triggered by inflexible growth.

Embedding this distinction formally in the tariff gives PGE the regulatory certainty needed to treat flexible demand as a legitimate planning resource. It moves flexibility from the "unmodeled exception" category into the same framework used for resource adequacy and transmission expansion, aligning PGE's integrated-planning assumptions with real-world behavior.

Q. WHAT ARE THE BROADER SYSTEM-LEVEL EFFECTS OF THIS APPROACH?

A. The presence of verified flexible loads expands the effective capacity of the existing grid without any new steel in the ground. By shaping consumption away from coincident peaks, these customers create room for additional economic growth within existing transmission and generation limits. That dynamic turns flexibility into a capacity-creating resource: it unlocks new interconnections, accelerates data center deployment, and supports other electrification initiatives, all while keeping system reliability intact.

In practice, a portfolio of asset-backed flexible loads can eliminate or defer millions and potentially billions of dollars in capital spending by PGE by shifting marginal megawatts into unused off-peak headroom. Those avoided or delayed investments ultimately flow

through to potential reallocation of funds for other productive uses and downward pressure on rates for all customers.

Q. HOW DOES THIS FRAMEWORK INTERACT WITH PGE'S EXISTING EMBEDDED-COST RECOVERY?

A. Flexible data centers under Schedule 96-F continue to pay their share of embedded transmission and generation costs through fixed-demand charges. The tariff simply adjusts growth-related allocators—such as the PGM and minimum-demand provisions—so that customers who curtail during critical hours are not charged for infrastructure they demonstrably help avoid. This avoids cost shifting related to use of the existing system while ensuring that incremental capacity costs are assigned to the data centers that actually drive them. The result is a rate design that is both financially sound for the utility and economically efficient for the system.

Q. WHAT ARE THE RATEPAYER IMPLICATIONS OF ADOPTING SCHEDULE 96-F?

A. The public-interest benefits are twofold:

1. Lower long-term costs: By avoiding or deferring capital expenditures on new transmission and generation assets, PGE's overall rate base grows more slowly, reducing long-term revenue requirements and stabilizing customer rates.
2. Higher asset utilization: Flexible customers purchase substantial off-peak energy, increasing throughput over existing infrastructure. Those incremental kilowatt-hours spread fixed costs over a larger sales base, again placing downward pressure on average rates.

Because Schedule 96-F maintains embedded-cost recovery, these benefits accrue without shifting costs to other ratepayers.

Q. HOW DOES THE FAST-LANE INTERCONNECTION PROCESS CONTRIBUTE TO THESE OUTCOMES?

A. The fast-lane queue ensures that grid-supportive projects are not delayed behind inflexible data centers that require new capacity. By embedding asset-backed flexibility into the study process, PGE can connect beneficial data centers faster, realize off-peak utilization sooner, and capture avoided-cost savings earlier. In effect, the fast-lane mechanism converts flexibility from a policy aspiration into a planning and execution tool—one that accelerates both customer investment and system benefit.

Q. DO THESE REFORMS ADVANCE OREGON'S POLICY GOALS UNDER HB 3546?

A. HB 3546 directs the Commission to ensure that cost allocation, rate design, and planning processes reflect the true drivers of system cost while encouraging efficient electrification and reliability. The Schedule 96-F framework accomplishes this by:

- Distinguishing between embedded and growth-related costs;
- Rewarding verifiable, asset-backed flexibility that reduces those growth costs;
- Embedding flexibility into interconnection and planning models; and
- Delivering measurable savings and reliability gains to all ratepayers.

In short, Schedule 96-F turns cost-causation accuracy into an economic-development strategy. It allows Oregon to welcome data centers without overbuilding infrastructure or burdening existing customers. That alignment of private capital with public benefit is precisely the outcome the legislature and this Commission have sought to achieve.

XI. SUMMARY AND RECOMMENDATIONS

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE COMMISSION.

A. My recommendations can be summarized in five key points, all of which share a single objective: aligning rates and planning processes with real, measurable cost causation while accelerating investment in grid-beneficial flexibility.

1. Adopt a dedicated tariff subclass—Schedule 96-F—for asset-backed flexible data centers.

   This subclass should establish transparent eligibility criteria, telemetry and M&V standards, and performance-based billing adjustments. It provides a durable, standardized framework that recognizes flexibility as a physical planning resource rather than a negotiated exception.

2. Revise the Peak Growth Modifier (PGM) to measure net-peak growth by crediting verified curtailments during coincident-peak hours.

   This ensures that flexible customers pay their share of embedded costs but are not charged for new capacity they demonstrably help the grid avoid.

3. Modify minimum-demand provisions to distinguish between fixed embedded recovery and variable growth-related recovery, granting credits or waivers when asset-backed flexibility meets certified curtailment thresholds.

   This preserves PGE's recovery of existing system costs while properly valuing grid-supportive behavior.

4. Clarify CIAC and credit-assurance rules so that dedicated interconnection facilities remain fully customer-funded, while any deferral or downsizing of shared system

upgrades is recognized through performance-based flexibility credits and risk-adjusted collateral requirements.

5. Implement a "fast-lane" interconnection process for Schedule 96-F customers, embedding flexibility directly into system-impact studies and allowing verified, asset-backed flexible data centers to connect sooner when they do not require incremental transmission or generation.

Together, these measures form an integrated framework that couples cost-causation accuracy with economic-development efficiency. They create a clear, transparent signal that Oregon rewards durable, physical investments in flexibility and values the public benefits they deliver.

Q. WHAT OUTCOMES WILL THIS FRAMEWORK ACHIEVE FOR OREGON AND FOR PGE'S RATEPAYERS?

A. The proposed Schedule 96-F structure will:

- Ensure proper cost assignment (no shifting) for use of embedded transmission and generation investments;
- Reduce or defer the need for new capacity additions, lowering long-term rate pressure;
- Enable faster, more predictable interconnection of beneficial, controllable loads; and
- Establish Oregon as a leader in integrating flexible demand as a planning resource rather than a policy aspiration.

By adopting these recommendations, the Commission will advance HB 3546's core intent—ensuring that rates are fair, costs are assigned in proportion to system impact, and the grid evolves toward greater reliability and affordability.

Q. DO YOU BELIEVE THIS FRAMEWORK PROVIDES A REPLICABLE MODEL FOR FUTURE PROCEEDINGS?

A. Yes. The Schedule 96-F approach offers a practical blueprint for other jurisdictions grappling with the rapid growth of data centers, electrification, and large-load interconnections. It demonstrates that utilities can welcome significant new demand without compromising affordability or reliability—provided flexibility is recognized, measured, and rewarded through transparent, asset-backed mechanisms.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

WITNESS QUALIFICATION STATEMENT OF JEFF BLADEN

ON BEHALF OF VERRUS LLC

I. Introduction and Purpose

My name is Jeffrey M. Bladen. I am submitting this statement on behalf of Verrus LLC, where I serve as Head of Energy.

The purpose of this statement is to summarize my professional background, education, and qualifications to support my participation as an expert witness in this proceeding regarding large flexible-load integration, interconnection processes, and related tariff-design issues.

II. Professional Background

I have more than 25 years of experience across the electric-power and energy-technology sectors spanning market design, system operations, regulatory strategy, and large-scale energy procurement.

I currently serve as Head of Energy at Verrus LLC, a Sidewalk Infrastructure Partners company. In this role, I lead all aspects of energy strategy, including utility partnerships, tariff and regulatory engagement, and grid-aware site selection for next-generation flexible data-center campuses. My work focuses on enabling flexible-load integration that accelerates interconnections by several years while reducing the need for new peaking generation and large-scale transmission investment.

From 2021 to 2024, I was Global Director of Energy at Meta Platforms, where I led global teams responsible for planning and procuring energy for one of the world's largest private electricity consumers. During my tenure, my team developed a 10GW+ pipeline of new data centers and added more than 2 GW annually of new clean-energy resources in addition to launching the ZEROgrid Initiative to advance grid-scale decarbonization.

Prior to Meta, I served in executive roles at the Mid-Continent Independent System Operator (MISO) from 2014 to 2021, including Executive Director of System Operations and Market Services and Executive Director of Digital Strategy. I oversaw market strategy, engineering, settlements, and technology planning for one of the world's largest organized power markets, including a $150 million modernization of MISO's market-trading platform.

Earlier in my career, I held senior positions with DNV GL Energy (formerly KEMA), Gamesa Energy North America, Comverge Inc., Mark Group, PJM Interconnection, and Constellation NewEnergy, gaining extensive experience in resource adequacy, renewable integration, and demand-side market participation.

I currently serve on the Board of Directors of the Energy Systems Integration Group (ESIG) and as a U.S. National Committee Member to CIGRE International's Markets and Regulation Committee (C5).

III. Education

- M.B.A., New York University – Stern School of Business (2007, with honors)
- B.A., Public Policy, Maxwell School of Public Affairs, Syracuse University (1993)
- Fellow, Michigan Political Leadership Program, Michigan State University (1995)

IV. Areas of Expertise

- Large flexible-load and data-center integration
- Transmission and interconnection planning
- Tariff and rate-design frameworks for dispatchable demand
- Energy-market design and price-formation mechanisms
- Utility-scale renewable and carbon-free resource development
- Grid-aware digital control and remedial-action-scheme implementation
- Regulatory and stakeholder engagement on large-load policy

V. Prior Testimony

This proceeding (UM 2377) is my first formal testimony before the Oregon Public Utility Commission.

I have previously provided written or oral testimony and participated in regulatory and stakeholder proceedings before the Federal Energy Regulatory Commission, multiple state public utility commissions, and regional transmission organizations, including but not limited to:

Pennsylvania PUC (1998–2006, retail market development), Michigan PSC (2005–2006 Capacity Need Forum), FERC (2006 Demand Response & Advanced Metering; 2015 Resource Adequacy; 2017 Competitive Retail Solution; 2018 DER Aggregation), MISO and ERCOT

stakeholder processes (2016–2019). This proceeding (UM 2377) represents my first appearance before the Oregon Public Utility Commission.

VI. Statement of Sponsorship

I am sponsoring testimony in this docket on behalf of Verrus LLC concerning frameworks to accommodate large, flexible data-center loads while maintaining reliability and putting downward pressure on rates. My professional experience qualifies me to evaluate and recommend approaches that align commercial, technical, and regulatory considerations for integrating such loads into utility planning and tariff design.

Partial Record of Regulatory Testimony and Industry Proceedings

Month/Year	Jurisdiction / Venue	Docket No.	Proceeding / Topic
09/1998	Pennsylvania Public Utility Commission (PA PUC)	—	Electric supplier registration filings, New Energy Ventures East LLC
06/1999	PA PUC	—	Electric supplier catalog and "grandfathered" filings, New Energy Ventures East LLC
07/1999	PA PUC	—	Advanced Metering Catalog filing, New Energy Ventures East LLC
02/2000	PA PUC	—	Electric supplier docket participation, New Energy Ventures East LLC
07/2000	PA PUC	—	Simakas Co., Inc. filing, party listing (New Energy Ventures East LLC)
09/2006	PA PUC	—	En Banc Retail Markets Session participant (New Energy Ventures Mid-Atlantic)
06/2005	Michigan Public Service Commission (MPSC)	—	Capacity Need Forum – presentation on PJM capacity markets

01/2006	MPSC	—	Capacity Need Forum Report publication summarizing PJM capacity presentation
01/2006	Federal Energy Regulatory Commission (FERC)	**AD06-2-000**	Technical Conference on Demand Response and Advanced Metering (PJM Interconnection)
08/2007	Pennsylvania House Energy & Power Committee	—	Legislative hearing on regional energy market design (PJM Interconnection)
10/2015	FERC	**AD15-5-000**	Technical Conference on Resource Adequacy and Market Mitigation (MISO representation)
07/2016	Midcontinent Independent System Operator (MISO) Stakeholder Process	—	Forward capacity construct stakeholder debate (MISO Market Subcommittee)
11/2017	U.S. Department of Energy – Electricity Advisory Committee	—	Transmission-Distribution Interface technical session (Midwest/MISO region)
02/2017	FERC	**ER17-284-000**	MISO Competitive Retail Solution testimony
04/2018	FERC	**RM18-9-000 /**	Technical Conference on Distributed Energy Resource Aggregation

		AD18-10-000	
06/2018	MISO Market Roadmap Stakeholder Session	—	Stakeholder ranking of market-improvement initiatives
09/2019	ERCOT Technical Advisory Committee (TAC) / RTO Stakeholder Forum	—	Real-time co-optimization discussion among RTOs
12/2018	FERC	**ER19-650-000**	MISO resource-adequacy filing referencing witness testimony
05/2022	Energy Bar Association Annual Meeting	—	Panel on interconnection queue congestion and regulatory responses
2025 (expected)	Oregon Public Utility Commission (OPUC)	**UM 2377**	Direct Testimony of Jeff Bladen on behalf of Verrus LLC — Large Flexible Load Tariff Proceeding