Docket No.: A.24-06-014, et. al.

Commissioner: Alice Reynolds

ALJ: Brandon T. Gerstle

Exhibit No.: PSG-01

Date: January 16, 2026

Witnesses: Mark Olson, Sam Harper

PREPARED TESTIMONY ON BEHALF OF
PACIFIC STEEL GROUP

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I. INTRODUCTION

1. Q: Please briefly describe Pacific Steel Group.

A: Pacific Steel Group ("PSG") is one of the largest reinforcing steel ("rebar") fabrication and installation subcontractors in the United States (West Coast footprint). Rebar is essential for structural integrity, strength, resilience, and seismic protection for critical infrastructure. PSG's ongoing fabrication and installation projects consist of approximately 22.3% public works (e.g., schools, civic centers, bridges, and water treatment plants), 34.3% residential projects (e.g., residential high rises), and 43.3% non-residential commercial projects (e.g., office buildings, parking structures, medical facilities). PSG has approximately 1,200 employees (primarily Ironworkers) in California, with a corporate office in San Diego.

2. Q: Briefly describe this testimony.

A: In Application ("A.") 24-06-014, *Application of Southern California Edison (U-338E) for Approval of Large Power Dynamic Pricing Rate,* and A.24-12-008, *Application of Southern California Edison (U-338E) for Approval of Marginal Cost-Based Dynamic Pricing Rates in Compliance with Decision 22-10-022 and Load Management Standards*.[1] Southern California Edison Company ("SCE") requests that the California Public Utilities Commission ("Commission") approve its proposed Large Power Dynamic Pricing Rate ("Large Power Rate") and Marginal Cost-Based Dynamic Pricing Rates ("Proposed LMS Rates"). PSG's witnesses support this request with their testimony.

In this testimony, PSG's witnesses first explain why PSG intends to invest over $600 million into a steel rebar mill project in California designed to eliminate the use of natural gas, significantly reduce transportation emissions by localizing production, and establish world

[1] Administrative Law Judge's Ruling Consolidating Proceedings and Modifying Schedule at 2 (Feb. 20, 2025).

class low emissions through innovative technologies (the "Mojave Micro Mill"). Next, the testimony describes the significance of SCE's Large Power Rate to the economics of the project. Finally, PSG's witnesses address the specific issues identified in the November 25, 2025 Assigned Commissioner's Amended Scoping Memo and Ruling to explain why the Commission should approve SCE's Large Power Rate.[2] The witnesses' prepared qualifications and testimony declarations are contained in Appendix A.

3. Q: Why should the Commission adopt SCE's Large Power Rate?

A: Approval of the Large Power Rate would play a significant role in the operational competitiveness of PSG's proposed Mojave Micro Mill, which is of great importance to the State. Moreover, the Large Power Rate will encourage PSG and other large power customers to respond to dynamic price signals and incentivize adoption of clean technologies that maximize efficient energy usage in large industry processes. Finally, it would contribute to the achievement of California's energy and climate goals relating to grid efficiency, decarbonization, load management, reliability, and affordability by better aligning energy demand with supply.

II. PSG'S PROPOSED ZERO-CARBON PROCESS STEEL REBAR MILL

1. Please describe the Mojave Micro Mill.

A: PSG is planning to invest more than $600 million to build a state-of-the art steel recycling rebar mill near Mojave, California. Once operational, the Mojave Micro Mill will be the only operating steel mill in California and the first new steel mill built in the State in more than 50 years.[3] The Mojave Micro Mill will combine efficient mill processes and innovative technologies to eliminate natural gas and control emissions, with an onsite renewable energy

[2] *See* Assigned Commissioner's Amended Scoping Memo and Ruling Extending Statutory Deadline at 4-5 (Nov. 25, 2025).

[3] Steel mill refers to producing steel from raw materials as opposed to processing of imported semi-finished steel.

portfolio in a unique micro mill configuration, positioning it as one of the cleanest steel mills in the world. The Mojave Micro Mill will significantly reduce environmental impacts traditionally associated with steel manufacturing while creating hundreds of high-quality jobs in California.

2. Q: What are California's steel rebar demands?

A: California requires over 1,000,000 tons of rebar annually.

3. Q: Is this rebar currently produced in California?

A: No. Currently, all of the rebar utilized in California is produced out of state. The last remaining California steel producer stopped production in 2019, leaving the State unable to process scrap metal locally. As a result, scrap metal must be exported out-of-state for processing into rebar, which is then imported back into California. Because there is no rebar production in California today, PSG and other rebar fabrication subcontractors must import rebar from manufacturers in Arizona (410 miles), Utah (780 miles), Oregon (950 miles), Washington (1,140 miles), and across the Pacific Ocean (6,000+ miles).[4]

Both scrap steel and rebar are heavy and bulky commodities. Assuming 1,000,000 tons of rebar utilized in California per year and an average of 20 tons per truck, current California rebar demand results in 50,000 long distance trucks trips per year to export scrap metal out-of-state, and another 50,000 long distance truck trips per year to import finished rebar. This transportation cycle contributes to significant emissions from moving both raw materials and finished steel products.

The Mojave Micro Mill will streamline the supply chain by enabling local processing and production, which will significantly reduce truck miles and emissions associated with California infrastructure projects.

[4] Measured from manufacturer location in each specified state to Mojave Micro Mill location in Southern California.

Figure 1: Transportation distance for raw scrap materials and finished steel products.

Rather than relying on imported products, the Mojave Micro Mill will manufacture steel using recycled scrap metal sourced locally within California and deliver finished rebar products primarily for California projects.

4. Q: Why has the steel manufacturing industry left California?

A: Steel rebar is a highly trade-exposed industry because it is a commodity market subject to commodity sales prices with steel mills competing primarily on cost. Out-of-state manufacturers are subject to less robust environmental requirements, no carbon compliance obligations, and lower electricity costs. This puts extreme cost pressure on steel manufacturers wishing to operate in California. The high trade exposure of the steel industry is best evidenced by the fact that 100% of current California consumption is imported from out-of-state.

5. Q: What are the consequences of relying solely on out-of-state steel manufacturers to meet California's demand?

A: Because California no longer produces any of its own steel, it has lost the jobs and other economic benefits of this once-thriving industry. By outsourcing all of its steel production, California has also increased the environmental impact of the steel it utilizes. As noted above, the need to export scrap metal and import finished steel products results in high transportation emissions for both scrap raw materials and finished steel products. This imported steel is also produced using dirtier electricity and without the robust environmental regulations manufacturers would be subject to in California.

6. Q: Why did PSG embark upon this project?

A: As a California based company and one of the largest rebar subcontractors in California, PSG is frustrated with the inability to source steel locally in the State. PSG therefore intends to build the solution.

7. Q: What features will the Mojave Micro Mill have?

A: The proposed advanced manufacturing and recycling facility will:

- Produce seismic reinforcing steel critical for infrastructure and climate resilience.
- Localize the supply chain thereby greatly reducing transportation emissions.
- Utilize onsite renewable energy and battery storage to complement California's increasingly clean grid and provide reliability to the grid as a demand response resource.
- Demonstrate best-in-world technology and performance.
- Bring desperately needed economic activity to Kern County, including 400 high-paying jobs near under-served communities.
- Set global benchmark for emissions.

- Prove that the California energy model can work for advanced manufacturing.

8. Q: What is the Mojave Micro Mill's expected production capacity?

A: Once fully operational, the Mojave Micro Mill is expected to produce more than 450,000 tons of rebar steel annually.

9. Q: What is the Mojave Micro Mill's projected greenhouse gas emissions reductions?

A: At full operating capacity, annual production of rebar steel will correspond to an estimated avoidance of approximately 85% when compared to North American average steel mills.

10. Q: How will the Mojave Micro Mill minimize emissions?

A: The Mojave Micro Mill will demonstrate best-in-world technology and set a global benchmark for emissions reductions through the following key investments:

First, the Mojave Micro Mill will eliminate the use of natural gas in the manufacturing process. This will be accomplished by electrifying every step that is traditionally fossil fueled, most notably by replacing the largest natural gas consumer (the gas reheat furnace) with electric induction heating instead of combustion.

Second, the Mojave Micro Mill will achieve world-class low levels of emissions by utilizing Danieli's ECO Primary Line and Q-One Technology. The ECO Primary Line is a steelmaking process configuration using electric processes, emission controls, and heat recovery. It significantly reduces GHG emissions and criteria pollutants by eliminating onsite fossil fuel use, reducing total energy intensity, improving thermal efficiency, and lowering overall energy demand. The Q-One Technology is an innovative electrical power supply system for electric arc

furnaces and other metallurgical applications. It reduces power consumption, enables higher use of renewable electricity, and stabilizes the grid interface.

Third, the Mojave Micro Mill will further reduce carbon emissions through the installation of behind-the-meter solar photovoltaics panels for electricity generation and long-duration energy storage batteries to support energy demand.

Fourth, the Mojave Micro Mill will utilize selective non-catalytic reduction to mitigate more than 90% of nitrogen oxide ("NOx") emissions.

Fifth, the Mojave Micro Mill will be built with a fully enclosed melt shop to capture and treat fugitive emissions.

11. Q: How will the Mojave Micro Mill utilize operational flexibility to be more cost competitive?

A: The Mojave Micro Mill will be capable of high operational flexibility, which will be critical to PSG's ability to manage energy costs and manufacture cost-competitive products. Specifically, the Mojave Micro Mill will have advanced capability to tailor its energy usage in response to price signals and grid emergencies. For example, elements of the production process – such as modifying the power profile in the electric arc furnace to adjust the speed of production – can be carefully calibrated in accordance with energy price signals. Since different rebar products require different energy intensity, PSG can schedule production based on day-ahead market prices. PSG will also be able to schedule daily, weekly, and annual outages based on forecasted market and grid conditions.

Additionally, on-site solar generation and energy storage will provide PSG with additional responsive capabilities, including helping PSG minimize grid energy consumption during grid stress events.

III. THE LARGE POWER RATE WILL PLAY A LARGE PART IN ENSURING THAT THE MOJAVE MICRO MILL WILL BE COMPETITIVE WITH OUT-OF-STATE AND OUT-OF-COUNTRY FACILITIES

1. Q: What role does the cost of electricity play in the steel manufacturing industry?

A: Steel production is highly energy intensive, with energy costs being the largest expense for rebar manufacturers in converting raw materials into finished products. California has significantly higher electricity rates compared to neighboring states and this has contributed to driving the steel industry out of California. To bring steel manufacturing back to the State, electricity pricing will play a key role in facilitating competitive operations and will require an innovative approach.

2. Q: How does California's cost of electricity for the industrial sector impact the Mojave Micro Mill compared to other states?

A: California Industrial Rates are dramatically higher than neighboring states including states with steel production being shipped into California. For comparison, according to Energy Information Agency ("EIA") figures, SCE Industrial rates were 83% higher than Arizona Public Service Company and 115% higher than Portland General Service Company.[5] On average, SCE Industrial rates are over twice the price of average Industrial rates from utilities in neighboring states. These substantial differences in electricity rates result in millions of dollars of energy cost to PSG each year that will have to be overcome to compete with out-of-state steel production.

[5] Based on Industrial Sector Average Electricity Rate by Utility, Energy Information Agency, EIA-861M Report for most recent 12 months data available from November 2024 – October 2025.

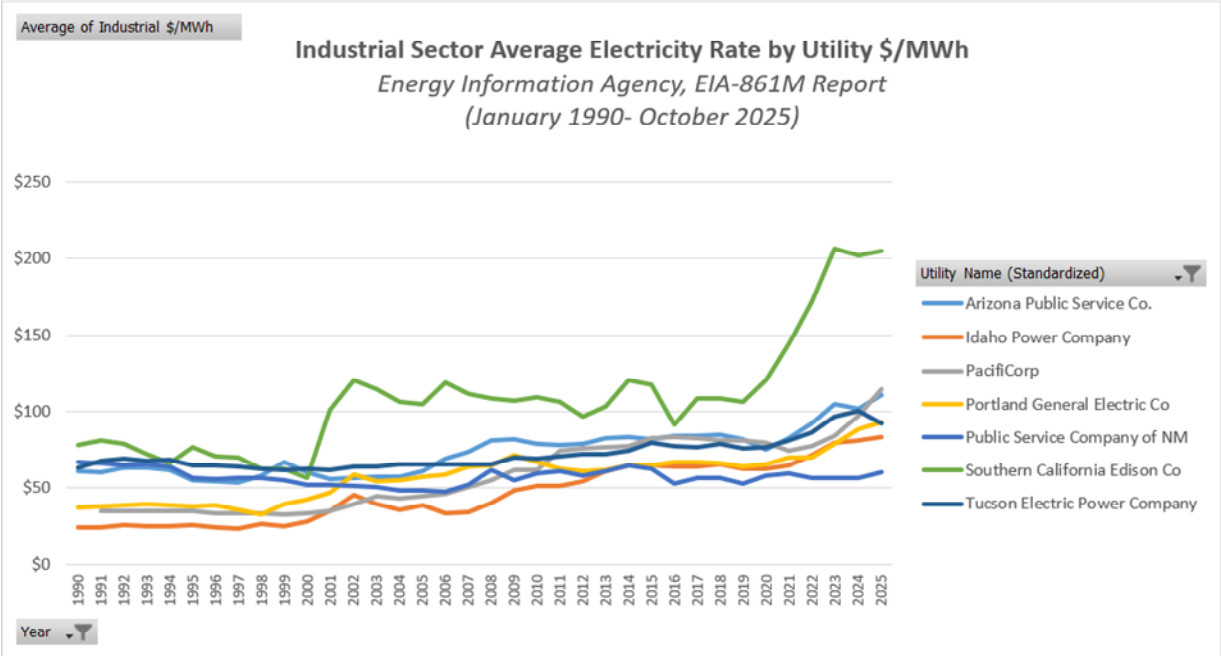

Figure 2: Comparison of SCE industrial rates to out-of-state utility rates.[6]

3. Q: Why is the Large Power Rate critical to PSG's proposed Mojave Micro Mill?

A: The price of electricity will be one of the most critical cost factors that will affect PSG's ability to manage energy costs and to sell a cost-competitive end product. The Large Power Rate would allow the Mojave Micro Mill to optimize its energy usage by responding to continuous price signals based on marginal costs, day-ahead grid condition forecasts, and the California Independent System Operator's ("CAISO") day-ahead market price. The Large Power Rate also includes multiple price curve options to ensure PSG and other customers can manage price volatility aligned with risk appetite. Through careful operations planning and management, use of innovative clean energy technologies, and tailoring of the mill's energy usage, PSG will be able to best achieve the competitive electricity costs necessary to create cost-competitive products.

[6] Based on Industrial Sector Average Electricity Rate by Utility, Energy Information Agency, EIA-861M Report from January 1990 – October 2025.

4. Q: What are the important elements of the Large Power Rate to the Mojave Micro Mill?

A: Multiple important elements of the Large Power Rate will provide operational planning certainty for the Mojave Micro Mill and allow PSG to optimize its electric load.

First, the Large Power Rate affords PSG adequate rate structure certainty. For example, the 10-year contract term with the option to extend provides PSG with critical investment certainty to plan and optimize its operational flexibility and on-site clean energy and storage resources. The 10-year contract term also provides certainty to SCE that customers will not jump to conventional rates in response to price volatility.

Second, dynamic prices set in the day-ahead timeframe allow PSG adequate short-term operational planning.

Third, PSG will have important flexibility to tailor its participation according to its needs and individual risk appetite. For example, PSG can set its subscription level to meet its evolving operational and risk requirements, with annual election by Time-of-Use Base Period Usage and without restrictive minimums/maximums. PSG and other customers may also elect amongst three options for the shape of their generation capacity curve to meet their ability to manage risk. These elements are critical for successful implementation of the Large Power Rate for customers with differing flexibility and approach to risk management.

Fourth, PSG is incentivized to use clean energy and storage, maximize efficiency especially during periods of high marginal cost and marginal emissions, and contribute to overall grid stability. Importantly, PSG would have the ability to respond to voluntary price signals in this Large Power Rate while continuing to provide resource adequacy through mandatory Demand Response such as the Base Interruptible Program ("BIP").

Finally, the Large Power Rate incorporates most cost components, including time-related transmission and distribution costs with price curves sufficiently high to encourage load reductions during times of grid scarcity and sufficiently low during high renewable production times to allow competitive operations.

5. Q: How does the Large Power Rate differ from SCE's proposed marginal cost-based dynamic pricing rates?

A: The Large Power Rate differs from SCE's Proposed LMS Rates in that it is tailored to the operational and risk management needs of large customers, is capacity-limited, and is a contract-based alternative to default time-of-use rates. The Large Power Rate's contract structure allows SCE and customers to jointly define subscription levels and price curves based on historical usage, expected operations, load flexibility, and risk tolerance, providing tailored management of extreme price exposure.[7]

In contrast, the Proposed LMS Rates are formula driven, have no participation caps, and cannot offer customer-specific risk profiles.[8] This would leave large power consumers like PSG with less flexibility to efficiently align specific operational processes with price signals and would result in less responsive industrial loads.

IV. THE LARGE POWER RATE IS JUST AND REASONABLE

1. Q: How does the Large Power Rate meet the requirements of Public Utilities Code Section 451?

A: Public Utilities Code Section 451 mandates that "[a]ll charges demanded or received . . . shall be just and reasonable" sufficient to recover reasonable costs, non-

[7] *See* Ex. SCE-04, Exhibit 4 – Southern California Edison Supplemental Testimony Pursuant to Decision 25-08-049 at 2-3 (Oct. 28, 2025) ("Ex. SCE-04")
[8] *See* Ex. SCE-04 at 3-5.

discriminatory, and reflective of sound rate design and public policy."[9] The Large Power Rate meets these mandates.

First, the Large Power Rate reasonably aligns prices with costs by exposing marginal load above subscription levels to day-ahead hourly prices. These prices are based on CAISO Day Ahead prices and hourly marginal costs based on applicable class revenue requirements. Meanwhile, customers are charged for their subscription load based on established otherwise applicable rate structures. The Large Power Rate preserves the current method of collecting non-bypassable and departing load charges. Thus, the Large Power Rate recovers reasonable costs by maintaining the same aggregate revenue requirement at the class level, reflects public policy associated costs, and exposes participating customers to more accurate and granular price signals for rate design purposes.

Second, the Large Power Rate is voluntary and applies to a defined customer class with rational eligibility criteria related to load characteristics. No similarly situated customer will be denied access. This customer class is sophisticated about their energy usage and is more likely to have—or obtain—the technical capabilities to carefully match their operations and electricity demand to day-ahead price signals.

Third, the Large Power Rate promotes Commission policy objectives including demand flexibility, grid reliability, grid stability, and incentivizing clean energy and storage. Customers face price signals that reflect real system conditions which encourage load shifting, optimization of clean behind-the-meter resources, and reduced consumption during times of high grid stress, which improves the efficient and optimal use of the grid. Customers utilizing the Large

[9] *See* Pub. Util. Code §§ 451 and 453; *see also* D.18-07-025 at 4-5; D.15-07-001 at 86-87.

Power Rate should contribute to shaping load patterns before the grid reaches a critical state and help avoid emergency events.

Finally, the Large Power Rate will also directly promote Commission and State goals to support and retain trade-exposed industries to minimize emissions leakage and promote jobs and economic opportunities.

2. Q: Does the Large Power Rate build on the guidance provided in Section 4 and 5 of Decision 25-08-049?

A: Yes. The Large Power Rate's rate design components build on Decision ("D.") 25-08-049 guidance on marginal and non-marginal costs in Demand Flexibility ("DF") rate proposals and export rates and compensation. D.25-08-049 requires large investor-owned utilities ("IOUs") who elect to include export compensation in a DF rate proposal to use asymmetric pricing based on unscaled marginal costs, while import rates include a scalar or a time-differentiated Revenue Neutral Adder to recover the scaled portion of the authorized revenue requirement.[10] Accordingly, the Large Power Rate uses CAISO day-ahead marginal energy prices, preserves non-marginal cost recovery, avoids cost-shifting, and applies asymmetric export compensation. The Large Power Rate then builds on this guidance by allowing important flexibility in the design of a specialized contract rate. The Commission should prioritize such flexibility to meet the Commission and State objectives that we discussed earlier.

[10] *See* D.25-08-049 at 95.

V. ALLOWING THOSE OPTING FOR THE LARGE POWER RATE TO ALSO PARTICIPATE IN THE BASE INTERRUPTIBLE PROGRAM IS IN THE PUBLIC INTEREST

1. Q: Should the Commission permit "dual participation" for those customers utilizing the Large Power Rate with the Base Interruptible Program ("BIP")?

A: Yes, doing so is in the public interest. BIP is a retail supply-side demand response program that complements a customer's existing rate schedule. Participants agree to reduce their electricity usage when the CAISO or utility declares a curtailment event due to grid system emergencies. BIP curtailment events are short notice, emergency events and mandatory to program participants. Accordingly, the Commission will want the very customers willing and able to elect the Large Power Rate to also participate in BIP given the customers' energy profiles and capabilities. Dynamic rates promote numerous state policy goals and grid efficiencies; however they are inadequate for resource adequacy given their voluntary nature. Customers may or may not respond to a price signal on any given day. Whereas resource adequacy requires mandatory compliance to ensure grid reliability and requires forward looking commitments to meet compliance obligations in the planning horizon. The Large Power Rate appropriately adjusts the subscription level to ensure customers are only credited for BIP performance during overlapping events. The Large Power Rate will complement the BIP by sending dynamic price signals outside of system emergency conditions and encouraging enrolled customers to voluntarily remain flexible to adjust demand and consumption behavior across all hours of the year.

2. Q: How would dual participation work with respect to PSG's proposed Mojave Micro Mill?

A: Certain rebar products require higher temperatures or longer periods to produce than others. It is also possible to calibrate production processes by melting metals at slightly lower power levels over a slightly longer period of time. The Large Power Rate will allow

the Mojave Micro Mill to schedule production and calibrate its operations according to day-ahead dynamic price signals. This flexibility and responsiveness will allow careful management of energy costs, keeping the cost of end-products market competitive. In doing so, PSG's Mojave Micro Mill will help improve the grid's net load ramp requirements and contribute to shaping load patterns even *before* the grid reaches a critical state. In comparison, participation in the BIP program would require the Mojave Micro Mill to halt operations altogether upon short notice in the event of a true grid emergency. These events are triggered in real time and are typically not anticipated day-ahead. BIP events include mandatory performance subject to penalties. Thus, the Large Power Rate and the BIP create different triggers to obtain different and complementary types of responses from the Mojave Micro Mill.

VI. CONCLUSION

1. Q: Does this conclude your testimony?

A: Yes, it does.

APPENDIX A: QUALIFICATIONS OF WITNESSES

QUALIFICATIONS AND PREPARED TESTIMONY OF MARK OLSON

1. Q: Please state your name and business address.

A: My name is Mark Olson. My business address is Pacific Steel Group, 4805 Murphy Canyon Rd, San Diego, CA 92123.

2. Q: By whom are you employed and in what capacity?

A: I am a Vice President of Mill Operations at Pacific Steel Group.

3. Q: Briefly state your educational background and experience.

A: I hold an MBA from Purdue University Calumet, along with a Bachelor of Science and an Associate of Science in Organizational Leadership and Civil Engineering Technology from Purdue University Northwest. My education has provided me with a strong foundation in business strategy, leadership, and technical expertise, all of which have been instrumental in my career in the steel mill industry.

My career began at Bethlehem Steel Corporation, where I gained valuable experience in union relations, contract services, and manufacturing operations. Previously, I held senior leadership roles at Gerdau, where I drove significant improvements in productivity, safety, and profitability across multiple facilities. Currently, I serve as Vice President of Mill Operations at Pacific Steel Group, where I am leading the design, permitting, and construction of a state-of-the-art hybrid micro steel mill in California.

With over 30 years of progressive leadership experience, I have held key roles in both integrated and mini-mill steel manufacturing. I have successfully led large-scale operations, including managing up to 10 steel plants across North America with $4 billion in revenue and 4.8 million tons of annual production. My expertise spans P&L management, operational turnarounds, regulatory compliance, and strategic planning.

4. Q: What is the purpose of your testimony?

A: I am jointly sponsoring this testimony with Sam Harper.

5. Q: Does this conclude your testimony?

A: Yes.

QUALIFICATIONS AND PREPARED TESTIMONY OF SAM HARPER

1. Q: Please state your name and business address.

A: My name is Sam Harper. My business address is Harper Advisory LLC, 9002 Six Pines Drive, Shenandoah, TX 77380.

2. Q: By whom are you employed and in what capacity?

A: I am a consultant in the field of energy markets and policy. I am employed by Harper Advisory LLC.

3. Q: Briefly state your educational background and experience.

A: I have extensive experience in energy procurement, utility regulation, ISO/RTO governance, renewable energy development, and demand response. I have direct experience with commercial energy arrangements, demand response, and the stakeholder processes in PJM, MISO, ERCOT, CAISO, IESO, CENACE, and various unorganized markets. In my current role as a consultant, I advise organizations that engage across the energy supply chain, including large energy consumers for whom energy is a significant percentage of their cost of production.

Prior to consulting, I was the Director of Energy of North American operations for Gerdau, a major steel producer with significant energy requirements and active demand response participation. From 2013-2022, I held a variety of positions for Gerdau, which included Regional Energy Manager and Assistant Vice President of Operations for Gerdau's subsidiary load serving entity. My responsibilities included demand response operations, RTO/ISO stakeholder process, utility regulatory intervention, commercial energy contract negotiations, commodity risk management, and renewable energy development.

I was elected each year from 2016 through 2021 to the Board of Directors of the Electric Reliability Council of Texas ("ERCOT"). I served on the Human Resources and

Governance Committee throughout my tenure, and in 2021 was elected Vice-Chair. I served during the Storm Uri reliability crisis in February 2021 and its aftermath.

I served on the Advisory Board for the Renewable Development Fund of Minnesota from 2017-2020, ensuring renewable energy grants were awarded and executed prudently and consistent with state policy goals.

From 2008-2013, I was employed by ArcelorMittal, a global steel producer, ending as the Sourcing Manager of Electricity for US Operations. During that time, I created and managed a load serving entity and curtailment service provider in the PJM territory.

I earned a Bachelor of Science degree in Business Administration from the University of Illinois at Urbana-Champaign in 2008, graduating with Honors.

4. Q: What is the purpose of your testimony?

A: I am jointly sponsoring this testimony with Mark Olson.

5. Q: Does this conclude your testimony?

A: Yes.