Before the Oregon House Committee on Climate, Energy, and Environment

Testimony of Jeremy Fisher, Sierra Club on House Bill 3546 March 6, 2025

Good morning Chair Lively and Members of the Committee, thank you for having me this morning. My name is Jeremy Fisher, and I am the Principal Advisor for Climate and Energy at Sierra Club, the nation's largest grassroots environmental organization with 55,000 members and supporters in Oregon. Sierra Club regularly intervenes in public utility dockets throughout the United States to protect customers and public health.

Today I'm here in support of House Bill 3546 which provides regulators a critical set of tools.

I'm here to talk about the explosive growth that we've seen in data centers nationally, and how that growth is impacting electricity systems and residential consumers to provide some context for the value of a large load tariff.

Over the last two years, Sierra Club has been closely tracking utilities that introduce large new loads, like data centers, and the impact that they are having on both customers and emissions. Today, we're tracking 23 states that are on their way to having one gigawatt or more of data centers only by 2030, and Oregon's estimated 4 gigawatts by 2030 is no exception to this startling growth.

Today's data centers are an entirely new class of customer, building at scales unimaginable just a few years ago. Between 2000 and 2020, just sixteen zip codes across the US had built more than 150 MW of data center in any given year. But in the last five years, we've seen nearly 50 zip codes with more than 150 MW of growth per year, and that number is set to climb again in the next five years. The individual clusters of data centers that are seeking to move into utility territories are climbing into gigawatt territories, becoming sizable fractions of a utility's load. As an outcome, utilities and their incumbent customers are increasingly exposed to the needs of singular, and highly concentrated, customers, a pattern which departs greatly from traditional load growth.

We are observing and modeling several impactful outcomes from this projected growth.

First, when load growth outpaces our ability to add new generation, the cost of energy increases for all customers, as the system increasingly turns to existing generators with higher marginal costs of operation. In much of the US, that higher cost generation also bears higher emissions. Sierra Club conducted a rigorous assessment of what data center growth in Virginia, Ohio, and Illinois meant for PJM, the Regional Transmission Operator for much of the eastern seaboard out to Chicago. Our modelers found that the need for energy rose rapidly with an influx of new data centers, increasing overall energy system costs by 30%, and driving up residential bills by 10% over the entire 13 state region. Adding new generation to a system does not necessarily mitigate costs for other customers if those customers are required to pay for new generation that serves the new load. Only tariffs that fairly allocate incremental costs to the large new loads provide protection for residential ratepayers.

Second, high concentrations of new load require large investments in transmission infrastructure, a cost which has historically been socialized across all customer classes. Today, Virginia is grappling with no fewer than nine active dockets seeking to certify new transmission and large substations for data centers, with costs allocated to all customers across the zone, while Illinois and Maryland are grappling with transmission costs for large data center campuses.

Third, a number of jurisdictions are considering proposals to pair new data centers with large gasfired generators, which will have the consequence of increased fuel cost exposure and volatility for all customers, and substantially increased emissions.

Finally, the industry – and market – are unclear about the trajectory of data center growth, except for the enormous injections of thus far largely speculative capital. Our assessments show that nearly 25% of all data center load growth is being proposed by companies with few if any substantial data centers under their belt, and we continue to see large land purchases by developers without technology company customers. Indeed, the largest cohort of data center companies today are co-location wholesalers, like Digital Realty, QTS, and Stack Infrastructure. It is unclear just how many of the proposed data centers will actually transpire, or remain profitable enough to pay for the infrastructure that they demand. Commissions across the US are increasingly worried about creating new stranded assets, or generation assets without customers.

Several states are already leading in proposals to insulate customers from system costs imposed by new large loads and data centers, including tariffs that assign new infrastructure costs to new large load customers, require minimum term contracts, minimum demand charges, and financial assurances or bonds. And states like Nevada are in the process of creating novel tariff structures that will allow technology companies to invest in new, local, clean energy and incentivize onsite storage to reduce system strain and fuel cost exposure.

I support House Bill 3546 which ensures that Oregon's regulators have the tools that they require to structure large load tariffs, protect incumbent and low-income customers, and protect the state's energy goals. These are critical tools that create critical certainty and stability for both new entrants, like data centers, and Oregon's existing electricity ratepayers.

Thank you for your attention to this matter.