Testimony to the House Committee on Climate, Energy, and Environment
Support for HB 4080 – Balcony (Plug-in) Solar

February 5, 2026

Chair Lively, Vice-chairs Gamba and Levy, and members of the committee,

My name is Dr. Pat DeLaquil. I am an energy system modeler and climate policy analyst, and I am submitting these comments on behalf of MCAT (Mobilizing Climate Action Together), a community of volunteers working on advancing a healthy climate and a green economy for future generations.

I'm here to testify in support of HB 4080 because balcony solar is one element of the emerging transition towards the decentralization of our electricity system - similar to the decentralization transitions that swept the telecommunication sector and allowed the birth of the internet. Balcony solar is a small, but important piece of how we can enable the transition our electricity grid into a smart, safe and distributed network that gets more use out of our existing infrastructure, employs low cost replicable, consumer-based systems to manage supply and demand, and minimizes systems peaks to improve both resiliency and reliability. Millions of consumer-based products like plug-in solar panels have already been safely installed in Germany, where they are cheap and easy to install and provide low-cost electricity that offsets a portion of the household loads.

HB 4080 starts a process in Oregon that will establishes a regulatory process for certifying plug-in solar appliances in Oregon. This includes UL certification, IEEE technical requirements, and rulemaking by the Oregon Building Codes Division. The goal is to enable a low-cost option that helps renters and homeowners to make a small reduction in the consumption of grid electricity.

The reason we support HB 4080 is because **our existing central-station utility model is at a breaking point**. Its size is driven by peak loads, which are minimally managed. Much has been discussed regarding the difficulties of meeting new load growth from data centers and electrification of transportation and buildings. Rather than follow the investment heavy and delay prone process that traditional thinking is taking us, we believe we should shift our near-term focus to making greater use of the existing electric grid infrastructure that we already have in place. The current utilization is only about 40%, which means that we currently only use the system full capacity during the hottest days in the summer. For much of the past two decades we flattened electric capacity needs through end-use device efficiency. Now we can we can do something similar by tapping into the under-utilized capacity in our distribution network.

Once enabled in Oregon, these plug-in solar devices can help meet rising energy demands, and will help lower the cost of rooftop solar systems and residential batteries. Both of these technologies are key components of Virtual Power Plants, which are a coordinated network of distributed energy resources that collectively function to balance energy supply and demand by providing a coordinated way to shift large amounts of power out of peak demand periods and can be deployed during emergencies for local grid resilience, and are also the subject of legislation this session.

HB 4080 represents the start on the path to transitioning our electricity network that will likely take 20 or more years to play out completely. Compared to the traditional path that many are criticizing as too costly and risky, we believe this bill represents a more viable path to **strengthening Oregon's energy grid while controlling and reducing electricity costs for all Oregonians**.

We urge your support.

Sincerely,

Dr. Pat DeLaquil
on behalf of MCAT Steering Committee