WASEIA
Washington Solar Energy Industries Association

August 12, 2021

Krista Braaksma
Codes Specialist
State Building Code Council
Washington State Department of Enterprise Services

Dear Ms. Braaksma:

WASEIA would like to respond to the July 30 comments from the Washington Public Utilities District Association (WPUDA) regarding the Renewable Energy Commercial Code Proposal (Log Number 21-GP1-78).

WAPUDA's economic analysis unfortunately exaggerates the impact net metering statute would play on grid-tied solar installations under the proposal's changes to the code. Based on U.S. Department of Energy figures, the present day average electrical consumption of a commercial building is 22.5 kWh/sq ft. The table below shows the load offset for typical commercial buildings under the Proposal's amendments. These solar installations would simply replace a portion of the building's expected electrical load and the electricity would be consumed onsite. Very little would be returned to the grid and therefore the retail rate is the correct valuation for the energy as documented in the Proposal.

Prototype	Floor Area (Sq Ft)	kWh Usage/Demand per DOE	kWh Generation under proposal	Percentage of Load Offset
Large Office	498,000	11,205,000	273,900	2
Medium Office	53,600	1,206,000	29,480	2
Small Office	5,500	123,750	3,025	2
Standalone Retail	24,700	568,100	13,585	2
Stripmall Retail	22,500	517,500	12,375	2
Primary School	73,960	1,109,400	40,678	4
Secondary School	210,900	3,163,500	115,995	4
Warehouse	49,495	445,455	27,222	6

Additionally, the $0.09/kWh energy price disputed by WAPUDA is more likely too conservative than too high. The 2021 Washington State Energy Strategy projects the state's overall electrical load will double by 2045 because of aggressive efforts to electrify transportation, buildings and the industrial sector. While this further proves my above point that the electricity produced by the amendment's provisions will continue to be consumed onsite, it also undoubtedly puts an upward pressure on electricity rates statewide, across all building prototypes.

Finally, we would question WAPUDA's assumptions on the useful lifetime of solar installations. Solar PV modules typically have warranty coverage that guarantees a minimum of 85 percent output capacity at age 25, suggesting a useful life of 45-50 years. Extended warranties for inverters and racking are typically 20-25 year, translating to a useful lifespan of 25-35 years.

Thank you for your consideration,

Markus Virta, President
Washington Solar Energy Industries Association