

From: [Steven Ghan](#)
To: [EFSEC mi Comments](#)
Subject: Wautoma Solar Energy Project
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External Email

Honorable Chair and Council,

I wish to submit this written testimony on the Wautoma Solar Energy Project adjudication public hearing on October 3, 2024.

I am a climate scientist, retired from a productive career as a global climate modeler. My work found a 70% reduction in mountain snowpack in the western U.S. for a carbon emissions scenario similar to the path the world is on today. Since 70% of the riverflow in the western U.S. is from snowmelt, a 70% reduction in snowpack means a 50% reduction in summertime riverflow. Such a reduction would have enormous consequences for water resources in the Yakima watershed.

Adaptation can help, but clearly more must be done to reduce global carbon emissions. The state of Washington has passed both initiative and legislation to do its part, and federal legislation has also provided resources.

Clearly, electrification of transportation and buildings will play an important role in reducing emissions. That means more carbon-free electricity is required. The hydropower potential for the Pacific Northwest has already been largely tapped. Nuclear power could be increased, but the cost of that additional power is uncertain. Wind power has become economically competitive in some places, but is less reliable and faces objections because of its visible and bird impacts. Solar power has also become competitive, thanks to generous federal subsidies; while relatively predictable, its diurnal cycle requires substantial storage to meet nocturnal demand.

The proposed Wautoma Solar Energy Project addresses this need. The proposed project is suitable for solar energy production and compatible with agricultural uses in the area. It will provide substantial revenue to Benton County. The electricity production is also substantial, 400-470 MW. It includes storage sufficient by battery (200 MW for four hours) for at two more hours of comparable production at night. Given the much higher cost of electricity from batteries, providing sufficient storage for comparable production all through the night would likely render it more expensive than existing electrical rates. Such a project would therefore be most useful for meeting peak daytime demand on hot days. Charging electric vehicles and heating buildings and homes peaks at night, so the project would be less valuable for meeting those demands. Clearly there is a need for cheaper effective ways to store energy and for

competitive carbon-free electricity production at night.

While solar energy is not the perfect energy solution to climate change, all energy sources involve impacts. Given the devastating impacts of climate change on agriculture in Benton County, I consider the solar project preferable to continuing to rely on fossil fuels for transportation and heating. Benton County comprehensive plans, codes, regulations and standards that prohibit such solar projects should be preempted.

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Steve Ghan
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