



October 20, 2022

Anthony Doan
Council Chair
Washington State Building Code Council
1500 Jefferson Street SO
PO Box 41449
Olympia WA 98504

Regarding: October 4th WAPUDA Petition for Reconsideration

Dear Council Chair Doan,

The Washington Solar Energy Industries Association (WASEIA) represents 6,000 employees statewide installing and maintaining over 315 MW of Distributed Energy Resources statewide. Our representatives on the Technical Advisory Group, Gavin Tenold and Jon Lange, tracked proposal 21-GP1-078 from its draft form, during technical review by the TAG, in breakout sessions between TAG members and before Council. On June 16, 2022 we submitted comments on WAPUDA's first petition¹. We have reviewed Mr. Garcia's new petition, and would like to add to those earlier comments.

Mr. Garcia begins by requesting that the Council provide evidence of its consideration of information he provided over the course of the process from parties including NREL, NWPCC, BPA, WA Department of Commerce and PNNL. Having been involved in discussions concerning this Proposal 21-GP1-087 with TAG members, the MVE Committee, the proponents, Mr. Matthew Tyler who performed the cost-benefit analysis² for Council and Council itself; It is our belief that Council has in fact considered each point Mr. Garcia has made through this Code Revision process, often by the use of the same sources he cites.

We will begin with National Renewable Energy Laboratories (NREL). Mr. Garcia contends that the Council has ignored data he brought forward from the NREL. In paragraph 5 sentence 2 of his memo, Mr. Tyler states: "The simulations rely on the PVwatts generator model **developed by NREL** and built into EnergyPlus" (emphasis mine). PVWatts is indeed the work of the NREL, and it is used to estimate energy production and costs of grid-connected solar arrays worldwide. Mr. Garcia expresses frustration that the simulations did not account for the degradation of the solar panels year-to-year. As pointed out in our previous comments on the earlier WAPUDA petition, this is accounted for by the model's high system losses of 14%. Mr. Tyler concurs on this matter in his Oct. 18, 2022 response to Mr. Garcia's second petition³. Considering the above, it is reasonable to conclude that Council has

¹ https://sbcc.wa.gov/sites/default/files/2022-06/WASEIA%20WAPUDA%20response_061622.pdf

² <https://sbcc.wa.gov/sites/default/files/2022-03/WA%20renewables%20cost-effectiveness%20memo.pdf>

³ https://sbcc.wa.gov/sites/default/files/2022-10/PNNL%20Responce_10-18-22.pdf

satisfied its obligation to consider Mr. Garcia's concerns coming from information gathered from NREL regarding solar panel degradation.

The second party from where Mr. Garcia's petition rests its case is the Northwest Power and Conservation Council (NWPCC). Mr. Garcia, in his first petition⁴, argues against the use of the retail rate in the cost benefit analysis' valuation of the electricity offset by the solar array, and for using wholesale rates as forecasted by NWPCC. As documented in our first response, this has been the subject of much discussion by the TAG, a breakout group of the TAG, the MVE Committee and Council. Mr. Garcia is in a distinct and small minority using flawed logic in this contention. If WAPUDA is concerned about building owners voluntarily expanding the systems they install on new commercial rooftops, the State Building Code Council is not the venue to bring forth such an argument. Proposal 21-GP1-078 is an energy efficiency proposal, and is effectively the same as all other proposals. Considering the above, it is reasonable to conclude that Council has satisfied its obligation to consider Mr. Garcia's concerns coming from information gathered from NWPCC regarding wholesale rates for power.

The third party Mr. Garcia's petition cites is the Bonneville Power Administration (BPA). After finding WAPUDA's opinion on rates for solar energy to be that of a minority on the TAG, Mr. Garcia brought to Council concerns about the BPA's transmission interconnection agreements for solar systems larger than 200kW⁵. Fees for such systems are a marginal cost at approximately \$.91 per kW/Month. For a 300kW system, for example, this totals \$273/month in balancing fees for systems offsetting approximately \$2,100/month. Given that the percentage of buildings with a square footage large enough to require such a system is very small, and these size buildings would be constructed near large population centers off BPA's grid, omitting such an insignificant fee from a cost benefit analysis still places the simulations within an acceptable degree of accuracy. The balance of Mr. Garcia's concerns surrounding the BPA are in fact from a utility perspective and have nothing to do with the Energy Code. To reiterate: If WAPUDA is concerned about building owners voluntarily expanding the systems they would be required to install on new commercial rooftops under this proposal 21-GP1-078, the State Building Code Council is not the venue to bring forth such an argument. Considering the above, it is reasonable to conclude that Council has satisfied its obligation to consider Mr. Garcia's concerns coming from information he gathered from BPA.

The fourth party Mr. Garcia's petition cites is the Washington State Department of Commerce. Mr. Garcia first brought information he gathered from Commerce to the TAG contending that statute mandated solar net-metering arrangements caps would somehow prevent building Owners from complying with proposal 21-GP1-078. This was discussed the afternoon of August 24, 2021 in a lively TAG breakout session consisting of 7 members including the TAG Chair, Mr. Garcia, WASEIA's Business Growth & Development Coordinator, the proponents and myself. Mr. Garcia again found himself in a distinct and small minority that believes this energy efficiency proposal, producing in some cases as little as 2% of a prototype's load, is somehow affected by net-metering caps. In this second petition, Mr. Garcia is also citing economic data from the Department of Commerce titled *Financial Impact of Fuel Conversion on Consumer Owned Utilities and Customers in WA*. The State Building Code Council does not govern, nor regulate Consumer Owned Utilities. Mr. Garcia is attempting to conflate the Draft Energy Code with building Owners who may voluntarily expand beyond this energy efficiency proposal and become power producers themselves. I will repeat: The State Building Code Council is not the

⁴ <https://sbcc.wa.gov/sites/default/files/2022-06/Petition%20for%20Reconsideration%20with%20Attachment.pdf>

⁵ <https://mail.google.com/mail/u/0/?tab=rm&ogbl#inbox/FMfcgzGqRGRqjtRtKddlWwXFMjVCntTp?projector=1&messagePartId=0.1>

venue to bring forth such an argument. Considering the above, it is reasonable to conclude that Council has satisfied its obligation to consider Mr. Garcia's concerns from information he gathered from the Washington State Department of Commerce.

The fifth party Mr. Garcia petitions the council to consider is the Pacific Northwest National Laboratory (PNNL). Mr. Garcia must be confused. He seems to indicate that it was WPUA that brought PNNL into the conversation regarding proposal 21-GP1-078, when the record shows that it was Council that did so by requesting the PNNL cost benefit analysis performed by Mr. Matthew Tyler. I will quote Mr. Garcia directly:

"We see nothing in the rulemaking file to indicate that the SBCC considered the information included in WPUA's comments from organizations like the **PNNL**, NREL, NWPC, BPA, WA Department of Commerce, etc. regarding this code provision" (emphasis mine).

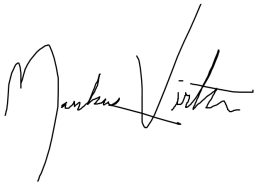
"We respectfully request that the SBCC replace this portion of its current Concise Explanatory Statement and actually justify why the SBCC believes that the reports, data, and other information that we identified from **PNNL**, NREL, NWPC, BPA, WA Department of Commerce, etc. are incorrect or irrelevant" (emphasis mine).

Considering the above, **it is reasonable to conclude** that Council has satisfied its obligation to consider any of Mr. Garcia's concerns that stem from information he gathered from the subject matter experts at PNNL.

It is the opinion of WASEIA, and our allies, that Council has fully and faithfully satisfied its obligations under the Administrative Procedures Act, and that Mr. Garcia's request that Council "prepare a cost-benefit analysis of sufficient quality so as to persuade a reasonable person that its rulemaking decision is justified" should be dismissed for cause. Council's decision on this proposal was indeed sound and justified.

We do however, recommend that the concise explanatory statement be updated to reflect the record I have worked to document for you regarding the rulemaking behind this proposal 21-GP1-078.

Respectfully,

A handwritten signature in black ink, appearing to read "Markus Virta". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

Markus Virta
President of the Board
Washington Solar Energy Industries Association

Cc: Bill Will, WASEIA
WASEIA Policy Committee
Stoyan Bumbalov, SBCC