AMERICAN-MADE SOLAR FORECASTING PRIZE INFORMATIONAL WEBINAR Q&A

11/12/21

Below are the answers to the questions received during the informational webinar held on 11/8/21. A recording of the presentation and related slide deck can be <u>found on HeroX.</u>

Many of the below answers refer to the official rules document.

Eligibility:

Question: Can foreign students can also apply? Question: What about international students inside the US? Are they eligible? Question: Are international competitors allowed?

Answer: The official rules state that competitors must be "An individual prize competitor (who is not competing as a member of a group) must be a U.S. citizen or a permanent resident." (pg 8 of the official rules)

Question: Will you clarify more about the eligibility? Do employees from DOE labs eligible to participate?

Answer: Per the rules "Researchers at Federal Facilities may provide submission as registered competitors in this prize and can receive honorable mention but are not eligible to receive any cash prizes." (pg. 8 of the official rules)

Question: Can one person participate in more than one team?

Answer: Yes, an individual competitor may compete on more than one team, however, please keep in mind "Individuals affiliated with the same organization may form multiple competitor teams. However, the teams and their corresponding submissions must be substantially different from each other" (pg. 8 of the official rules)

SFA Forecast Submissions:

Question: When does the forecast need to be submitted?

Answer: The SFA evaluation period is January 17 – February 13, 2022. Forecasts will be submitted daily. The rules describe the specifications in detail – see section 5.2.

Question: Is the solar forecast for specific location?

Answer: These will be day-ahead forecasts, for 10 locations in the U.S. The HeroX website, under Resources, contains the list of sites. See the <u>Solar Forecasting Prize Site List.</u>

Question: Could you please explain how CRPS_PEF works?

Answer: There is a description in the Appendices section of the Rules, along with references to relevant publications.

Question: Is it based on observed solar radiation or predicted ones or based on historic data? Answer: It is based on historical data (observations).

Question: CRPS index is not clear. Can you please give an example?

Answer: The rules, in the Appendices, contain references for the CRPS and the Persistence Ensemble Forecast. The Solar Forecast Arbiter also has definitions and documentations of the metrics.

Question: How is the day-ahead solar forecast used?

Answer: Day-ahead solar forecasts are used to estimate generation from solar PV systems during the following day and calculate any additional energy resources needed to meet the expected electricity demand.

Question: What is the time-step (time resolution) of the forecast day ahead data? Answer: The Prize requests day-ahead forecasts of hourly resolution.

Question: I think this could be good collaborative opportunity. Why such limited locations? Answer: The locations were chosen for climate diversity. We believe that 10 locations provide a good compromise between overhead associated with the number of locations and the desired diversity of climatic conditions.

Question: Do we need to upload forecast results only or code as well? Answer: The Arbiter accepts ONLY forecast results.

Question: About the daily submission deadline. Since the 10 location spreads over the US, does it mean one can submit forecasts at different locations at different UTC times of the day? Answer: Yes, this is allowable.

Question: Is hourly average, maximum or minimum value?

Answer: For each hour, you will need to upload 11 values, one for each decile, starting from 0.

Question: Assuming that the winner will continue t produce results - what is the long-range use for this data?

Answer: The data generated for the Prize will only be used for the evaluation.

Question: What is the next step for the winners?

Answer: There are no specific required follow-on activities for prize winners following the prize, however DOE and the Prize Administration team encourages competitors to continue developing and commercializing their forecasting products.