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U.S. Department of Energy 1000 Independence Ave, S.W. Washington, DC 20585

November 14, 2022

To Whom it May Concern,

Invenergy has carefully reviewed the U.S Department of Energy (DOE) Clean Hydrogen Production Standard (CHPS) Draft Guidance and appreciates the opportunity to provide the below feedback.

Submitted Electronically via: Cleanh2standard@ee.doe.gov

Question 3: Implementation – Part C:

Invenergy supports the use of RECs, PPAs, VPPAs, and other market structures to supply clean electricity for hydrogen production. Regarding certification of the clean power, Invenergy believes annual time of use (TOU) matching will be most effective in ensuring clean energy supply as well as near-term market growth. Furthermore, Invenergy supports limiting electricity generation to the region in which hydrogen is produced. This will ensure that the local grid is greened and that energy markets are not distorted. Further detail is outlined below.

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- 1) Annual Time of Use (TOU) Matching: Invenergy supports annual matching of generation to consumption for electrolyzer operation. Invenergy does not support hourly matching restrictions for electricity procurement, as this would have negative implications on the advancement of green hydrogen development. Currently, there is no mechanism to track and validate TOU power and the implementation of such system would delay market growth since significant resources would be required for its design and implementation. Electrolyzers require high capacity factors to justify capital costs, therefore the restriction of hourly matching would greatly increase the cost of green hydrogen, drastically limiting market adoption. In the long term, if an hourly-based matching restriction was implemented, then the accounting framework should be based on marginal emissions factors of the grid, in agreement with the proposed RMI solution. Annual matching is immediately feasible and would ensure the power being used is renewable or low emission.
- 2) Invenergy is in favor of a regional limitation for RECs and PPAs. This limitation would require power to be produced within the same ISO or balancing authority as the hydrogen project. Additionally, this supports the DOE's goal of advancing carbon free energy generation by upholding REC credibility.

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3) If additionality becomes a requirement, it should not be extended to colocated facilities. Otherwise curtailed energy on an existing system can be used as energy supply for electrolyzers, increasing net utilization of clean energy and supporting the increase of renewable generation resources.

Invenergy welcomes questions on the above feedback for the draft guidance. Please direct communications to Jenny McTague via email at <u>imctague@invenergy.com</u> or by phone at 773-808-2117.

Sincerely,

Jenny McTague Associate, Origination – Emerging Technology Invenergy LLC