



Sierra Energy  
1222 Research Park Dr.  
Davis, CA 95616

The Honorable Douglas O'Donnell  
Acting Commissioner, Internal Revenue Service  
1111 Constitution Ave, NW  
Washington, DC 20224

December 1, 2022

Dear Commissioner O'Donnell:

My name is Mike Hart, and I am the Chairman and CEO of Sierra Energy. Sierra Energy has developed FastOx<sup>®</sup> gasification, a technology that turns waste feedstocks into particulate and tar-free syngas suitable for conversion into high-value end products such as hydrogen, methanol, and ammonia without creating new waste byproducts. Sierra Energy has a fully integrated, commercial-scale demonstration facility at Fort Hunter Liggett in Monterey County, California. The company continues to advance its technology and test new applications for gasification at the Sierra Energy Research Park in Davis, California. I greatly appreciate the opportunity to comment on the definition of Clean Hydrogen.

### **3.01 (1) – Clean Hydrogen**

Sierra Energy believes the definition of “qualified clean hydrogen” should include hydrogen that is contained in a mixed stream, such as syngas mixtures of “qualified clean hydrogen” with CO and CO<sub>2</sub>. This clarification should only apply to “qualified clean hydrogen” in mixed streams with a controlled composition suitable for direct conversion to an end-product without release of CO<sub>2</sub>.

In the case of syngas, Sierra Energy believes that any syngas mixture meeting the definition of “qualified clean hydrogen” should be of a composition that is correctly balanced to allow for full capturing of carbon in the end-product. To ensure full accounting of carbon in lifecycle emission calculations, this clarification can and should be restricted to cases where production and conversion of the mixed stream containing “qualified clean hydrogen” to an end-product occurs in the same facility.

Sierra Energy believe this clarification meets the spirit of the Inflation Reduction Act as it promotes the production of clean hydrogen and its use in end-products such as renewable methanol with reliable accounting for all carbon in the process.

Thank you again for the opportunity to comment on this important provision. I look forward to working with you and your team in the future.

Very Respectfully,

A handwritten signature in black ink, appearing to read "MH", written over a light blue horizontal line.

Mike Hart  
Sierra Energy