Atlas Agro North America Corp
723 The Parkway
Richland, WA 99352

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The Honorable Janet Yellen
Secretary
U.S. Department of the Treasury
Internal Revenue Service
1500 Pennsylvania Ave, NW
Washington DC 20220

Mr. John Podesta
Senior Advisor to the President for Clean Energy Innovation and Implementation
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Dear Secretary Yellen and Senior Advisor Podesta,

Atlas Agro North America Corp ("Atlas Agro") is a leading green nitrogen fertilizer company developing several carbon-free hydrogen, ammonia and nitrogen plants across the US. The company was founded by former executives of chemicals, agriculture and engineering and construction companies with a mission to decarbonize global nitrogen industry – one of the most polluting industries responsible for ~2% of global GHG emissions.

Each of Atlas Agro green nitrogen fertilizer plants would produce ~40ktpa of H2 / 230ktpa of ammonia / 700ktpa of final nitrogen fertilizers and avoid ~1mtpa of GHG compared to best available fossil-based alternatives.

Midwest is one of the priority regions for Atlas Agro for two reasons:

- The region is an agricultural heartland of the United States, with strong demand for nitrogen fertilizers; and
- It has abundant carbon-free nuclear power.

To build green ammonia/nitrogen production at scale, a developer needs access to large amounts of clean hydrogen produced around the clock with clean generation. This makes nuclear power a perfect match for green ammonia / nitrogen production in the Midwest.

Abundant nuclear power combined with IRA Section 45V PTC makes it possible to produce green nitrogen fertilizers for Midwest farmers in a commercially viable way at a competitive price vs. fossil-based alternatives without any additional green premium.

However, based on current 45V guidance released in December 2023, it is practically impossible to get 45V PTC above USD1/kg:

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Grid usage as % of total power consumption	Carbon Intensity (GHG emissions, kgCO2e/kgH2)	Implied 45V PTC (USD/kg H2)
10%	2.9	0.6
5%	1.4	1.0
3%	0.8	1.0

Source: DOE 45V GREET model

Even assuming a prohibitively expensive hypothetical energy mix (97% wind+solar+storage / 3% grid), maximum implied 45V PTC would be USD1/kg H2.

There are 3 main drivers resulting in such low PTC that makes local green nitrogen fertilizer production not competitive with fossil-based alternatives:

1. The incrementality requirement disqualifying zero-emissions nuclear power;
2. The DOE 45V GREET Model that instructs developers to determine lifecycle greenhouse gas emissions based on a pre-defined grid mix (MRO in case of Midwest), that effectively nullifies benefits of firming with carbon-free nuclear power available in the region, as carbon intensity for the firming part of electricity is calculated based on the pre-defined MRO that has much higher carbon intensity compared to nuclear power; and
3. Hourly matching combined with annual LCA carbon intensity determination leading to high carbon intensity even when relying on grid power for less than 10% of hours within a year.

We recommend that the U.S. Department of Treasury consider a mechanism allowing:

- Developers to benefit from local zero-emissions nuclear power; and
- Partial 45V credit i.e. hourly carbon intensity determination rather than a single annual one.

Better alignment of Section 45V with economic and business reality of continues production processes such as nitrogen fertilizers will help provide the certainty that the Midwest can participate in, and lead, the clean hydrogen economy.

We thank you for your consideration of this important matter, and appreciate the opportunity to provide comments.

We are available to discuss this issue at your convenience should you have any questions.

Truly yours,

Dan Holmes
President, Atlas Agro North America Corp.