



53 Brigham Street, Unit #8
Marlborough, MA 01752
617-714-5723

January 9, 2023

Linda Jackson
Forest Supervisor
Payette National Forest
500 North Mission Street
McCall, Idaho 83638

Re: Stibnite Gold Project EIS #50516

Dear Supervisor Jackson:

Ambri Inc. wishes to provide the following comments to Perpetua Resources' Supplemental Draft Environmental Impact Statement for the Stibnite Gold Project in the Payette National Forest. Ambri has entered into a conditional supply agreement with Perpetua Resources for antimony produced at the Stibnite Gold Project for use in Ambri's antimony-based grid-scale battery systems. Ambri has strong interest in a reliable domestic supply of antimony and encourages the Forest Service to approve the Record of Decision in 2023.

Ambri is a Massachusetts headquartered, long-duration grid energy storage (LDES) battery company. Ambri batteries were born in the GroupSadoway Lab at the Massachusetts Institute of Technology (MIT). Ambri's battery chemistry utilizes a molten calcium alloy anode, a solid antimony cathode, and a molten salt electrolyte. Ambri's battery technology provides a superior performing battery in terms of response time, lifespan, energy capacity degradation, and footprint -- all the with lower-cost, widely available materials compared to standard lithium-based batteries.

Ambri has developed a grid-scale long-duration Liquid Metal™ Battery designed for daily cycling with 4-24 hour duration for energy storage applications. Ambri systems are targeted at large scale energy storage projects that move over 10MWh from variable renewable energy sources to peak demand times of each day. By storing excess electricity produced from solar and wind energy during off-peak hours to peak hours, Ambri batteries provide the opportunity for 24/7 renewable energy to utilities, IPPs, and developers looking for consistent, responsive electrical power.

Over the last year, Ambri has made significant strides in its commercialization plan. This includes:

- Successfully commissioned a demonstration system for Microsoft, the largest cloud provider in the world.
- An agreement to deliver 1200 MWh Ambri battery systems to be combined with a 300 MW wind-powered generation site in South Africa.

- An agreement for a demonstration project with Xcel Energy a leading US electric utility is focused on delivering a clean energy future.
- Received certification for UL 1973, the Standard for Batteries for Use in Stationary and Motive Auxiliary Power Applications.
- An agreement for a demonstration project with Reliance Industries, the largest private corporation in India.
- Commissioned a life-cycle assessment (LCA) to calculate the GHG associated with its battery technology. The baseline LCA results project that the life-cycle GHG emissions associated with an NMC 111 lithium-ion battery system are 72% greater than an Ambri battery system.

Ambri currently produces batteries at a prototype manufacturing plant in Marlborough, Massachusetts, which produces approximately 1 MWh of annual capacity. In spring of 2022, Ambri secured a new facility in Milford, Massachusetts, to triple the existing manufacturing footprint. The new 140,000 square foot facility will begin producing in 2023, and it will be at full capacity in 2024. Ambri is also undergoing a site selection process for a high-volume U.S.-based manufacturing facility. The new facility will occupy two million square feet with an annual production capacity of 13.5GWh per year. Ambri intends to select a site in the first quarter of 2023, begin construction in the Q2, and start production in 2025.

As Ambri increases its manufacturing capacity, it will be necessary to increase and diversify the supply of antimony. Ambri strongly prefers using U.S.-sourced antimony for its batteries. Ambri's estimated total volume production capacity schedule will increase from the existing capacity of 1 MWh in 2022, to 3-5 MWh in 2023, 20 MWh in 2024, 400 MWh in 2025, 3 GWh in 2026, and 13.5 GWh in 2032. Once at full production capacity, Ambri will demand 16 percent of the existing global worldwide annual antimony production.

Increasing the supply of antimony is essential to alleviating a supply crunch of antimony and resulting price shocks due to Ambri's ramp-up of production. Currently U.S. production of antimony is solely from recycling -- with no domestic mining at sufficient quantities to satisfy Ambri's demands.

The Stibnite Gold Project deposit contains 148 million pounds of proven reserves of antimony, and the project is the most immediate and commercially viable domestic opportunity to ensure a secure and reliable supply of antimony. The timeline of production of the Stibnite Gold Project currently aligns with Ambri's timeline for production. For these reasons, Ambri encourages the Forest Service to issue the Record of Decision without delays for the Stibnite Gold Project.

Ambri thanks the Forest Service for the opportunity to comment.

With warm wishes,
Adam Briggs
Chief Commercial Officer
Ambri Inc.
abriggs@ambri.com