

Pacific Northwest Hydrogen Hub

Proposed Action

DOE's proposed action is to provide funding to support the development of the Pacific Northwest Hub, as proposed by Pacific Northwest Hydrogen Association (also referred to as the PNWH2 Association). The Pacific Northwest Hub intends to produce clean hydrogen through a variety of hydrogen production technologies, storage, delivery, and end-use applications, all within the Pacific Northwest region. Hydrogen production technologies being considered include various forms of electrolysis, the application of electrical energy to water to generate pure oxygen and hydrogen. Methods of hydrogen storage may include above-ground tanks, tube trailers, and/or storage using "line pack", in which a pipeline holds hydrogen when the pipeline is not in use for transporting hydrogen. Delivery options being considered include pipelines, refueling stations, liquefaction, and trucking.

Specific Pacific Northwest Hub project details and site locations are in development, DOE will evaluate specific projects and site locations in subsequent tiered National Environmental Policy Act (NEPA) reviews.

Hub Description

The Pacific Northwest Hub is proposed to consist of a suite of demonstration projects involving clean hydrogen production, transportation, and end uses located within the Pacific Northwest. The Pacific Northwest Association is the primary funding recipient and lead Pacific Northwest Hub manager. As currently structured, the Hub encompasses approximately 10 projects, including clean hydrogen production facilities that could produce 300-400 metric tons per day of clean hydrogen, hydrogen liquefiers, connective infrastructure including refueling stations and pipelines, and a range of end uses including fuel cell electric trucks, fuel cell electric buses, cargo handling equipment, and stationary fuel cells.

Environmental Impact Statement

DOE will prepare an EIS (DOE/EIS-0571) to evaluate the potential impacts to the human environment associated with funding the Pacific Northwest Hub. The EIS will evaluate the potential impacts associated with the types of hydrogen infrastructure and technologies proposed in the Pacific Northwest Hub, such as impacts from electricity and water usage and rates of emissions, that are inherent to the technologies and infrastructure regardless of where they may be deployed. The EIS will help inform DOE's decision as to whether to carry the Pacific Northwest Hub forward for project-specific funding decisions but will not directly authorize funding for specific Pacific Northwest Hub projects.

If DOE decides to provide funding for the construction and operation of the Pacific Northwest Hub, DOE will analyze the potential site-specific environmental effects of

individual proposed projects and make site-specific funding decisions. In addition to being subject to DOE's NEPA review, with associated public scoping and comment periods as appropriate, individual projects will be required to adhere to the requirements of all applicable Federal, State, and local laws and regulations.