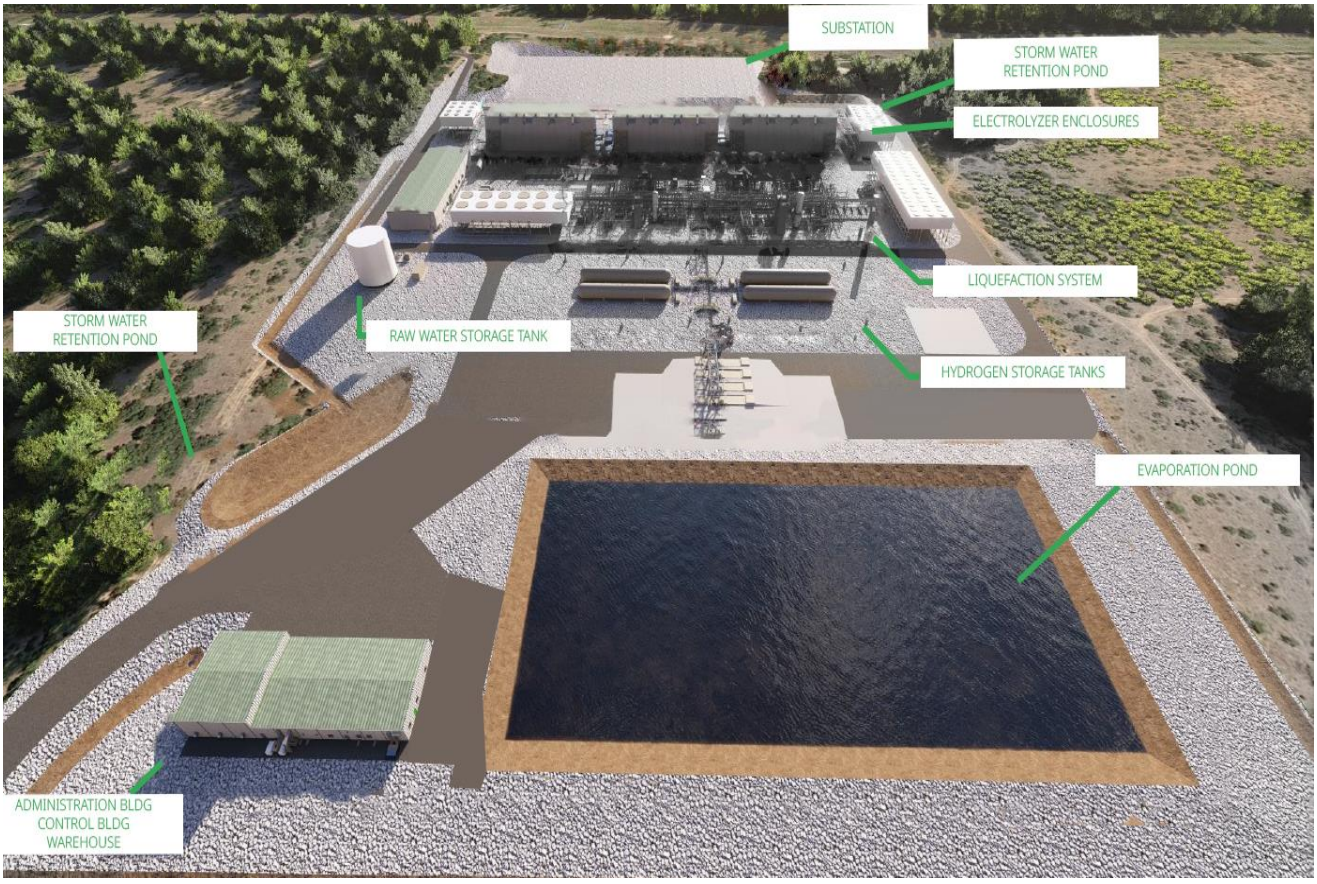

DRAFT Environmental Assessment Limestone Green Hydrogen Production Project

Department of Energy Loan Programs Office – Title XVII Program

December 2024

DOE/EA-2281

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Acronyms and Abbreviations

ACHE	air-cooled heat exchanger
APE	Area of Potential Effect
APLIC	Avian Power Line Interaction Committee
Applicant	Plug Power, Inc.
B&A	Blanton & Associates
BAHX	brazed aluminum heat exchanger
BFD	bird flight diverter
BMPs	best management practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
City	City of Graham
DC	direct current
DI	deionized
DOE	Department of Energy
EA	environmental assessment
EJ	environmental justice
EPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act of 2005
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FM	farm-to-market road
FONSI	Finding of No Significant Impact
Fort Belknap WSC	Fort Belknap Water Supply Corporation
FPPA	Farmland Protection Policy Act
GHG	greenhouse gas
gpm	gallons per minute
H_2	hydrogen
HVAC	heating, ventilation, and air-conditioning
ICP	Integrated Contingency Plan
kV	kilovolt
LPO	Loan Programs Office
MBTA	Migratory Bird Treaty Act
MW	megawatt
N_2	nitrogen
NAAQS	National Ambient Air Quality Standards
NATA	National-Scale Air Toxics Assessment
Nation	Tonawanda Seneca Nation
NEPA	National Environmental Policy Act
NHD	National Hydrography Dataset
NO_2	nitrogen dioxide
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O&M	operations and maintenance
OSHA	Occupational Safety and Health Administration
PBR	Permit by Rule
PEM	polymer electrolyte membrane

Plug Power	Plug Power, Inc.
PM_{10}	particulate matter less than 10 micrometers in diameter
$PM_{2.5}$	particulate matter less than 2.5 micrometers in diameter
PMD	Portfolio Management Division
Project	Limestone Green Hydrogen Production Project
Proposed Action	financial assistance for development of a green hydrogen facility in Young County, Texas
PSM	Process Safety Management
RMP	Risk Management Plan
SPCC	spill prevention, control, and countermeasures
STAMP	Science, Technology, and Advanced Manufacturing Park
SWPPP	Stormwater Pollution Prevention Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
THC	Texas Historical Commission
tpd	tons per day
TPDES	Texas Pollutant Discharge Elimination System
TWDB	Texas Water Development Board
TxDOT	Texas Department of Transportation
UPW	ultra-pure water
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WEST	Western EcoSystems Technology, Inc.
WOTUS	Waters of the United States
WSP	WSP USA, Inc.

1. Purpose and Need

1.1 Introduction

Plug Power, Inc. (Plug Power or the Applicant), is proposing to construct a green hydrogen production facility in Young County, Texas (Limestone Green Hydrogen Production Project or the Project). The facility will produce 45 tons per day (tpd) of green hydrogen from water using renewable energy sources to power next-generation electrolyzer technology combined with liquefaction (i.e., the converting the hydrogen gas into a liquid) and distribution technologies to reduce/avoid greenhouse gas (GHG) emissions, thereby reducing overall emissions of air pollutants and human-caused GHGs.

Plug Power has applied for a loan guarantee for the development of up to six green hydrogen projects (see Section 1.4.1 for additional discussion of the green hydrogen projects) pursuant to the U.S. Department of Energy's (DOE's) Title XVII Clean Energy Financing Program, as authorized by the Energy Policy Act of 2005 (EPAct), as amended. Under Title XVII, the Secretary of Energy is authorized to provide loan guarantees for projects that support clean energy deployment and energy infrastructure reinvestment in the United States.

The Title XVII program is administered by DOE's Loan Programs Office (LPO), which originates, underwrites, and services loans and loan guarantees to eligible applicants for projects that accelerate the commercial deployment of innovative energy technology. LPO has reviewed Plug Power's application and determined that Plug Power is eligible for a potential loan guarantee (10 Code of Federal Regulations [CFR] Parts 609.3 and 609.5).

The decision as to whether to provide a loan guarantee (federal financial assistance) constitutes a major federal action, requiring DOE to conduct an environmental review under the National Environmental Policy Act (NEPA). LPO prepared this environmental assessment in accordance with NEPA (42 United States Code 4321 et seq.), the Council on Environmental Quality (CEQ) NEPA implementing regulations (40 CFR Parts 1500–1508), and the DOE NEPA implementing regulations (10 CFR Part 1021). LPO is using the NEPA process to inform its decision as to whether to issue a loan guarantee to the Applicant in support of the Project.

1.2 Purpose and Need for Agency Action

The purpose and need for DOE's proposed action, issuance of a federal loan guarantee, support DOE's authority under Title XVII of the EPAct to finance projects and facilities in the U.S. that employ new or significantly improved technologies that avoid, reduce, or sequester air pollutants or anthropogenic emissions of GHGs (42 United States Code 16513, as amended).

1.3 Background

Plug Power is a producer of green hydrogen. The company's objective is to construct and operate the Limestone Green Hydrogen Production Project to meet the growing demand for green hydrogen.

Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the city of Graham, along Farm-to-Market Road (FM) 209 (see Figure 1). The Project area consists of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road, and an approximately 13.6-mile-long transmission line. The 40-acre site would also house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant (Figure 1). The facility will produce 45 tpd of green hydrogen from water using renewable energy sources to power next-generation electrolyzer technology combined with

Figure 1: Project Location

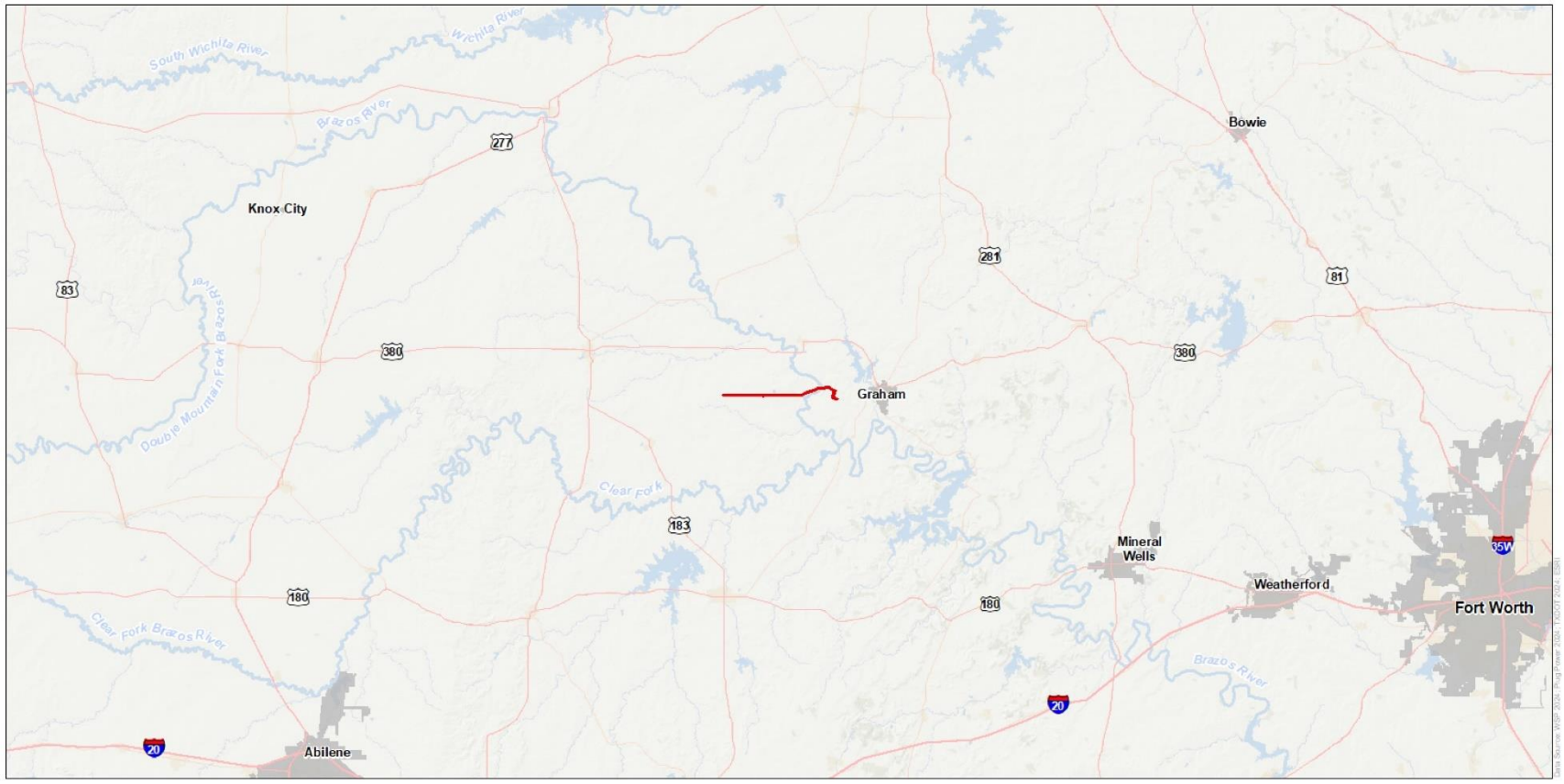
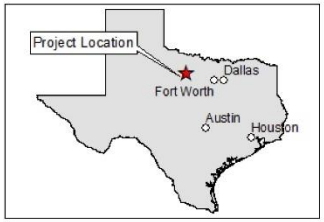


FIGURE 1: Project Location



Map Features

- Project Site
- City Limit
- Major Roadway
- Major River
- Lake

0 5 10 20 Miles

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Limestone Green Hydrogen Production Project

liquefaction (i.e., converting the hydrogen gas into a liquid) and distribution technologies to reduce/avoid GHG emissions, thereby reducing overall emissions of air pollutants and human-caused GHGs (see Exhibit 1).

The Title XVII Clean Energy Financing Program is central to LPO's mission to serve as a "bridge to bankability" for clean energy projects that are critical to decarbonizing the energy sector and enhancing the domestic clean energy supply chain. Commercial use of these technologies will help sustain and promote economic growth, produce a more stable and secure energy supply and economy for the U.S., and improve the environment. DOE published an Interim Final Rule that establishes the policies, procedures, and requirements for the loan guarantee program (10 CFR Part 609).

1.4 Scope of Environmental Assessment

As noted in Section 1.1, Plug Power has requested LPO financing to fund up to six green hydrogen production facilities, with one being the Limestone facility in Texas. Because the locations for the remaining facilities, as well as the timing for construction, have not been determined, LPO would prepare a supplemental EA in accordance with NEPA to inform its decision regarding federal financial support for such future facilities. LPO notes that Plug Power would have to submit site-specific information for each site to support LPO's review pursuant to NEPA. As such, the future green hydrogen production facilities that may be the subject of federal financial support are not ripe for analysis at this time (see 40 CFR 1501.11) but would be the subject of a supplemental EA that would tier from this EA, as appropriate. Therefore, LPO is preparing this environmental assessment (EA) to address issues concerning construction and startup of a green hydrogen production facility in unincorporated Young County, Texas. If no significant impacts are identified during preparation of this EA, DOE will issue a Finding of No Significant Impact. If potentially significant impacts are identified, DOE will prepare an environmental impact statement. As presented below, natural, physical, and socioeconomic resources that may be subject to potentially significant environmental issues are identified, along with resources that would not be subject to potentially significant environmental issues, thereby narrowing the scope of the environmental review to environmental issues deserving of study.

Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the city of Graham, along FM 209 (Figure 1). The Project site is entirely on private land, consisting of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from FM 209, and an approximately 13.6-mile-long transmission line (Figure 2). The 40-acre site would also house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

Initial development of the Project occurred prior to Plug Power's application for a loan guarantee. These activities were funded by Plug Power and, therefore, are not the subject of the request for federal financial assistance (loan guarantee) by LPO. The initial site development activities included the following (see Figures 3a and 3b):

- Cleared, grubbed, and graded the 40-acre hydrogen production facility site
- Cleared, grubbed, and graded the 1.1-mile-long access road (included were final grading and installation of the subbase and a permanent stream crossing)[1]
- Cleared the right-of-way for the 13.6-mile-long transmission line and developed foundations for the transmission line structures

[1] Given the amount of development for the access road that has already occurred and the limited amount of work remaining (e.g., application of asphalt), further development of the access road is not subject to federal financial assistance and is not considered as part of the Proposed Action.

Exhibit 1: Purpose – Clean Fuel

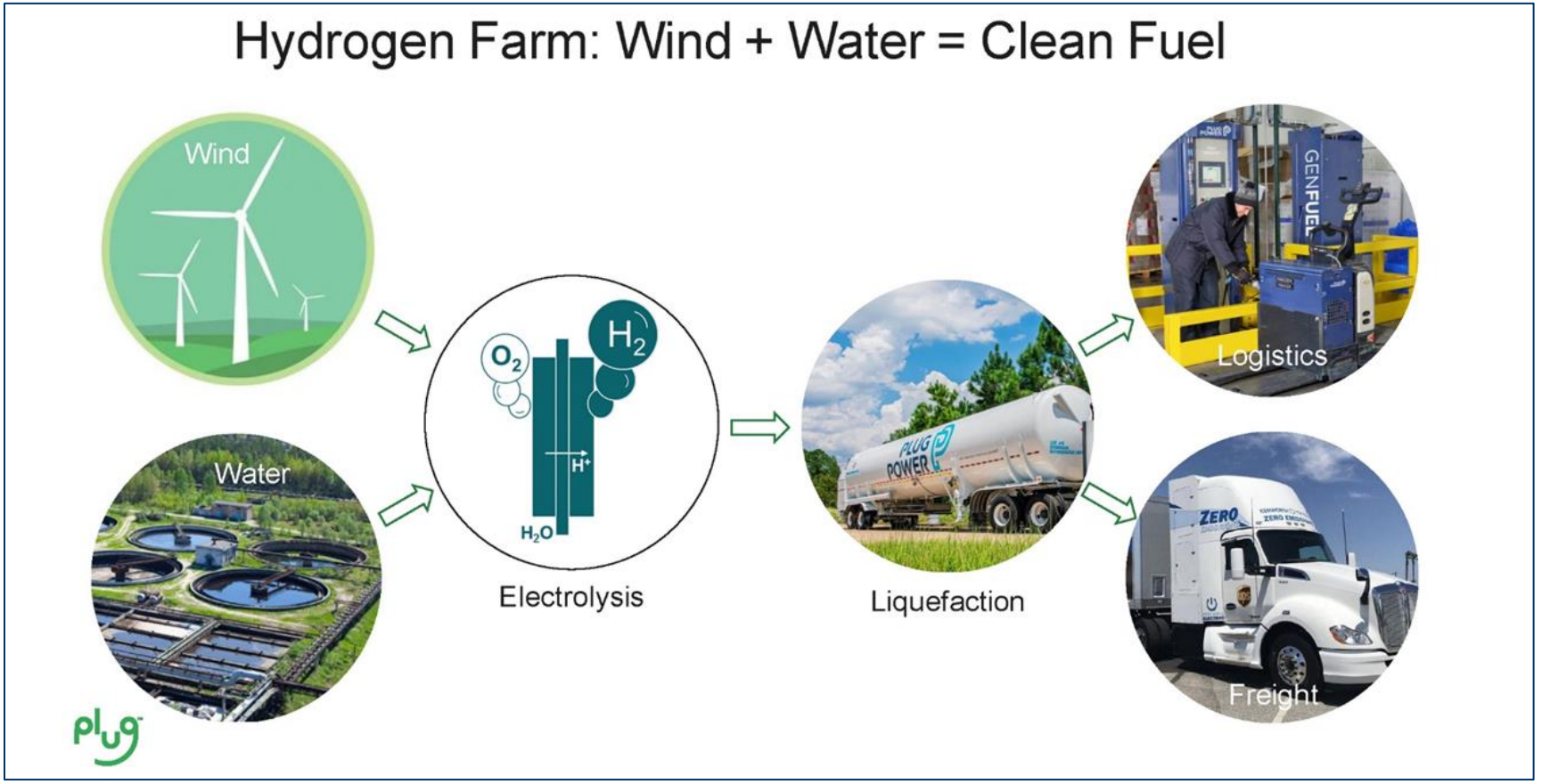
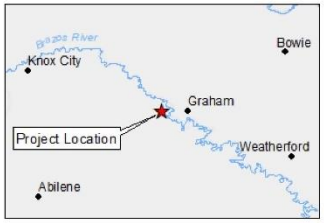


Figure 2: Project Site Plan

FIGURE 2: Project Site Plan



Map Features

- Hydrogen Production Facility
- 345 kV Transmission Line
- Right of Way
- Access Road
- River
- Roadway

0 0.5 1 2 Miles

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Limestone Green Hydrogen Production Project

Figure 3a: Existing Conditions, May 2024, Project Site Main Facility – Cleared and Graded with Construction Staging Area and Temporary Stormwater Detention

Figure 3b: Existing Conditions, May 2024, Facility Entrance/Access Road Cleared and Graded

All Project development activities to date were completed in accordance with applicable permits and approvals (e.g., the Stormwater Pollution Prevention Plan (SWPPP) that was prepared in compliance with the Texas Commission on Environmental Quality (TCEQ) Construction Stormwater General Permit [TXR150000]). Because these activities have already been completed and are not the subject of the federal financial assistance (loan guarantee) being sought from LPO, they are not part of the Proposed Action under review in this EA.

As of December 2023, all construction activities associated with the Project have ceased but are anticipated to resume in 2025 following loan guarantee approval.

The following is a summary of the remaining site development activities that would be subject to the federal financial assistance being sought from LPO and would make up the Proposed Action under review (Figure 4):

- Installation of foundations, buildings, structures, tanks, and equipment (e.g., electrolyzers); construction of ancillary facilities (e.g., water pre-treatment plant, parking area); and development of other facilities, including a substation within the 40-acre hydrogen facility site
- Start-up and operation of the hydrogen facility

  Installation of transmission line poles, conductor stringing, and interconnection work

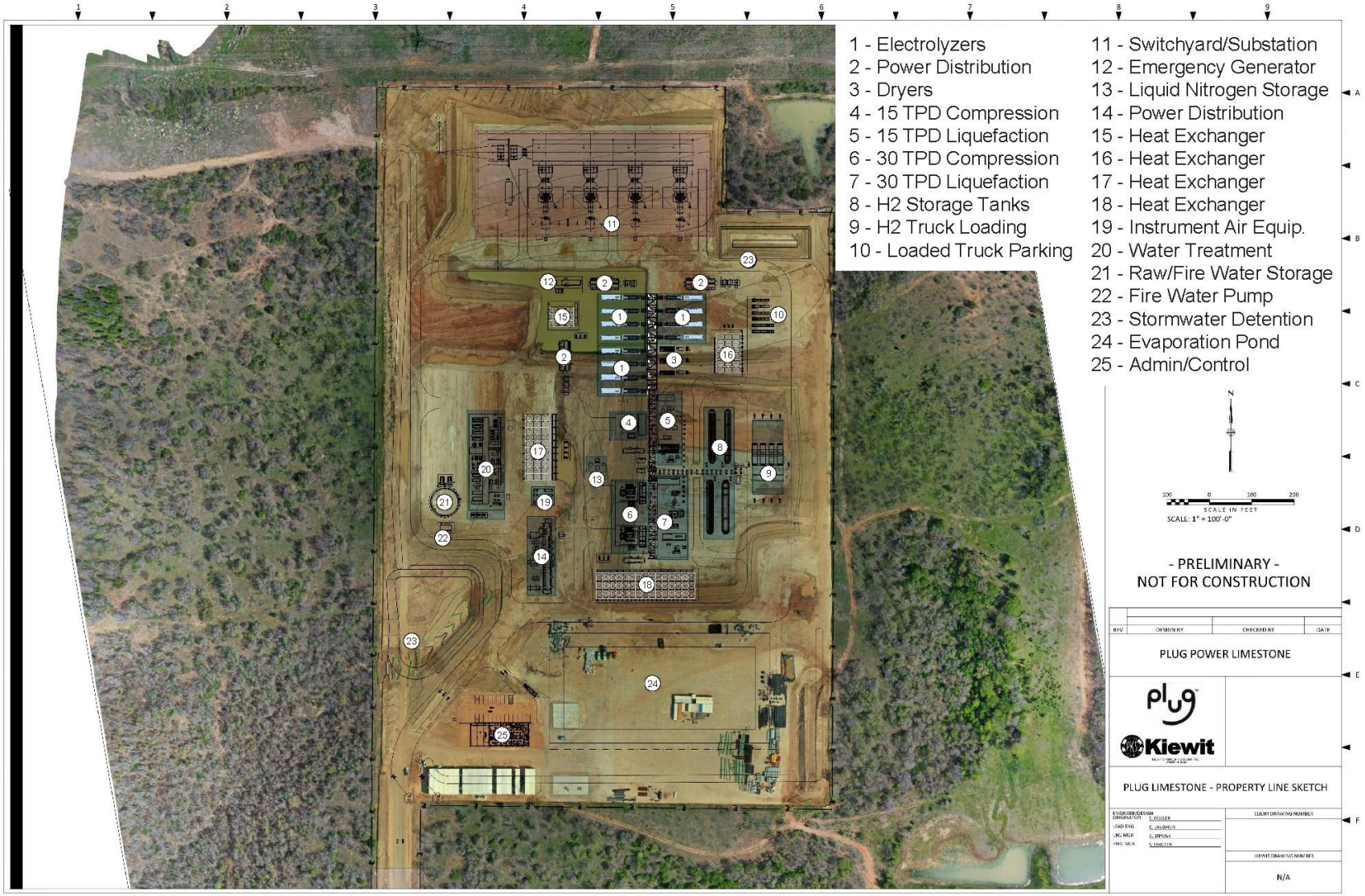
This EA describes the Project and its potential impacts on multiple resource areas due to construction and operation of the hydrogen production facility. The resource areas assessed in this EA are:

- Cultural resources, including Native American interests
- Water resources, including wetlands, surface water, and groundwater
- Air quality
- Noise
- Transportation
- Aesthetic and visual resources
- Biological resources
- Socioeconomics and environmental justice
- Public and occupational health and safety
- Waste management
- Cumulative impacts, including climate change

The above resource areas were identified as potentially being affected by the Project; therefore, each was assessed to determine the nature, extent, and significance of the impacts (see Chapter 3). The assessment combined desktop research and analysis of existing available information with select field studies, including site assessments related to the presence/absence of wetlands, water bodies, habitat for threatened and endangered species, cultural resources, and environmental contamination.

Resource areas not included in this EA consist of geology; soils, including prime farmlands; and land use because the Project site has already been developed (cleared and graded) in accordance with local and state permits and approvals (see Appendix B). The Project site is located on private land in an area that is not zoned. Impacts on the three aforementioned resource areas are not anticipated to be significant and, therefore, are not included in the scope of analysis of this EA.

Figure 4: Hydrogen Production Facility Plan



1.4.1 Review of Potentially Connected Actions

As noted in Section 1.1, Plug Power has applied for a loan guarantee for development of up to six green hydrogen projects with federal financial support from LPO. However, LPO notes that Plug Power is developing other green hydrogen projects near Atlanta, Georgia (Peachtree site), and in western New York (Science, Technology, and Advanced Manufacturing Park [STAMP] site) that are not the subject of the requested federal financial support from LPO. Plug Power issued public statements in November 2023 and January 2024 that "DOE funding would facilitate construction at STAMP" and that "DOE funding will play a pivotal role in scheduling plants in Texas and New York." DOE LPO reviewed Plug Power's development of the other green hydrogen projects, which are not the subject of the requested federal financial support from LPO, to determine if they are NEPA "connected actions," as defined in 40 CFR 1501.3. In other words, are Plug Power's non-federal projects associated with the LPO's Proposed Action (i.e., providing federal financial assistance to Plug Power for its facility in Limestone, Texas) (Appendix A).

In its review of NEPA connected actions, LPO attempted to determine if there are closely related federal activities or decisions that should be considered in the Limestone NEPA review. The review of potentially connected actions considered whether the activities were closely related federal activities or decisions that should be considered in the same NEPA review and that 1) automatically trigger other actions that may require NEPA review, 2) cannot or will not proceed unless other actions were taken previously or simultaneously, or 3) are considered interdependent parts of a larger action and depend on the larger action for their justification (see 40 CFR 1501.3[b]).

LPO notes that the Tonawanda Seneca Nation of New York (Nation) has expressed concerns regarding development of Plug Power's green hydrogen project within the STAMP site, which is adjacent to the Nation's reservation and ancestral lands. The Nation contends, based on comments made by Plug Power, that the green hydrogen project at the STAMP site is a NEPA connected action (i.e., connected to LPO's Proposed Action, which calls for financial assistance for development of a green hydrogen facility in Young County, Texas). The Nation asserted that LPO federal financial assistance to Plug Power for the Limestone facility would allow the Applicant to free up cash flows and continue construction of the STAMP project in New York.

As outlined in the conditional commitment between LPO and Plug Power issued in August 2024 (DOE 2024), Plug Power has requested LPO financing to fund up to six green hydrogen production facilities, with one being the Limestone facility in Texas. The exact locations for the remaining facilities and the timing for construction have not been determined; the options are still being evaluated by the Applicant. As future geographically distant projects are identified for potential LPO financing, LPO will prepare a supplemental EA in accordance with NEPA to inform its decision regarding federal financial support for such future facilities. LPO notes that Plug Power would have to submit site-specific information for each site to support LPO's review pursuant to NEPA. As such, the future green hydrogen production facilities that may be the subject of federal financial support are not ripe for analysis at this time (see 40 CFR 1501.11); however, the facilities would be the subject of future supplemental EAs that would tier from this EA, as appropriate.

The Plug Power facilities that are under development, including the STAMP facility, are not being considered for federal financial assistance from DOE LPO, nor did they receive funding from LPO for initial development activities. DOE LPO is not involved in the decision as to whether to proceed with completion of the Plug Power facilities that are under development, including the facility at the STAMP site. As a result, LPO concludes that the Plug Power facilities that are under development are not federal activities and do not require a federal decision; therefore, they are not subject to a NEPA review by DOE LPO.

LPO found that each green hydrogen production project site is a stand-alone project and will proceed independently. Each project has a unique and separate development plan and a schedule that does not overlap with schedules from other projects; each is geographically separate (currently in New York, Georgia, and Texas) and not financially connected to other projects. In addition, the projects are not interdependent parts of a larger action or dependent on a larger action for their justification. Each project will operate with independent utility, meaning one is not dependent on another to exist and does not depend on another to operate (e.g., the Limestone facility would operate independently of the STAMP facility).

For these reasons, LPO has found that the Plug Power green hydrogen production projects, including the STAMP facility, are not NEPA connected actions (i.e., connected to LPO's Proposed Action) and outside the scope of the NEPA review of the Limestone facility in Texas. DOE LPO has also determined that the proposed federal financial assistance for construction and startup of the Limestone facility would not be used to subsidize or reimburse responsible parties for activities associated with other Plug Power green hydrogen projects, including the STAMP facility, despite public statements made by Plug Power.

After loan closure, the DOE LPO Portfolio Management Division (PMD) provides oversight for loans and associated disbursements, thereby ensuring that construction and completion of a project are executed in accordance with the terms and conditions of the loan documents. Also, PMD monitors and manages borrower activities to ensure compliance with the loan documents by monitoring and analyzing project costs, schedule, and performance quality.

2. PROJECT DESCRIPTION

The Project site is at 2264 FM 209, Graham, Texas, within an unincorporated portion of Young County. The Project site is approximately 8 miles southwest of Graham corporate limits. The primary entrance to the Project site is approximately 50 feet west of the intersection of FM 209 and Warren Road. The Project site consists of an approximately 65.5-acre parcel within an area dominated by pastureland and single-family homes. The northernmost border of the Project site is bounded by a transmission line right-of-way that is owned and operated by Oncor (see Figure 2).

Site build-out for the Project will involve constructing a green hydrogen production plant with electrolyzers, hydrogen liquification systems, and storage tanks; constructing a water pre-treatment plant; installing electrical supply equipment, cooling equipment, and ancillary support structures; installing a 13.5-mile-long transmission line, along with utility poles, cables, and a substation; and providing a 1.1-mile-long access road. The green hydrogen production plant will consist of the following:

- Twelve 10-megawatt (MW) electrolyzers
- A 15 tpd and 30 tpd hydrogen liquefaction system (45 tpd total)
- Electrical supply equipment
- An approximately 6,500-square-foot administration/control/warehouse building
- Four 42,000-gallon liquid hydrogen storage vessels
- A water pre-treatment plant
- A four-bay truck loading station
- A 2.75-kilowatt, diesel-fired backup power generator
- On-site parking spaces for 20 to 25 cars
- A 1.1-mile-long access road

The 13.5-mile-long,345-kilovolt (kV) transmission line consists of:

- A 25-foot-wide corridor and a 125-foot-wide maintenance corridor
- Ninety-one steel monopoles (transmission tangent poles) and 17 steel angle and dead-end poles
- Substation (500 feet by 250 feet) at the Project site

Power for the Project will be supplied by the Young Wind Farm. Raw water for the electrolyzers will supplied by the City of Graham (City). An approximately 8-mile-long waterline, which was installed by the City, terminates at the Project site's property line on FM 209. Potable water will be supplied to the site from the Fort Belknap Water Supply Corporation (Fort Belknap WSC).

Figure 2 and Figure 4 provide the overall site plan for the Project and the general location for activities associated with the federal financial support request, which is under review by LPO (i.e., the Proposed Action). As described in Section 1.4, certain construction activities have already occurred at the Project site, as Figure 3. That work, which is outside the scope of LPO's Proposed Action, included 1) clearing, grubbing, and grading for the hydrogen production facility site and access road; 2) clearing for the transmission line right-of-way; 3) installation of the access road's subbase and permanent stream crossing for the access road; and 4) development of the foundations for transmission line structures.

LPO's federal assistance will be used for the remainder of the work that has not been completed, including the installation of foundations, tanks, on-site utilities, and equipment (e.g., electrolyzers); the construction of buildings and structures; the installation of ancillary facilities (e.g., water pre-treatment plant, parking area); final site grading and landscaping; and start-up of the hydrogen facility. Federal funding will also be used for construction and installation of the remainder of the transmission infrastructure needed to power to the Project. That work will include the installation of 91 transmission towers, conductor stringing, interconnection work, construction of a sub-bay at the existing substation adjacent to the Young Wind Farm, and development of the substation at the Project site.

2.1 Construction of the Proposed Action

Plug Power's Limestone facility will consist of a green hydrogen production plant with electrolyzers, hydrogen liquification systems and storage tanks, a water pre-treatment plant, electrical supply equipment, cooling equipment, and ancillary support structures, such as a detention pond. In addition, there will be a 13.5-mile-long transmission line, including utility poles, cables, and a substation), and a 1.1-mile-long access road to the site.

Initial development of the Project occurred prior to Plug Power's application for a loan guarantee. These activities were funded by Plug Power and, therefore, are not the subject of the request for federal financial assistance. LPO's Proposed Action (i.e., providing federal financial assistance to Plug Power) is for only the following: installation of foundations, buildings, structures, tanks, equipment (e.g., electrolyzers), ancillary facilities (e.g., water pre-treatment plant, substation, parking area), and transmission line poles, along with conductor stringing and interconnection work.

Electrolyzer Area

The Project will consist of twelve 10 MW electrolyzers, which will be housed in metal enclosures. Each enclosure will be supported on an independent foundation, approximately 50 feet long, 15 feet wide, and 2 feet deep, and have an internal steel frame, a metal exterior, and a heating, ventilation, and air-conditioning (HVAC) unit to control the temperature of the equipment. The height of each enclosure structure will be approximately 20 feet.

Each electrolyzer will be paired with two rectifiers and a water treatment polishing vessel. De-oxo dryer equipment (three units, 15 tpd each) will be installed downstream of the electrolyzers prior to the area for the liquefaction process. Cooling for the electrolyzers will be provided by air-cooled heat exchangers (ACHEs), which are approximately 27 feet tall.

Hydrogen Liquification Area

The liquefaction area will house the equipment for the four basic circuits in the liquefaction process: 1) hydrogen feed circuit, 2) hydrogen flash circuit, 3) nitrogen refrigeration circuit, and 4) the hydrogen refrigeration circuit. Equipment for the liquefaction process includes primarily the pearlite cold box, vacuum cold box, aluminum heat exchanger, and flash tank liquefaction unit. This equipment is divided into two trains (15 tpd and 30 tpd) and installed on multiple foundations with a maximum depth of 18 inches over an area of approximately 7,576 square feet for the 30 tpd train and 4,963 square feet for the 15 tpd train. The maximum height of the equipment in the 15 tpd train is approximately 50 feet; the maximum height of the equipment in the 30 tpd train is approximately 65 feet. In addition, compression equipment will be installed in this area. Each compressor foundation will cover approximately 2,010 square feet and have a depth of 5 feet. There are two compressors in the 30 tpd train and a single compressor in the 15 tpd train. Cooling for the liquefaction equipment will be provided by ACHEs. The 15 tpd ACHE is approximately 31 feet tall; the 30 tpd liquefaction ACHE is approximately 36 feet tall.

Hydrogen Storage Area

The Project will consist of four 420,000-gallon liquid hydrogen storage vessels. Each vessel will be approximately 123 feet long and 30 feet in height. Each will be manufactured off-site, then delivered to the site for installation. The vessels will be installed on constructed foundations that will be approximately 22 feet long, 20 feet wide, and 36 inches deep. The height of the installed tanks will be approximately 19 feet, with vents extending to approximately 28 feet.

Administration/Control Building

The operation building will be 6,500 square feet in size. It will house personnel, control systems, and a warehouse for maintenance/storage. This building will have an approximate height of 16 feet for the administration/control portion and 22 feet for the warehouse portion.

Water Treatment Plant

The Project requires ultra-pure water (UPW) for the electrolyzers to produce the green hydrogen. The UPW system is currently being designed; however, the expected water rejection rate is 4 gallons per minute (gpm). The water will be piped to the evaporation pond for management. The UPW system will be housed in a building approximately 222 feet long by 76 feet wide on a concrete foundation (approximately 2 feet deep). The approximate height of the building will be 24 feet.

Hydrogen Tanker Truck Loading

The Project will include a truck loading area with four bays. Each bay will be able to accommodate three hydrogen tanker trucks per day, for a total of 12 trucks; this does not include delivery or supply trucks. There will also be a parking area for loaded trucks. An approximately 1,302-square-yard asphalt parking lot and associated curb-and-gutter stormwater collection system will also be constructed.

Evaporation Pond

The Project is proposing to treat and dispose of industrial wastewater generated at the site with the use of an evaporation pond. The pond will be located at the southeast corner of the Project site and cover approximately 14,678 square yards. The evaporation pond will be constructed in accordance with the TCEQ general permit for a discharge of wastewater (WQG100000).

Stormwater Detention

Stormwater collection on the Project site will rely on a combination of open ditches and a catch basin that will lead to underground piping. Stormwater flows will be managed with the use of two detention ponds that will be designed to limit outflows to pre-development levels. The locations for the ponds will be based on pre-development topography. One pond will be located at the northeast corner of the site; the second pond will be located at the southwest corner of the site. The stormwater sediment basins have already been constructed to manage stormwater from construction activities.

Utilities and Substation

The Project will install the necessary underground infrastructure within the boundary of the site. Internal site distribution systems will be installed between buildings and around perimeter roads as appropriate. The utility systems to be installed will be for domestic water, raw water, wastewater, stormwater, electricity, telecommunications, and fire protection. The maximum depth below grade for utility infrastructure will be 9 feet, with an average of 6 feet for the duct bank. Primary power to the facility will be provided by Oncor. Electricity will be brought in at 345 kV, then stepped down to 34.5 kV at the Project switchyard/substation. Substation capacity is based on use of four 345:34.5 kV transformers; three are targeted for electrolyzer service and one is targeted for liquefaction service. The footprint will be approximately 500 by 250 feet.

Backup Power, Fire Water Pump, and Fuel Storage Tank

The Project will require backup power in the event of a power outage at the Limestone Substation. This will require the use of a 2,750-kilowatt emergency diesel generator. An approximately 10,400-gallon diesel storage tank will provide fuel for the backup generator. In addition, a 300-horsepower diesel emergency pump for fire water will also be required; the fuel tank for the pump will hold approximately 360 gallons of diesel. A tank for combined process water and fire water will be installed on the Project site to maintain flows in case the municipal water supply is interrupted. The water tank will be approximately 65 feet in diameter and 40 feet high.

Transmission Line

A transmission line will be constructed just south of an existing high-voltage electrical transmission line owned by Oncor. The line will be oriented east to west, originating near FM 578 and tying in at the northwest corner of the hydrogen production facility site.

Power for the Project will be supplied by an approximately 13.5-mile-long, 345 kV transmission line. The transmission line will require 91 steel monopoles, ranging in height from 110 to 140 feet above the ground. The majority of the towers will be directly embedded in the ground to a depth of approximately 15 to 20 feet. Seventeen of the towers will be placed on concrete foundations, which have already been installed. The transmission line will be 25 feet wide, and the maintenance corridor will be 125 feet wide, for a total right-of-way easement width of 150 feet.

2.2 Construction Schedule

General construction activities began in the fall of 2022 and included clearing and grading for the driveway and the hydrogen site. The right-of-way for the 13.6-mile-long transmission line was also cleared and foundations for transmission line structures were installed. Construction is currently paused but expected to resume in 2024, following loan approval. Remaining transmission line and substation construction activities are expected to be completed over a 9- to 10-month period and end in 2025. Overall construction is expected to be completed in 2026. Foundation and utility installations are expected to be completed first when construction resumes. Construction of the electrolyzer building, liquefaction building, admin/control/water pre-treatment facility, truck loading area, and parking lot will follow. Manufacturing equipment will begin to be installed in 2026; initial startup is also planned for 2026.

Typically, construction activities will take place between 5:00 a.m. and 5:00 p.m. Monday through Saturday. The peak construction workforce is expected to total approximately 315 over a period of approximately 3 months, then begin to gradually decline until completion of the Project in 2026. The average number of construction workers per month will be 150 for the duration of construction. The typical equipment used on the site during construction will include bulldozers, track hoes, dump trucks, cranes, water trucks, concrete delivery and pump trucks, scissor lifts, rough-terrain forklifts, floor scrubbers, and boom lifts.

2.3 Operations of the Proposed Action

2.3.1 Hydrogen Manufacturing Process

Renewable energy generated by wind will be brought to the site through a transmission line, processed at a switchyard using transformers, and then distributed throughout the site to the equipment. Raw water for the production of the green hydrogen will be provided by the City wastewater treatment facility in the form of reclaimed water. This reclaimed water is currently not being used by any customers. The water will be transported to the Project site by an underground waterline that will be owned and maintained by the City. The Project will include a tank to store up to 800,000 gallons of raw water, ensuring water will be available.

Electrolyzers use renewable energy to break down deionized (DI) water into hydrogen and oxygen using a combined reverse osmosis/DI water treatment process. The bulk oxygen is vented, and the wet hydrogen gas from the electrolyzer is de-oxygenated, cooled, and dried. Hydrogen gas is sent to hydrogen liquefier units where it is pre-cooled with refrigerated nitrogen (N_2). The N_2 reliquefaction system is integrated within N_2 refrigeration, N_2 expander compressors, and a pre-cooling perlite cold box system. The pre-cooled hydrogen undergoes ortho-paraconversion to minimize boil-off in the liquid product. Hydrogen gas is liquefied using a hydrogen gas compression/expansion refrigeration loop. Hydrogen is also used as a refrigerant in a closed loop within the vacuum-insulated cold box exchanger to achieve the desired temperature for hydrogen liquefaction. Liquid hydrogen is moved to storage for transport and loaded onto trucks for distribution. Hydrogen flash gas is captured and recycled to minimize loss. The manufacturing process is illustrated in Exhibit 2, below.

2.3.2 Electrolyzer

An electrolyzer uses electricity to split water molecules into hydrogen and oxygen. Like fuel cells, an electrolyzer consists of an anode and a cathode, which are separated by an electrolyte. Plug Power electrolyzers are based on polymer electrolyte membrane (PEM) technology that uses a dry, solid polymer electrolyte. Direct current (DC) is fed to the anode and cathode through an external circuit. Water, which is fed into the membrane, reacts at the anode to form oxygen and positively charged hydrogen ions (essentially, protons). As electrons flow through the external circuit, the hydrogen ions move across the PEM from the anode to the cathode. At the cathode, positively charged hydrogen ions combine with negatively charged electrons to form diatomic hydrogen gas molecules, H_2.

PEM cells are constructed in series stacks that are optimized for the efficient conversion of electrical energy into hydrogen. By leveraging the same PEM building block in both fuel cell engines and electrolyzers, Plug Power is setting the benchmark for manufacturing economies of scale in cost, reliability, and quality. Stacks are constructed in modules, as pictured below (Exhibit 3), to produce units of varying capacity. Modules can be operated in parallel and constructed in very high-capacity electrolyzer systems.

Plug Power currently produces electrolyzers rated at 1 MW, 5 MW, and 10 MW, with input power capable of producing 99.99 percent pure hydrogen gas at an output pressure of 40 bar (580 pounds per square inch). This relatively high native pressure is an important aspect of the Plug Power electrolyzer and will be used advantageously in the design of the gas storage vessels and hydrogen liquefier. In 2022, Plug Power introduced a next-generation electrolyzer rated at 10 MW, with input power capable of producing 300 kilograms of hydrogen per day. This 10 MW unit will be the basic building block of the hydrogen production plant. The Limestone production plant will produce 45 tpd of liquefied hydrogen.

2.3.3 Hydrogen Storage and Liquification

The four 42,000-gallon liquid hydrogen storage vessels will be used as a buffer for fueling operations, ensuring that an adequate supply of hydrogen will be available for delivery trucks (up to 12 hydrogen tanker trucks per day).

Plug Power's liquefaction technology includes a pre-cooling section that uses gaseous nitrogen refrigerant and a liquefaction section that uses gaseous hydrogen refrigerant and a flash gas circuit. Plug Power's liquefaction plant is designed for 99.995 percent pure gaseous hydrogen. The plant will include a cryogenic treatment section to remove trace amounts of impurities (e.g., nitrogen and argon), resulting in 99.9999 percent pure liquid hydrogen product. There are four basic circuits in the liquefaction process: hydrogen feed gas, hydrogen flash, nitrogen refrigeration, and hydrogen refrigeration. The brazed aluminum heat exchanger (BAHX) cools the feed gas in the pre-cooling and primary cooling loops to further purify the gas. The liquification process is illustrated in Exhibit 4, below.

Exhibit 2: Hydrogen Manufacturing Process

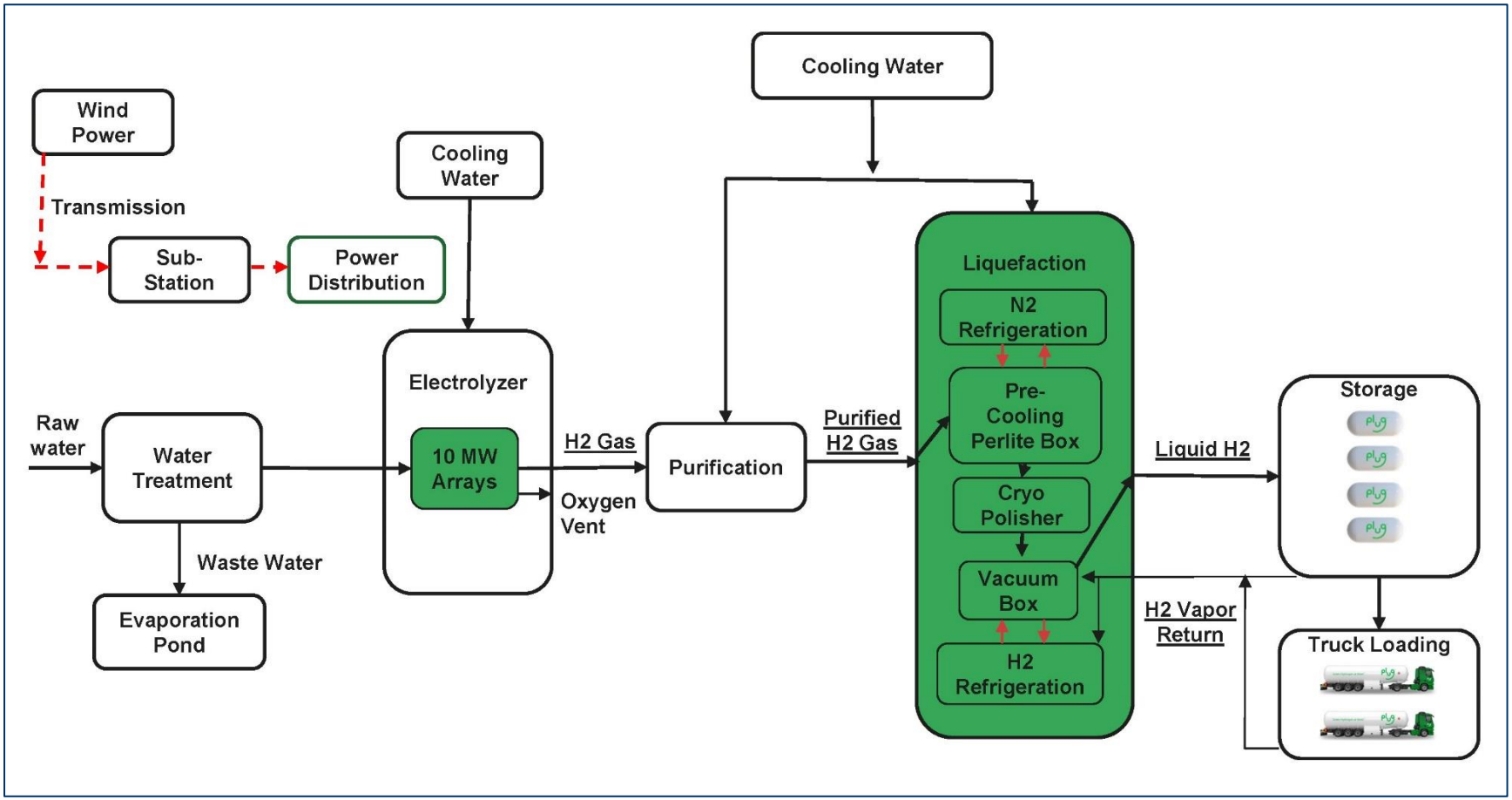
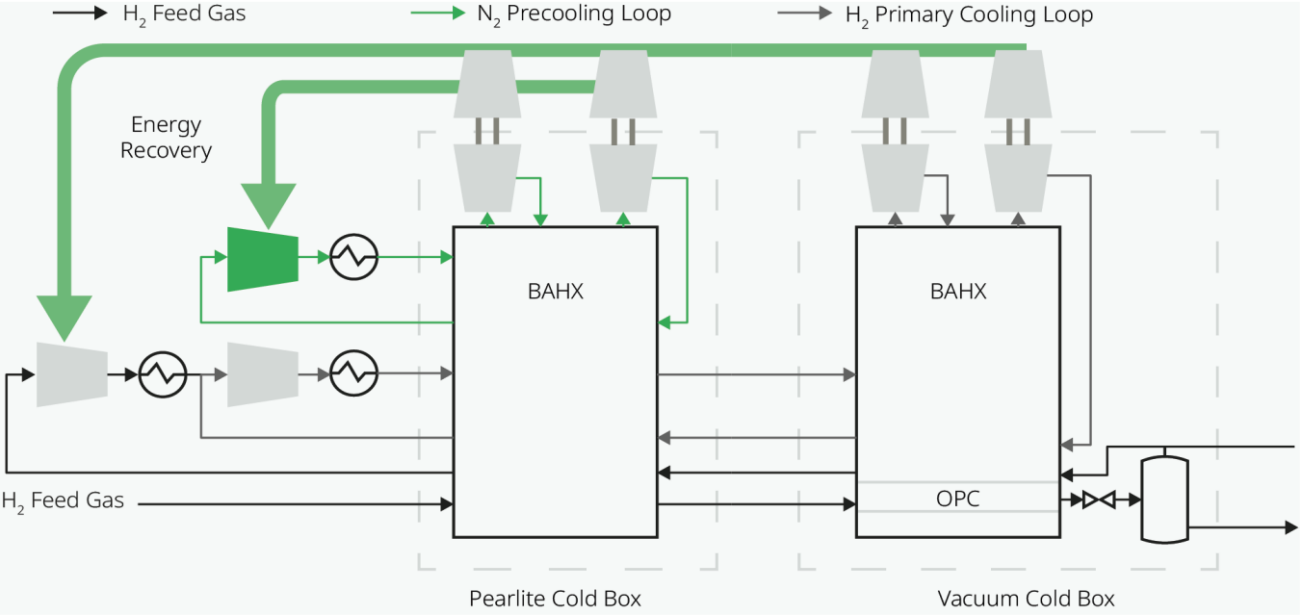


Exhibit 3: PEM Electrolyzer Unit

Exhibit 4: Liquefaction Process



2.3.4 Utilities

Raw water for the production of green hydrogen will be provided to the Project site from the City Wastewater Treatment Plant, using an underground waterline that is owned and maintained by the City. The Project has entered into a 30-year water supply agreement with the City to provide “at least 350,000 gallons per day” of treated effluent from the City Wastewater Treatment Plant. The Project will construct and maintain a storage tank with the capacity for 800,000 gallons of raw water, ensuring water will be available during times when the City cannot meet its agreement; the will also be used for fire suppression.

The Project will use between 350,000 and 500,000 gallons of reclaimed water per day, accounting for approximately 58.3 to 83.3 percent of the City’s supply of reclaimed water. The water use agreement between the City and Plug Power will include provisions for the line with reclaimed water to be open to

other members of the community for future irrigation use; reclaimed water is not currently authorized for any other purposes. The City anticipates future irrigation uses to require 5,000 gallons per day, leaving the City with a surplus of at least 95,000 gallons per day of raw water. The Project will not affect the local or regional water supply.

Potable water will be supplied to the Project site by the Fort Belknap WSC, which currently supplies potable water to Graham and surrounding areas in Young County. As part of its existing service, Fort Belknap WSC currently has waterlines installed to the boundary of the Project site. A formal water supply agreement between the Project and Fort Belknap WSC has yet to be executed but will be executed prior to the completion of construction.

The Project has entered into a power purchase agreement with Young Wind, LLC, to provide renewable energy to the facility. Young Wind, LLC, owns and operates a 345 MW wind farm in Young County west of the Project site. Power from the Young Wind Farm will be provided to the Project through an approximately 13.5-mile-long, 345 kV transmission line that will be owned and maintained by the Project. During periods with low wind, energy will be purchased from the Electric Reliability Council of Texas.

2.3.5 Staffing and Operational Timeframe

During the operational phase, the Applicant estimates that the manufacturing facility will employ approximately 50 people. The Applicant intends to hire the facility's staff locally, to the extent feasible. Production assumes 24/7 operation of the facility, which will operate with three shifts, with up to 20 employees on-site during each shift.

2.3.6 Shipping and Receiving

The Project site is located off FM 209, a two-lane, undivided highway that is owned and maintained by the state. FM 209 has a posted speed limit of 55 mph. The hydrogen facility is anticipated to operate around the clock and be staffed by 50 employees over three shifts.

The primary source of traffic will be associated with the delivery of manufactured green hydrogen to Plug Power's customers. Initial estimates indicate that the facility will generate 20 to 30 tanker deliveries per day. Most delivery trucks will exit the facility in the morning and return in the afternoon. In addition, the majority of any needed raw materials (e.g., dry goods, fuel, chemicals) will be brought in by truck. Truck traffic associated with these deliveries is anticipated to be limited (i.e., one or two trips per day).

Given the location of area population centers, it is anticipated that most Project-related delivery trucks will travel east toward Highway 67 and Graham.

2.3.7 Waste Management

During operations, the facility will generate both liquid nonhazardous wastes, associated with the manufacturing processes, as well as solid nonhazardous waste, associated with routine building operations and maintenance. Liquid nonhazardous wastewater will be treated at the lined on-site evaporation pond, with a usable storage volume of 28,594 cubic yards; with the 2 feet of free board, the total volume is 37,509 cubic yards. The evaporation pond will be permitted with a general permit from TCEQ. Routine maintenance of the evaporation pond will include removing any remaining waste and disposing of at a certified landfill or treatment facility. Compressor units will require routine oil changes; the oil will be disposed of at a licensed facility. Table 1, below, summarizes anticipated Project waste.

Table 1: Project Waste Management

Waste Type	Anticipated Waste Classification	Estimated Generation Volume	Collection Method	Disposal Method
Wastewater	Non-hazardous	Less than 4 gallons per minute (approximately 5,500 gallons daily)	Lined evaporation pond	Permitted evaporation pond
Evaporation pond solids	Non-hazardous	11,000 pounds per year	To be determined	Disposal at a certified waste facility
General waste	Non-hazardous	Less than 8 cubic yards per week	Dumpster	Disposal at a certified waste facility
Used oil	Non-hazardous	10 gallons per month	55-gallon drum	Recycle or dispose of at a certified waste facility

3. ENVIRONMENTAL CONSEQUENCES

3.1 Introduction

In each of the following sections, a specific resource area is addressed with both qualitative and, where applicable, quantitative information to concisely describe the nature and characteristics of the resource that may be affected by the Project as well as the potential direct and indirect impacts on that resource from the Project given Project controls. A conclusion regarding the significance of impacts is also provided for each resource area.

Section 3.12 provides a review of the present and reasonably foreseeable federal and nonfederal actions that may contribute to a cumulative impact when added to the impacts of the Project. The impacts of past actions were reviewed and included as part of the affected environment to establish the current condition of the resource (the baseline condition) that may be affected by the Project.

3.2 Cultural Resources

As described in Section 1.4, initial development of the Project included clearing and grading areas where Project facilities (e.g., hydrogen facility, transmission line, substation) would be located. Although unlikely, adverse impacts could occur during ongoing construction if human remains or cultural artifacts are discovered during ground-disturbing activities, such as foundation construction or underground utility installation. However, direct ground disturbance during construction would be limited because of the small size of the proposed disturbance areas. The Applicant would implement an Unanticipated Discovery Plan and conduct staff training to minimize potential adverse impacts resulting from Project construction.

The landscape in the vicinity of the Project site can be described as a rolling type of topography with areas of exposed bedrock, including a rocky hilltop that rises over the east bank of the Brazos River within the Project site. This hilltop is one of many in the Belknap Mountains west of Beehive Mountain. The development that has occurred in the area's natural landscape includes a corridor for an overhead electrical transmission line north of the Project site. There are also other energy projects in the area.

In March 2022, Blanton & Associates, Inc. (B&A), conducted a cultural resources study for the Project. This included a background cultural review, architectural survey, and archaeological field survey at crossings of potential Waters of the United States (WOTUS) in the Project area. Archaeological field investigations of the Project area consisted of surface examinations, backhoe trenching, and strategic shovel testing.

The character of the data collected during the field survey indicated a landscape with low to moderate probability for cultural resources. The archaeological field survey did not identify any archaeological sites, historically significant structures, State Antiquities Landmarks, or artifacts that would be eligible for listing in the National Register of Historic Places (NRHP). The background cultural review identified three previously recorded archaeological sites within 1 kilometer of the Project area. The Project site is not within a designated historic district (B&A 2022a).

From September 9 to 15, 2024, WSP USA, Inc. (WSP), conducted a Phase I intensive archaeological survey of the Project area (WSP 2024a). The Area of Potential Effect (APE) included the 40-acre site for the green hydrogen plant and the approximately 13.6-mile-long transmission line corridor (approximately 150 feet wide). In addition, a survey of the entire APE was conducted, including a systematic pedestrian survey, systematic subsurface testing (shovel test probes), and deep testing (hand auger probes). No cultural material was identified during the pedestrian survey, and none of the excavated shovel test probes contained cultural material. None of the deep testing (hand augers) identified any buried cultural deposits. As a result of the intensive archaeological survey, no

archaeological sites or cultural materials were identified. The Phase I intensive archaeological survey for the Project, which found the Project would have no effect on historic properties, was submitted to the Texas Historical Commission (THC) in September 2024. THC concurred with the findings from the Phase I intensive archaeological survey in October 2024.

In August 2024, WSP architectural historians conducted an aboveground cultural resource eligibility and effects survey for the Project (WSP 2024b). The purposes of the survey were to identify aboveground historic resources 50 years and older within the APE, evaluate the resources relative to their eligibility for listing in the NRHP, and assess the potential direct and indirect visual effects of the proposed undertaking on these resources. The APE for cultural historic resources includes the Project area and an additional 0.5-mile buffer to account for potential visual impacts on aboveground historic architectural resources. A total of 20 architectural resources 50 years and older were identified within the APE; none of them were previously recorded. Of the 20 resources within the APE, WSP recommended 12 as not eligible for listing in the NRHP due to a lack of architectural or historic significance. Because of access restrictions, the remaining eight were not accessed and, therefore, assumed eligible for the purposes of this study. These eight resources are more than 3 miles from the proposed hydrogen facility and access road, which is beyond the typical 0.5-mile viewshed buffer for new construction. The new transmission line introduced by the Project would be between 0.09 and 1.12 miles from the eight resources. Because the proposed transmission line would be similar in character to the existing adjacent transmission lines and vegetation and other structures diminish the view between the Project and these eight resources, it is anticipated that there would be no adverse effect from the Project on these resources (WSP 2024b). The THC concurred with the finding of no adverse effect in October 2024.

LPO reviewed the surveys and concurred with the THC's finding of no effect on architectural resources within the APE and no archeological resources within the Project site or surrounding areas on November 24, 2024. The THC concurred with LPO's findings on December 4, 2024 (Appendix A). Given the no effect determination, and implementation of an Unanticipated Discovery Plan in the event of an unanticipated discovery of such resources, Project impacts on cultural resources would not be significant.

3.2.1 Native American Interests

In conjunction with this EA and the National Historic Preservation Act Section 106 historic and archaeological review process, consultation with Native American tribes and interested communities/parties is currently ongoing. The purpose is to identify areas of specific religious and traditional value, concerns, and other issues.

At the time of preparation for this EA, interested/potentially interested tribes were identified as the following:

- Absentee-Shawnee Tribe of Indians of Oklahoma
- Apache Tribe of Oklahoma
- Caddo Nation of Oklahoma
- Comanche Nation, Oklahoma
- Delaware Nation, Oklahoma
- Tonkawa Tribe of Indians of Oklahoma
- Wichita and Affiliated Tribes (Wichita, Keechi, Waco, and Tawakonie), Oklahoma
- Tonawanda Seneca Nation, New York

On July 3, 2024, DOE asked potentially interested tribes (listed above) to identify any known sites within the APE with religious or traditional value. Responses were received from the Wichita and Affiliated Tribes of Oklahoma and the Tonawanda Seneca Nation. The Wichita and Affiliated Tribes of Oklahoma

Tribal Historic Preservation Officer requested a review of the Project's cultural resource survey documents and expressed concerns that the Project could affect the Brazos Indian Reservation. The Tonawanda Seneca Nation expressed concerns regarding development of Plug Power's Gateway project in Alabama, New York, as a connected action.

In February 1854, the Texas Legislature designated 12 Spanish leagues as Indian reservations, which were to be maintained by the federal government; these were collectively known as the Brazos Indian Reservation. An eight-league tract, located on either side of the Brazos River in Young County, Texas, was historically designated for use by the Caddo, Anadarko, Waco, Tonkawa, and Tehuacana. The Project boundary would be approximately 2.25 miles northwest of the eight-league tract at its closest point (Figure 5). The nearest Limestone facility to the eight-league tract would be the Project's access road. Therefore, impacts on the Brazos Indian Reservation would not be significant. The information was transmitted to the Wichita And Affiliated Tribes of Oklahoma Tribal Historic Preservation Officer in September 2023. No additional comments or responses were received.

LPO entered into tribal consultation with the Tonawanda Seneca Nation regarding the Project in August 2023. The Nation expressed concerns regarding development of Plug Power's hydrogen project in New York because it would be adjacent to reservation territory and ancestral lands. The Nation contends, based on comments made by Plug Power's CEO, Andy Marsh, that the green hydrogen project at Gateway is a NEPA connected action (i.e., connected to LPO's Proposed Action [potential financial assistance for development of the Project in Young County, Texas, and future green hydrogen production projects]). The Nation asserted that LPO federal financial assistance to Plug Power for the Limestone facility would allow the Applicant to free up cash flows and continue construction of the Gateway project in New York. As part of this consultation, LPO received approximately 150 letters from various members of the public in opposition to the Plug Power Gateway site. A list of commenters and the letters can be found in Appendix C.

LPO evaluated the Nation's concerns in Section 1.4.1 of this EA and concluded that the Plug Power green hydrogen production projects, including the Limestone facility, are not NEPA connected actions (i.e., connected to LPO's Proposed Action) and outside of scope of the NEPA review for the Limestone facility in Texas.

Given the absence of traditional cultural properties or historic properties within the Project site, as assessed in the cultural resource surveys evaluated in this section; the concurrence of the THC (Appendix A) with LPO's finding; the disturbed nature of the site; and the controls that are in place to handle an unanticipated discovery of cultural resource materials, impacts on cultural resources, including Native American interests, as a result of the Project would not be significant.

3.3 Water Resources

This section evaluates the environmental baseline and potential Project-related impacts on wetlands, surface water, groundwater, and floodplains in the Project area.

3.3.1 Wetlands and Surface Water

In January and March 2022, B&A conducted a WOTUS delineation to determine if wetlands and other potentially jurisdictional water bodies were present in the Project area (B&A 2022b). The wetland investigation involved the WOTUS field survey (B&A 2022b) as well as preliminary review of the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD), U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI), and other information, including precipitation data, soil surveys, and local wetland inventories. During the field survey, B&A mapped four ponds, 20 streams (25 total stream segments), and one freshwater emergent wetland (0.01 acre). The delineated wetland and

Figure 5: Brazos Reservation

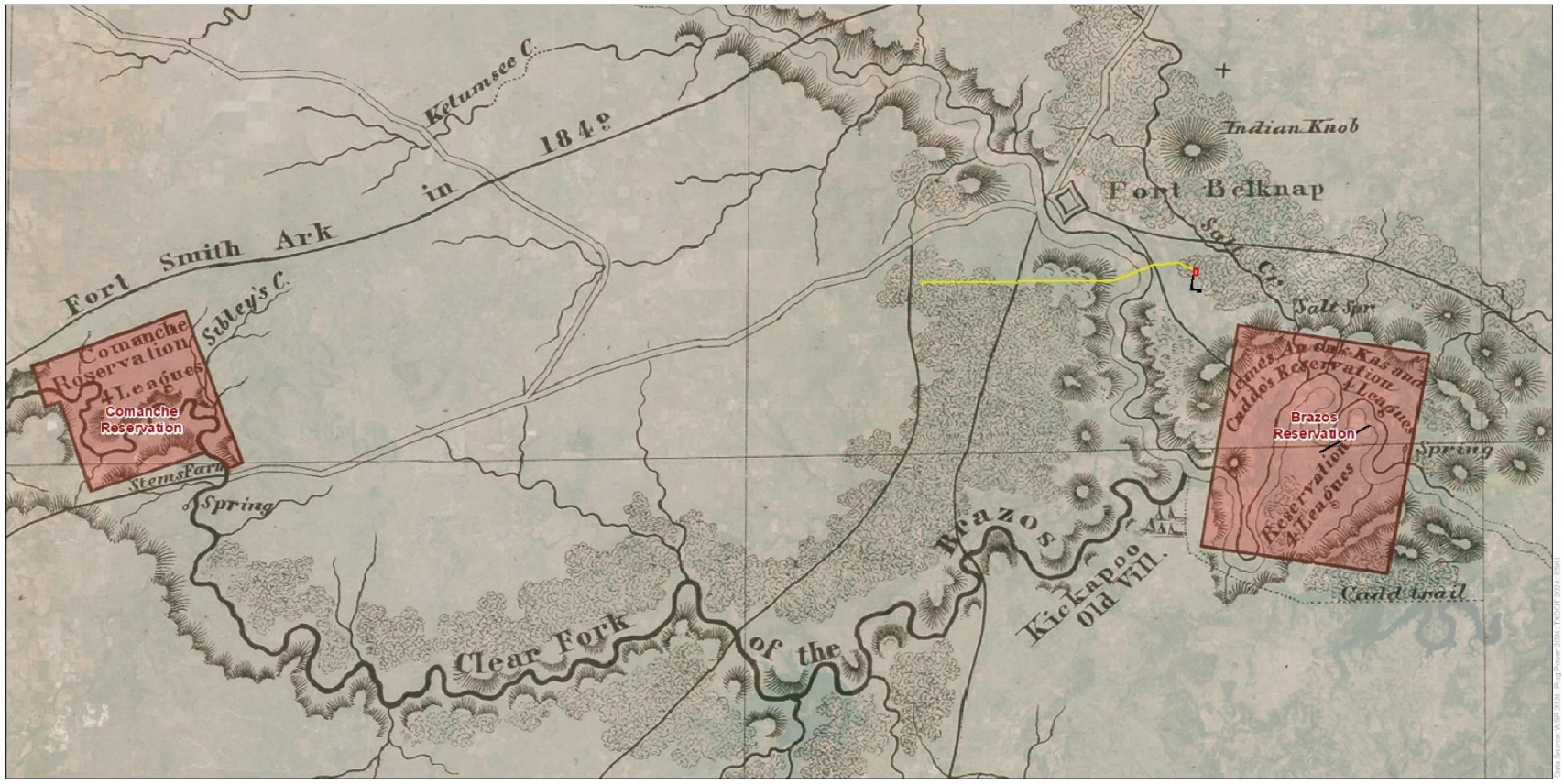
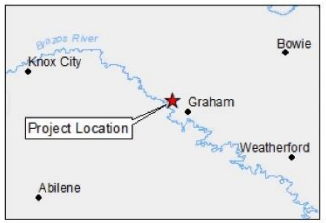


FIGURE 5: Brazos Indian Reservation



Project Features

- Hydrogen Production Facility
- 345 kV Transmission Line
- Access Road
- Reservation

0 2.5 5 10 Miles

Limestone Green Hydrogen Production Project

the streams are all situated within the proposed electrical transmission line corridor and site access road. WOTUS delineations and wetland conditions at the Project site were also reviewed and documented in the WOTUS field survey. The results of the WOTUS delineation concluded that all mapped stream segments and one mapped wetland are most likely jurisdictional under the Clean Water Act, while the four mapped ponds are most likely not jurisdictional due to lack of a surface water connection. All jurisdictional wetland impacts would be subject to review and permitting by U.S. Army Corps of Engineers (USACE). A permit application was submitted to the USACE Fort Worth District for review in November 2024 (Appendix B). USACE reviewed the survey determinations, which resulted in issuance of Nationwide Permit 14 for the Project in November 2024 (Appendix B) because of potential impacts on wetlands in the Medlan Branch of the Brazos River. Construction of the access road was not part of LPO's scope for the Proposed Action (see Section 1.4) but did result in potential impacts on regulated WOTUS; therefore, the impacts are discussed in Section 3.3.2 as a cumulative impact.

No significant impacts on wetlands are anticipated because Project site planning has avoided the identified wetland. The Project's electrical transmission lines would be installed on steel monopoles that would span all regulated WOTUS.

Because project planning avoided wetlands to the extent practicable, and because the transmission lines would be installed on steel monopoles located outside of regulated WOTUS, allowing the lines to span all regulated WOTUS along the transmission line corridor, direct impacts on wetland resources would not occur. Indirect impacts would be minimized through implementation of a Project-specific Spill Prevention, Control, and Countermeasures (SPCC) Plan and erosion and sedimentation best management practices (BMPs) to reduce potential runoff into wetlands. Consequently, Project-related impacts on wetlands would not be significant.

3.3.2 Groundwater

The Project site is within the Fish Creek-Brazos River watershed, as defined by the 10-digit hydrologic unit code (USGS n.d.). The Project overlies the Cross Timbers Aquifer, a minor aquifer, consisting primarily of limestone, shale, and sandstone in north-central Texas (Texas Water Development Board [TWDB] 2019).

According to the TWDB Groundwater Data Viewer, there are no wells within the Project site; however, scattered water wells were identified in surrounding areas. Well depths in the surrounding areas range from 55 to 270 feet below ground surface. Depth to water ranges from 14.9 to 170 feet below ground surface. Uses are listed as primarily "domestic purposes with stock" or "not used" (TWDB 2022). The Applicant completed 20 on-site geologic borings, ranging from 30 to 40 feet deep; groundwater was not encountered. Construction activities are not expected to extend below these depths; therefore, groundwater is not likely to be encountered.

All water for the Project would be obtained from public water supplies. Source water for hydrogen generation would be obtained from the City and potable water would be purchased from Fort Belknap WSC. The Project would not include groundwater wells or any groundwater discharges. Therefore, there would be no impacts related to groundwater levels, availability, or flow patterns from on-site groundwater use.

Potential impacts on groundwater would be avoided because the evaporation ponds would be constructed in accordance with TCEQ's Evaporation Pond General Permit (WQG100000). Soils in the vicinity of the Project site are generally well drained; therefore, impacts on groundwater recharge resulting from new impervious surfaces would be localized and minimal. An underground source of drinking water was not identified during the Phase I Environmental Site Assessment; therefore, should a leak occur within the ponds, drinking water would not be contaminated (Tetra Tech, Inc. 2022).

Given the lack of groundwater use at the Project site, the groundwater protection measures incorporated into the facility design, the TECQ Evaporation Pond General Permit, and the SPCC Plan, Project-related impacts on groundwater would not be significant.

3.3.3 Floodplains

According to the Federal Emergency Management Agency (FEMA) Flood Map Service Center data, the Project site and access road are not within a floodplain (FEMA 2011). However, the corridor for the transmission line crosses Zone A, which includes areas with mapped floodplains associated with the Brazos River, the Medlan Branch, and the Ratliff Branch (FEMA 2011). Zone A floodplains represent 100-year floodplains and therefore have a 1 percent chance of being inundated each year.

The transmission line would be designed to minimize the number of structures within Zone A; approximately 20 support structures would be placed in Zone A. The structures would not alter or affect floodplains because the size of the footprint would be negligible within the context of mapped Zone A floodplains. In addition, the existing topography would be maintained. Any area disturbed during transmission line construction would be revegetated. Vegetative coverage would be maintained to reduce the risk of floodplain alteration.

Grading during construction would be minimal and would not substantially alter the existing contour or flow regime of the site. Although runoff patterns and concentrations could be altered by grading activities, such changes would be minimal, and the rate or amount of surface runoff resulting from the Project would be similar to the rate or amount under existing conditions. Areas where vegetation would be removed during construction would be revegetated and maintained as under existing conditions to the greatest extent feasible. Maintaining vegetative cover would help facilitate groundwater infiltration, minimize surface flows, and reduce runoff.

Sections of the transmission line would be located in a floodplain. However, because of the negligible size of the footprint for the structures and because existing topography would be maintained, impacts on floodplains would not be significant. Given the relatively flat topography of the Project site, that the Project site is not located in a floodplain, and the design and location of Project facilities, including stormwater management features (e.g., stormwater detention pond), impacts associated with floodplains would not be significant.

3.4 Air Quality

Pursuant to the Clean Air Act, the U.S. Environmental Protection Agency (EPA) established National Ambient Air Quality Standards (NAAQS) to control a number of widely occurring criteria pollutants, including carbon monoxide, nitrogen dioxide (NO_2), ozone, particulate matter less than 2.5 micrometers in diameter ($PM_{2.5}$), particulate matter less than 10 micrometers in diameter (PM_{10}), sulfur dioxide, and lead. Primary air quality standards were developed for these pollutants to protect public health, including sensitive populations, such as children, the elderly, and asthmatics, and secondary standards were developed to protect the nation's welfare, including protection against decreased visibility and damage to animals, crops, and vegetation. EPA has concluded that the current NAAQS protect the public health, including the at-risk populations of older adults, children, and people with asthma, with an adequate margin of safety. The Project site is located in Young County, Texas, which is listed as in attainment for the NAAQS, meaning that none of the ambient concentrations of criteria pollutants exceed the air quality standards.

Fugitive dust emissions during construction may result in temporary air quality impacts at the Project site; however, these impacts would be minor and would occur only during active construction. Per the SWPPP and Construction Stormwater General Permit (TXR150000), controls, such as watering as needed and using temporary construction entrances, would be implemented to minimize fugitive dust emissions during construction.

The construction timeframe is anticipated to be 24 months. Construction emission sources include cranes, scissor lifts, forklifts, generators, and trucks. Criteria pollutants expected to be emitted from construction include carbon monoxide, NO_2, ozone, $PM_{2.5}$, PM_{10}, and sulfur dioxide. Table 2 presents anticipated air emissions from the proposed construction.

Table 2: Estimated Emissions – Construction

Pollutant	Total Emissions (Tons/year)
Sulfur oxides (SO_2)	0.35
Nitrogen oxides (NO_X)	2.44
Volatile organic compounds (VOC)	0.15
PM_{10}	0.35
$PM_{2.5}$	0.26
Carbon monoxide (CO)	1.53
Hazardous air pollutants (HAPs)	0.16
Carbon dioxide equivalents (CO_2e)	199.02

The Project's operational emissions would be a minor source of criteria and toxic air pollutants; however, the Project would qualify for a Permit by Rule (PBR) under Title 30 Texas Administrative Code (TAC) Section 106.511 and 30 TAC Section 106.478 because pollutant levels would be lower than threshold levels. The appropriate PBR documentation for the Project was submitted to and approved by the TCEQ in September 2023 (Plug Power 2023). Registration with TCEQ is not required for the PBRs needed for the Project, but ongoing monitoring is required. The facility emission sources would be a diesel-fired emergency generator, a diesel-fired pump for fire water, and a 10,446-gallon diesel storage tank. Criteria pollutants expected to be emitted from operations at the green hydrogen facility include carbon monoxide, NO_2, ozone, $PM_{2.5}$, PM_{10}, and sulfur dioxide. Table 3, presents anticipated air emissions from the Project.

Table 3: Estimated Emissions – Operations

Pollutant	Total Emissions (Tons/year)
Sulfur oxides (SO_2)	0.03
Nitrogen oxides (NO_X)	1.52
Volatile organic compounds (VOC)	0.52
PM_{10}	0.11
$PM_{2.5}$	0.10
Carbon monoxide (CO)	1.15
Hazardous air pollutants (HAPs)	5.93E-03
Carbon dioxide equivalents (CO_2e)	230.22

Because of the Project's location, existing conditions with respect to air quality, the anticipated amount of air emissions, and compliance with applicable TCEQ emission standards, impacts on air quality as a result of the Project would not be significant

3.5 Noise

The Project site is in primarily undeveloped rangeland and woodland habitats. Existing sources of noise near the Project site include vehicular traffic along FM 209 and local roads, a trucking company to the east, the Brazos River, wind turbines to the north and south adjacent to the proposed transmission line corridor, and existing overhead electrical transmission lines, with which the Project's transmission line would be co-located. There are 12 existing residences within 0.25 mile of the proposed access road and transmission line extents. Of the 12 residences, five are within 0.25 mile of the access road; no residences are within 0.5 mile of the green hydrogen manufacturing facility.

Construction of the Project would generate noise during typical working hours for a project of this size from Monday through Saturday during the construction period. Given the remote nature of the Project location and the existing landscape features, noise from both site construction as well as installation of the transmission line is not anticipated to be materially impactful on the community; such noise would be intermittent, minor, and temporary. To reduce noise at nearby residences during peak construction, Plug Power would stagger the arrival and departure times of construction workers as well as delivery and supply trucks. During operation, noise would be generated primarily from the 12 tanker trucks that would transport hydrogen from the facility each day.

Because of the remote setting for the Project site, the temporary nature of construction noise, and the distance from the Project site to the nearest noise receptors (residents), and because Project-related traffic noise is not anticipated to measurably alter the noise environment along FM 209, impacts from noise as a result of the Project would not be significant.

3.6 Transportation

Access to the Project site would be provided by FM 209, a two-lane, undivided major collector with a 55-mile-per-hour posted speed limit. Access to FM 209 from the Project site would be controlled by a stop sign. Public access to the site is, and would remain, prohibited.

The peak construction workforce is expected to reach approximately 315; the average construction workforce is expected to be around 150 per month for the duration of construction. Construction workers, delivery trucks, and construction vehicles would access the Project site from FM 209. During peak construction, Plug Power would stagger the arrival and departure times of construction workers and delivery trucks to minimize traffic disruptions on FM 209.

During the operational phase of the Project, approximately 50 on-site employees would work three shifts to facilitate 24/7 hydrogen manufacturing. The Project would construct a 1,302-square-yard asphalt parking lot to accommodate 20 to 25 staff vehicles. Operational traffic impacts are provided in Table 4.

Thirty-five trucks per day would travel to and from the Project site (inclusive of deliveries and hydrogen shipments). Most hydrogen tanker trucks would leave the facility in the morning, primarily traveling east toward Highway 67 and the city of Graham, and return in the afternoon.

The annual average daily traffic volume on FM 209 from the most recent year (2023) was 505, with 14 percent being heavy vehicles. As noted in Table 4, the Project would add 20 to 30 trucks per day during operations (TxDOT 2024). Therefore, Project operations would result in a 4 to 6 percent increase in overall traffic on FM 209 and a 22 to 30 percent increase in traffic from heavy vehicles (see Table 4) but would not represent a notable change in the overall level of service associated with FM 209.

Table 4: Project Average Daily Traffic Impacts

Project Phase	Traffic Type	Existing	New	Total
Construction	Vehicles	505	150	655 (23% increase)
	Trucks	71	20–30[a]	91–101 (22%–30% increase)
Operations	Vehicles	505	5-	50
	Trucks	71	20–30[b]	91–101 (22%–30% increase)

[a.] *Approximately 20 to 30 truck trips are expected per day during the first 18 months of construction; the number would be less than 10 per day during the final 6 months of construction. Construction-related truck trips would include deliveries to the hydrogen production facility and the transmission line corridor.*

[b.] *The approximately 20 to 30 truck trips during operations include the up to 12 hydrogen tanker trucks as well as regular delivery and supply trucks.*

Plug Power has entered into a Highway Use Agreement with the Texas Department of Transportation (TxDOT). This agreement makes Plug Power responsible for traffic control on state roads and any construction, upgrading, maintenance, repair, rehabilitation and restoration work, or repair of damage caused by the transport of the Plug Power equipment over and along state roads. Implementation of this agreement would minimize any impacts of the Project on existing transportation facilities.

Given the low existing traffic volumes, the relatively low increase in traffic as a result of the Project, the stop sign to control traffic from the Project site to FM 209, the Highway Use Agreement, and the staggered work times for construction crews and operational employees, impacts on transportation as a result of the Project would not be significant.

3.7 Aesthetic and Visual Resources

The Project would be located in the west-central part of unincorporated Young County where development is sparse and rural. Views facing south, east, and west at the proposed site are characterized primarily by undeveloped rangeland and woodland habitats. Specifically, views facing west include unnamed dirt access roads; views facing south include the cleared dirt roadway that would be converted into the Project's access road. FM 209 and rural residences to the south are visually obstructed by woodland vegetation. Views facing north are characterized by an existing utility distribution corridor, including overhead transmission lines, and support structures.

Once completed, the Project would be partially visible from one residence, approximately 0.5 mile southeast of the Project boundary. The Project access road would be visible from FM 209 to the south, the Raw Trucking Company to the east, and potentially three residences within 0.5 mile of the proposed location for the hydrogen facility access road. The Project's transmission line would be visible when facing north or south from several residences and local roads between the generating facility and the transmission line's point of origin due to the height of the steel monopoles (110 to 140 feet) that would support the lines.

Construction of the Project would result in permanent impacts on the existing visual character of the site. The hydrogen facility would be mostly obstructed from view by surrounding vegetation. The appearance of the transmission line and access road associated with operations would be consistent with the appearance of existing utility distribution lines and nearby roadways, including FM 209. When operational, the Project would result in minor increases in nighttime light, which should not adversely affect nearby residents because the facility would be at least 0.5 mile from any residence. In addition, lighting would be directed downward where possible to minimize light pollution in surrounding areas.

Because of the isolated nature of the Project site and the presence of existing structures similar in visual character to Project features, impacts on aesthetic and visual resources resulting from the Project would not be significant.

3.8 Biological Resources and Threatened and Endangered Species

This section describes existing biological resources at the Project site. Biological resources include native or naturalized plant and animal species and the habitats within which they occur. Vegetation types include all existing terrestrial plant communities as well as individual component species that occur or may occur within the Project area. Wildlife generally includes commonly occurring species of mammals, birds, reptiles and amphibians, and fish that are not protected under the Endangered Species Act (ESA) or other regulations. Special-status species include plant and animal species that are listed as endangered, threatened, candidate, or proposed for listing under the ESA; birds protected under the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act; and species protected under other federal regulations. Federal candidate species and species proposed for listing are those species that could be federally listed as threatened or endangered in the near term but receive no statutory protection under the ESA. Critical habitat consists of federally designated geographic areas that contain essential features or areas that are essential to the conservation of federally listed species.

3.8.1 Vegetation and Wildlife

The Project site is in the Western Cross Timbers and Broken Red Plains Level IV Ecoregions within the Cross Timbers and Central Great Plains Level III Ecoregions (Griffith et al. 2007). The predominant vegetation types on the Project site are mesquite or mesquite-oak savanna, post oak (*Quercus stellata*) woodlands, and live oak (*Quercus virginiana*) woodlands. A variety of grasses and forbs occur within the savanna and woodland zones. No special-status plant species are known to occur in the vicinity of the Project site. The Western Cross Timbers habitat supports common species of mammals, birds, reptiles, and amphibians.

As outlined in Section 1.4, initial development of the Project was conducted prior to application for a loan guarantee and funded by Plug Power; it is not the subject of the requested federal financial assistance (loan guarantee) under review by LPO. Initial site development activities included clearing, grubbing, and grading the site for the 40-acre hydrogen production facility and 1.1-mile-long access road; installing the permanent stream crossing; establishing and clearing of the right-of-way for the 13.6-mile-long transmission line; and developing foundations for the transmission line structures.

Any surface disturbance can increase the possibility for the establishment of new populations of invasive, non-native species. Furthermore, construction of the Project may contribute to the establishment and spread of noxious weeds. As such, the Project would prepare a Noxious Weed Control Plan to minimize the establishment and spread of noxious weeds resulting from Project construction. This Noxious Weed Control Plan would incorporate BMPs regarding invasive species. These may include decontaminating construction equipment and vehicles upon departure from the Project site, among other controls. Direct impacts on wildlife expected as a result of Project construction could occur because of noise, resulting in the loss of wildlife habitat. However, construction noise would be temporary and sporadic; effected individuals would most likely relocate to adjacent undeveloped woodland areas.

3.8.2 Special-Status Species

The special-status species evaluated in this EA consist of the following:

- All federally protected species (i.e., listed as endangered or threatened);
- Additional species listed by the USFWS as candidate, proposed, or species review (USFWS 2024a); and
- State-listed endangered or threatened species.

Table 5 shows the special-status wildlife species with potential to occur at the Project site. Project activities could affect threatened, endangered, and special-status wildlife species in much the same way as other wildlife species, as discussed in Section 3.8.1. Species with low to moderate potential to occur on the Project site are discussed in more detail below.

3.8.2.1 Monarch Butterfly

Monarch butterflies require habitats rich in flowering plants to feed on their nectar. During their life cycle, monarch butterflies require milkweed (*Asclepias* spp.) to lay eggs. Milkweed was not observed on the Project site; therefore, suitable breeding habitat is not likely to be present. Any monarch butterfly use of the Project site would be limited to migratory stopover or flyover habitat.

3.8.2.2 Golden-cheeked Warbler

No potentially suitable nesting habitat was observed on the Project site. No tall, closed canopy, dense, mature stands of mixed Ashe juniper/deciduous forests were observed within the Project site (Western EcoSystems Technology, Inc. [WEST] 2022); most stands of juniper/deciduous forest at the Project site were small and lacking the maturity preferred by this species (WEST 2022). Golden-cheeked warblers have not been recorded in Young County (eBird 2022).

3.8.2.3 Whooping Crane

There are no historic whooping crane locations within the Project site; the closest observation is 5 miles northeast of the Project site (Palmer and LeBeau 2022). Three ponds and one wetland, identified as potential suitable whooping crane migration stopover habitat, occur within or adjacent to the Project site. These areas could be used as stopover habitat, particularly the wetland habitat south of the transmission line along the Brazos River. The Project would not disturb, alter, or remove this wetland habitat; therefore, the Project is not likely to adversely affect whooping crane, if present within the Project site.

To minimize the risk of whooping crane collisions with the proposed transmission line, Plug Power would mark the overhead shield wire and optical ground wire with appropriately designed BFDs. The installation of BFDs would increase the visibility of the transmission line for birds while transiting the area. Following Avian Power Line Interaction Committee (APLIC) guidelines, the Project would mark the inner 60 percent of higher-risk spans with BFDs (APLIC 2012).

In August 2024, the DOE submitted a biological assessment to USFWS to initiate informal consultation for a proposed “may affect, not likely to adversely affect” determination on whooping crane (WSP 2024c). Concurrence with this determination was received from USFWS on October 1, 2024 (Appendix A).

Table 2: Special-Status Wildlife Species with the Potential to Occur

Common Name Scientific Name	Listing Status (Federal/State)	Habitat	Potential to Occur
Invertebrates			
monarch butterfly *Danaus plexippus*	FC/--	Require milkweed host plant (primarily *Asclepias* spp.) to lay eggs.	**Low.** Milkweed was not identified during the plant surveys on the Project site. Any use of the site would be limited to migration through the area.
Texas fawnsfoot *Truncilla macrodon*	FC/ST	Flowing water, rivers, and large creeks. Occurs in the Colorado and Brazos Rivers and along the main stem of the Trinity River.	**None.** The mainstem Brazos River is excluded from known Texas fawnsfoot range (USFWS 2024b).
Birds			
Golden-cheeked warbler *Setophaga chrysoparia*	FE/SE	Tall, closed canopy, dense, mature stands of mixed Ashe juniper (*Juniperus ashei*)/deciduous forests for nesting.	**Low.** Could occur within wooded areas around the Project site, but no tall, closed canopy, dense, mature stands of mixed Ashe juniper/ deciduous forests occur within the Project site.
Piping plover *Charadrius melodus*	FT/ST	Tidal flats/shorelines and sand/dunes as wintering habitats. Winters along the gulf coast.	**None.** No suitable habitat occurs within the Project site. The Project site does not include tidal or dune habitats.
red knot *Calidris canutus rufa*	FT/--	Herbaceous wetland areas and tundra. Tidal flats/shorelines and sand/dunes as wintering habitats. Winters along the gulf coast.	**None.** No suitable wintering habitat was identified for this species within the Project site. In addition, this species has not been recorded in Young County (eBird 2022). It is unlikely to occur while overwintering or during migration due to lack of suitable habitat within the Project site.
whooping crane *Grus americana*	FE/SE	Breeds, migrates, winters, and forages in a variety of wetland and other habitats, including coastal marshes and estuaries, inland marshes, lakes, ponds, wet meadows and rivers, and agricultural fields. Uses a variety of habitats, mainly wetlands, during migration.	**Moderate.** There are no historic whooping crane locations within the Project site; however, potential suitable whooping crane migration stopover habitat is present within or adjacent to the Project site.
Fish			
sharpnose shiner *Notropis oxyrhynchus*	--/FE	Wide, shallow (often less than 0.5 meter [1.6 feet] deep) areas of flowing water where sandy river bottoms occur. Primarily restricted to the upper Brazos River and its major tributaries upstream of Possum Kingdom Lake.	**Moderate.** Suitable habitat in the Brazos River occurs within the Project site. Critical habitat for the species within the main branch of the Brazos River.

Common Name Scientific Name	Listing Status (Federal/State)	Habitat	Potential to Occur
smalleye shiner *Notropis buccula*	--/FE	Wide, shallow (often less than 0.5 meter [1.6 feet] deep) areas of flowing water where sandy river bottoms occur. Primarily restricted to the upper Brazos River and its major tributaries upstream of Possum Kingdom Lake.	**Moderate.** Suitable habitat in the Brazos River occurs within the Project site. Critical habitat for the species within the main branch of the Brazos River.

Key:
Federal: FE = Endangered; FT = Threatened; FC = Candidate
State: SE = Endangered; ST = Threatened; SC = Candidate

3.8.2.4 Sharpnose and Smalleye Shiner

Both the sharpnose and smalleye shiner are known to occur in Young County—specifically, the Brazos River basin. Project construction activities adjacent to the Brazos River are not anticipated to result in impacts on these species. The Project has been designed to avoid direct impacts on the Brazos River; as such, no equipment would enter the Brazos River channel. Dewatering within the river and water diversion activities are not components of the Project. Implementation of erosion control measures and revegetation of disturbed areas as part of the Project would minimize potential impacts on riparian habitat, thereby minimizing potential impacts on sharpnose and smalleye shiner populations.

3.8.3 Federally Designated Critical Habitat

Critical habitat has been designated in the Brazos River, within the Project site, for the federally endangered sharpnose shiner and smalleye shiner. As discussed in Section 3.8.2.3, the Project has been designed to avoid the Brazos River. Therefore, in-water work would not occur in the river. Erosion and sedimentation BMPs as well as a Project-specific SPCC Plan would be implemented to protect water quality in the Brazos River and its tributaries to the maximum extent practicable.

3.8.4 Migratory Bird Treaty Act

Impacts on protected species under the MBTA could occur if trees and shrubs that contain an active nest are removed. The removal of habitat or substantial disturbance during the breeding season would most likely result in the displacement of breeding birds and the abandonment of active nests. Noise-related construction activities and increased human presence could affect raptor nesting, roosting, and foraging activities; some species, such as golden eagles (*Aquila chrysaetos)*, are especially sensitive to disturbance. Changes in behavior could include increased alertness, turning toward the disturbance, fleeing the disturbance, changes in activity patterns, or nest abandonment. Raptors would be especially susceptible to disturbance early in the breeding season, possibly resulting in nest abandonment and failure.

The presence of transmission structures would provide perches and nesting sites for some raptor species. In some areas, the structures may be the only suitable nesting sites, allowing some species to use areas that would otherwise be unsuitable.

One American kestrel (*Falco sparverius*) and three unidentified non-eagle raptor nests were found in the transmission line right-of-way during the ground-based raptor nest survey conducted in March 2022. The Project would implement appropriate setbacks from these nests during construction to avoid unintentional nest removal or disturbance.

3.8.5 Bald and Golden Eagle Protection Act

No eagle nests were observed within or adjacent to the Project site during the ground-based raptor nest survey conducted in March 2022. However, nesting substrate for bald eagle (*Haliaeetus leucocephalus*) exists in the vicinity of the Project site. Given the results of the survey, if construction of the Project occurs before the next breeding season (February to June), impacts on nesting eagles would be unlikely. Plug Power would perform a bald eagle nest survey during the early nesting period and prior to construction. If a bald eagle nest is identified during surveys, tree clearing would not occur within 660 feet of the nest or within any woodlot supporting a nest tree. Any work within 660 feet of a nest or within the direct line of sight of a nest would be restricted from January 15 through July 31 to prevent disturbance during the egg-laying period until the young fledge.

3.8.6 Conclusion

Although most impacts on biological resources would be associated with construction, operation of the Project would require the occasional presence of people for facility inspection and maintenance. Human presence may result in wildlife temporarily fleeing an area, which would be within the animals' normal behavior patterns. In addition, some small wildlife individuals (e.g., rodents, rabbits, snakes, lizards) may be run over by vehicles. However, the inspection and maintenance visits would be infrequent, and the use of roads would be consistent with current use throughout the area. Because of the disturbed nature of the Project site, its lack of natural habitat, and the low potential for use by sensitive wildlife, as well as the Project's intent to restore disturbed areas of vegetation, LPO's review, and concurrence from USFWS that the Project would have no effect on listed species, except whooping crane (see Appendix B), impacts on biological resources, including listed species and critical habitat, as a result of the Project would not be significant.

3.9 Socioeconomics and Environmental Justice

3.9.1 Socioeconomics

The Project would be located in unincorporated Young County, Texas; it would not be subject to city/county zoning. The Project site, approximately 1 mile north of FM 209, is surrounded primarily by scattered rural residential properties and undeveloped rangeland/woodland habitat. The site is bordered on the north by an existing utility distribution corridor. The nearest hospital, Graham Regional Medical Center, is approximately 5.3 miles east of the site, and the nearest public school, Graham High School, is approximately 5.5 miles east of the site.

Beneficial socioeconomic impacts would occur from increased employment opportunities, tax revenue generation, and direct and indirect spending in the local economy. Project operations would create approximately 50 full-time permanent jobs, while Project construction would temporarily employ up to 315 full-time workers.

The Project intends to fill generated positions with skilled and capable individuals from the local workforce. Therefore, a substantial influx of new residents is not anticipated, and no new housing or supporting infrastructure would be necessary as a result of the Project. Occupied structures would not be removed by the Project. Adverse impacts on local housing, roadways, schools, hospitals, emergency services, and utilities are not expected. As such, adverse impacts related to socioeconomic resources resulting from Project development would not be significant.

3.9.2 Environmental Justice

LPO's review of environmental justice (EJ) issues focuses on Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations; the National-Scale Air Toxics Assessment (NATA) cancer risk and respiratory hazard index, as defined in EPA's EJ screening tool; and site-specific community centers (e.g., schools, day-care centers) near the Project site.

Executive Order 12898 directs federal agencies to address environmental and human health conditions in minority and low-income communities. The evaluation of EJ is dependent on determining whether high and adverse impacts from the Project would disproportionately affect minority or low-income populations in the affected community.

In accordance with EPA's EJ guidelines, minority populations should be identified when either 1) the minority population of the affected area exceeds 50 percent or 2) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

The ethnic and racial composition of Young County and the state of Texas is presented in Table 6. Minority populations make up less than 50 percent of the population in the county and are substantially smaller than the minority populations throughout the state. In Young County, the people-of-color population is 12 percent (see Table 7).

Table 3: Population, Ethnicity, and Poverty

	County	State
Total Population	18,124	30,503,301
Race/Ethnicity		
White	94.2%	76.8%
Black or African American	1.8%	13.6%
American Indian and Alaska Native	1.4%	1.1%
Asian	0.8%	6.0%
Native Hawaiian and Other Pacific Islander	0.1%	0.2%
Two or More Races	1.7%	2.3%
Hispanic or Latino[a]	21.0%	39.8%
Poverty	15.7%	14.0%

Note: All population and ethnicity data were gathered from the U.S. Census Bureau web page: https://www.census.gov/quickfacts/fact/table/youngcountytexas,TX,US/PST045223. Accessed: September 9, 2024.
[a] Hispanics may be of any race and are included in applicable race categories.

Table 4: EPA's EJ Screen Report

	Value	State Average	Percentile in State	U.S. Average	Percentile in U.S.
NATA* cancer risk (lifetime risk per million)	20	28	1	25	5
NATA* respiratory hazard index	0.2	0.3	1	0.31	4
People of color population	12%	58%	7	39%	25
Low-income population	29%	34%	46	31%	53

Notes: Selected Variables – Block Group: 485039504022, Texas, EPA Region 6. Approximate Population: 1,332.
**More information on the NATA can be found at https://www.epa.gov/national-air-toxics-assessment.*

The percentage of persons below the poverty level in Young County is 15.7 percent, which is not meaningfully different from the state average of 14 percent (see Table 6). In EPA's EJ screening tool (Table 7), the low-income population in the Project area is slightly lower than that of U.S. as a whole (29 percent versus 31 percent).The NATA cancer risk and respiratory hazard indices are a way to see how local residents compare to everyone else in the state as well as the entire country. For the NATA cancer risk index (lifetime risk per million), the Project is in an area that was in the fifth percentile in the U.S. (see Table 7). For the NATA respiratory hazard index, the Project is in an area that was in the fourth percentile in the U.S. (see Table 7). Both metrics indicate substantially lower risks of air toxic–induced health hazards in the vicinity of the Project compared to the entire U.S. In addition, a primary goal of the Project is to reduce emissions through clean energy generation, as discussed in Section 3.12.2, resulting in a further benefit to air quality.

Given the jobs created during construction, the 50 full-time permanent jobs created, and the Project's preference to fill such job openings with the local workforce, the Project would benefit the regional economy. There are no anticipated impacts that could result in disproportionate impacts on minority or low-income populations in the Project vicinity; therefore, EJ impacts would not be significant.

3.10 Health and Safety

Construction, operation, and maintenance of the Project would introduce minor potential for health and safety impacts. Potential health and safety risks from Project-related activities include accidental injuries during construction and operation, electric shock hazards related to high-voltage electrical systems, and hazards associated with the hydrogen generation and storage process, such as contact or an accidental release, equipment failure, employee and facility operator errors, or emergency or security situations. Adherence to Occupational Safety and Health Administration (OSHA) requirements would minimize these potential risks to health and safety. Detailed hazard assessments and safety procedures would be developed after the design phase and an operational analyses are completed.

The potential health and safety risks during construction are expected to be typical risks for any industrial or commercial construction site. Such risks are associated with the movement of heavy objects, including construction equipment; use of heavy machinery; and spills and exposures related to the storage and handling of chemicals and disposal of hazardous waste. During construction, safety measures, such as providing fencing around the construction site, establishing contained storage areas, and controlling the movement of construction equipment and personnel, would reduce the potential for accidents to occur.

During construction and operation of the high-voltage electrical transmission line, employees could be exposed to high-voltage systems and associated hazards, including electrical shock. However, employees would be protected from electrical hazards through proper maintenance for grounding, insulation, and electrical systems, along with proper training, all of which would be incorporated into the Project through safety policies, industry-standard OSHA practices, and routine procedures. Project-specific safety features and policies would be developed following completion of the design phase.

Security-related concerns would be addressed through development and implementation of a site security plan that would include 24-hour controlled access, with permanent fencing installed around the perimeter. Protection for the public during the construction phase of the Project would include the use of temporary fencing to enclose construction areas; additional permanent fencing would be added to surround the facility once construction is completed. Access to the site would be restricted to the gated main entrance.

Hydrogen is a highly flammable gas. As such, the production and storage of hydrogen can pose a risk. Fire and explosion could result if a leak occurs at a connection to the electrolyzer, within the hydrogen compressor enclosure, or on a hydrogen main manifold. To minimize the risks, the Applicant would develop maintenance strategies and safe operating procedures that would be in addition to engineered controls. Plug Power would coordinate with local emergency services providers during plant construction, educate personnel about the actual on-site equipment, and address service needs in the event of an emergency. Therefore, the likelihood of a fire or explosion occurring as a result of the Project is very low.

Plug Power would implement the following safety plans, programs, and procedures for the Project:

- Integrated Contingency Plan (ICP) – The plan would provide minimum requirements for the prevention, preparation, and response to natural and man-made incidents at the facility. The ICP would be prepared in accordance with the National Response Team ICP Guidance.
- Process Safety Management (PSM) Program – The program would ensure that hazards associated with producing hydrogen are identified, evaluated, and controlled. The PSM program would be prepared in accordance with OSHA's Process Safety Management Standard (29 CFR Part 1910.119).
- Risk Management Plan (RMP) – The plan would identify risks as well as methods for minimizing such risks. It would include a Prevention and Emergency Response Policy regarding notification of local emergency services providers and requests for response to an emergency.
- Additional safety programs would be implemented for the Project, including:
    - Electrical Safety Program
    - Hazard Assessment Program
    - Hearing Conservation Program
    - Heat and Cold Stress Program
    - Various Work Permits (e.g. Hot Work, Confined Space Entry, etc.)
    - Personal Protective Equipment Program
    - Management of Change Program
    - Integrated Operating Manual
    - Engineering Standing Order
    - Procedure Writer's Manual and Template

By meeting applicable federal, state, and local regulations (e.g., OSHA regulations) and establishing plans during construction and operation that promote a safe and healthy workplace, the Project would not present a significant risk to employees or the public or result in a significant impact on the environment.

3.11 Waste Management

Project-related waste streams produced during construction and operations would be limited primarily to fluids and materials that are not considered toxic or hazardous. These would include solid waste generated during construction and routine facility operations and maintenance and liquid waste associated with hydrogen manufacturing processes. Table 1 lists the anticipated waste that would be generated. As discussed in Section 3.3.2, liquid nonhazardous wastewater would be treated in the lined on-site evaporation ponds. Maintenance of the evaporation ponds would include the removal of any remaining waste on a routine basis. The waste would be disposed of at a regulated landfill or treatment facility.

During construction, Project-related waste streams would include waste created during general construction activities, such as relatively clean construction and building materials (e.g., wood, plastics, glass, metal scrap), surplus concrete, and packaging materials. These waste streams would be collected, diverted, and sorted for recycling or disposed of at an approved solid waste landfill. The Project would also be required to appropriately manage human waste generated during construction activities, which would be disposed of at a local landfill. Plug Power would work with Republic Services or another appropriate waste and recycling service provider and coordinate refuse pickup service for the site.

Construction of the Project would involve the use of mechanical equipment that would contain hazardous materials, such as fuel, oil, and lubricants. This equipment, and the hazardous materials required for operation, may need to be stored at staging areas. In addition, during the course of construction, equipment would need to be refueled or serviced on-site, requiring the use of hazardous materials (e.g., oil). Proper handling, storage, and disposal of such materials, in accordance with federal and state regulations, would minimize impacts on soil and groundwater by preventing accidental spills.

Similar to construction, waste produced during normal operations would include wood, plastics, glass, and packaging materials, along with human waste. When generated, these waste streams would be collected, diverted, and sorted for recycling or disposed of at an approved solid waste landfill. Liquid waste would be generated from equipment and facility maintenance. Liquid nonhazardous wastewater would be treated in the lined on-site evaporation ponds; a general permit for this has been obtained from TCEQ. Maintenance of the evaporation ponds would include the removal of any remaining waste on a routine basis and disposal at a regulated landfill or treatment facility.

Given the design measures, including the use of evaporation ponds; the non-toxic composition of the industrial wastewater produced during construction and operations; and the measures regarding handling, storage, and disposal, Project-related impacts during construction and operations would not be significant.

3.12 Cumulative Impacts

Cumulative impacts are potential effects on the environment from the incremental impact of the Project when added to other past, present, and reasonably foreseeable future actions undertaken by other agencies (federal or nonfederal) or persons (40 CFR Part 1508.1 [i.3]). Other past, present, and reasonably foreseeable future actions were identified through a review of active project lists and planning documents from the Nortex Regional Planning Commission, Young County, the Graham Chamber of Commerce, and TxDOT, with additional information provided by the Applicant and contacts at TxDOT.

The review identified the following current and reasonably foreseeable future projects:

- The initial site preparation work that was performed by Plug Power, including the access road
- The underground waterline to the Project site from the City wastewater treatment facility, which would be owned and maintained by the City
- The 117-turbine, 500 MW Young Wind Project, which is adjacent to the west end of the proposed transmission line corridor, approximately 0.2 mile away from the Project site at its closest point

LPO reviewed the identified projects in the region to determine the resources that may be subject to a cumulative impact. The review focused on the resources affected by the Project and resources that may be affected by both the Project and other projects in the region. Based on this review, the following resources were evaluated for cumulative impacts:

- Wetlands
- Greenhouse gas emissions and climate change

The Project, when considered with the identified projects in the region, would not have the potential to result in significant cumulative impacts on the resources evaluated in this EA because of the disturbed nature of the Project site and/or the lack of construction or operational overlap that could result in an incremental impact on a particular resource.

3.12.1 Wetlands

Plug Power's initial site preparation work at the green hydrogen production facility and access road was performed according to regulatory requirements and permit conditions, resulting in minimal environmental impacts on wetlands. Impacts resulted from vegetation clearing and grading on the 40-acre property, as well as the access road corridor, and the installation of culverts to maintain drainage patterns throughout the Project site. This work resulted in approximately 0.01 acre of impacts on the Medlan Branch of the Brazos River, which was permitted through the USACE. The initial site preparation activities would not contribute to cumulative effects on wetlands.

The reclaimed water pipeline would be installed underground along public rights-of-way from the Graham Sewer Plant to the planned hydrogen production facility. The pipe would follow Sewer Plant Road north from the Graham Sewer Plant, then continue west along Highway 67 and FM 209 to the hydrogen facility. At this time, the exact location of the pipe has not been determined; however, the design would avoid and minimize impacts on wetlands and streams. Because of the disturbed nature of the rights-of-way the pipe would follow, the opportunity to avoid WOTUS, and the temporary nature of the impacts that may occur, the reclaimed water pipe would not contribute to cumulative effects on wetlands.

The Young Wind Project was constructed in 2022 north and south of the Project transmission line. The NWI shows numerous mapped wetlands and streams within the boundary of the Young Wind Project; however, the majority of these wetlands and streams have been avoided by the Project. Any wetland impacts that may have resulted from the Young Wind Project would have been permitted by USACE, and mitigation would have occurred to ensure no net loss of wetland function. The Young Wind Project would not contribute to cumulative effects on wetlands.

The Project would avoid all wetlands and streams. No wetlands occur within the hydrogen production facility, and the site has already been cleared and graded. Wetlands and streams occur within the proposed transmission line corridor; however, these would be avoided by placing support structures outside of wetlands and stream boundaries This portion of the Project would consist of installing a

transmission line adjacent to existing transmission lines; and would not result in significant cumulative impacts on wetlandse.

3.12.2 Greenhouse Gas Emissions and Climate Change

The current science and study of the Earth's climate now shows with 95 percent certainty that human activity has been the dominant cause of observed global warming since the mid-20th century (Intergovernmental Panel on Climate Change 2013). Since the beginning of the industrial era, circa 1750, human activities have increased the concentration of GHGs, primarily carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, in the atmosphere. Rising global temperatures have been accompanied by changes in weather and climate, such as changes in rainfall, resulting in more floods, droughts or intense rain, rising sea levels, and Artic Sea ice decline, as well as more frequent and severe heat waves. Rising atmospheric GHG emission concentrations are significantly affecting the Earth's climate (CEQ 2016).

GHG emissions associated with construction of the Project would be minimal compared to the savings resulting from the use of green hydrogen produced at the facility. Project operations would be powered by renewable energy from the Young Wind Farm; minimal GHGs would be generated (i.e., from the combustion of diesel for emergency redundancy equipment, producing an estimated 230 tons of GHG per year). As discussed in Chapter 2, the facility would produce green hydrogen from water using renewable energy sources. The Project would use next-generation electrolyzer technology, combined with liquefaction (i.e., the conversion of hydrogen gas into a liquid) and distribution technologies, to reduce or avoid GHG emissions from production and operations.

The current plan is to bring hydrogen to market by transporting liquid hydrogen in diesel tanker trucks. Using the current average distance anticipated for the delivery of 45 tpd of hydrogen (i.e., 450 miles), the GHG footprint from the delivery of liquid hydrogen to market would be approximately 6,075 tons of carbon dioxide equivalent per year.

Currently, 95 percent of the hydrogen produced in the United States is "grey" hydrogen, which is produced from natural gas through a process called steam reforming. This releases carbon dioxide into the atmosphere. An equivalent grey hydrogen production plant producing 45 tpd of hydrogen would emit an estimated 194,799 tons of GHG per year (carbon dioxide equivalent per year). Through the Project's production of green hydrogen and delivery, as opposed to grey hydrogen, the net benefit would be an estimated reduction in GHG amounting to 188,494 tons of carbon dioxide equivalent per year.

Green hydrogen production would also reduce emissions of ozone precursors, particulate matter, and GHGs compared to hydrogen production from steam methane reforming and traditional energy sources. Therefore, cumulative impacts related to GHGs and climate change from operation of the Project and the other projects in the region would not be significant. The Project would serve to reduce overall GHG emissions on a national basis. Furthermore, Project operations would result in no carbon emissions. Because the Project would support GHG emissions reductions, impacts related to GHG emissions and climate change would be beneficial in the long term.

4. DRAFT FINDING

Based on this EA, DOE has determined that providing a federal loan guarantee to Plug Power to construct and operate a green hydrogen production facility in unincorporated Young County, Texas, will not have a significant effect on the human environment. Preparation of an environmental impact statement is therefore not required. DOE is issuing this Finding of No Significant Impact.

This Finding of No Significant Impact should not be construed as a final decision about issuance of a loan guarantee.

_____ _____

Todd Stribley Date
NEPA Compliance Officer
DOE Loan Programs Office

5. REFERENCES

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WSP USA, Inc. 2024c. *Limestone Green Hydrogen Project – Endangered Species Act Biological Assessment.* August 2, 2024.

6. List of Agencies Contacted

U.S. Army Corps of Engineers

U.S. Department of Agriculture, Natural Resources Conservation Service

U.S. Fish and Wildlife Service

Texas Commission on Environmental Quality

Texas Department of Transportation

Texas Historical Commission

Young County

City of Graham

7. LIST OF PREPARERS

U.S. Department of Energy

Todd Stribley, M.S., Environmental Science and Public Policy, 28 years of experience

Alicia Williamson, M.S., Environmental and Soil Science, 22 years of experience

Plug Power, Inc.

Andrew Temple, M.P.A., Public-Private Policy and Management, 18 years of experience

Mandy Chadwick, CSP, M.S., Environmental Management, 24 years of experience

Chris Hogan, M.A., Environmental Studies, 34 years of experience

WSP, USA

Michael D. Smith, Ph.D., Sociology (environmental and natural resources emphasis), 29 years of experience

Rob Rebel, P.E., B.S., Environmental Engineering, 19 years of experience

Marc Auten, B.S., Environmental Science, 20 years of experience

John Hunter, M.A., Anthropology, 24 years of experience

Tim Langer, Ph.D., Zoology, 30 years of experience

APPENDIX A AGENCY AND TRIBAL CORRESPONDENCE

APPENDIX A. CONSULTATION WITH AGENCIES AND NATIVE AMERICAN TRIBES

Organization		Date of Contact	Summary
Texas Commission on Environmental Quality – Jamie Zech		July 3, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment**
National Environmental Policy Act, MC-118 Texas Commission on Environmental Quality		July 3, 2024 August 1, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment** **TCEQ comments on NEPA Initiation letter**
Stefania Munoz National Environmental Policy Act, MC-118 Texas Commission on Environmental Quality		July 3, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment**
Texas Department of Transportation - Zach Husen, P.E.		July 3, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment**
Wastewater Permitting Section Manager - Texas Commission of Environmental Quality		July 3, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment**
Texas Commission on Environmental Quality - Water Gregg Easley, Manager		July 3, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment**
Texas Commission of Environmental Quality - Stormwater Team		July 3, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment**
Absentee-Shawnee Tribe of Indians of Oklahoma		July 3, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment**
Apache Tribe of Oklahoma**		July 3, 2024 August 1, 2024	DOE Notice of Intent to Prepare an Environmental Assessment DOE called to confirm receipt
Caddo Nation, Oklahoma		July 3, 2024 August 1, 2024	DOE Notice of Intent to Prepare an Environmental Assessment DOE called to confirm receipt
Comanche Nation, Oklahoma		July 3, 2024 August 1, 2024	DOE Notice of Intent to Prepare an Environmental Assessment DOE called to confirm receipt
Delaware Nation, Oklahoma		July 3, 2024 August 1, 2024	DOE Notice of Intent to Prepare an Environmental Assessment DOE called to confirm receipt
Tonkawa Tribe of Indians of Oklahoma		July 3, 2024 August 1, 2024	DOE Notice of Intent to Prepare an Environmental Assessment DOE called to confirm receipt
Wichita And Affiliated Tribes		July 3, 2024	DOE Notice of Intent to Prepare an Environmental Assessment

		August 1, 2024 September 5, 2024 September 18, 2024	DOE called to confirm receipt and received request for additional information Transmittal of follow up memo with information requested by THPO Follow up email to confirm receipt
Tonawanda Seneca Nation (The Nation)		January 22, 2024 January 29, 2024 February 29, 2024 March 4, 2024 April 15, 2024 May 29, 2024 July 22, 2024 October 16, 2024 December 2, 2024	**Letter from The Nation regarding Plug Power Project and Requesting Consultation** **Letter from The Nation regarding Plug Power Project and Consultation** **LPO response to Letter from The Nation dated January 22, 2024** **Letter from The Nation regarding Plug Power Project and Consultation** Virtual Meeting with The Nation to discuss Plug Power Project and Consultation Virtual Meeting with The Nation to discuss Plug Power Project and Consultation **DOE Notice of Intent to Prepare an Environmental Assessment** Virtual Meeting with The Nation to discuss Plug Power Project and draft EA Receipt of comments from The Nation on preliminary draft EA
Texas Historical Commission (THC)		August 15, 2024 September 12, 2024 September 26, 2024 October 11, 2024 October 18, 2024 November 25, 2024 December 4, 2024	**Submittal of – Proposed scope of work and associated shapefile of the Area of Potential Effect** **Submittal of architectural viewshed survey for THC review (confirmation email)** **Submittal of Phase I Intensive archaeological survey for THC review (confirmation email)** **TCH concurrence no Limestone architectural viewshed survey** **TCH concurrence on Limestone above ground resources and archaeological survey** **DOE request for THC concurrence on Plug Power Limestone Site** **THC Concurrence on DOE Findings**

US Army Corps of Engineers		August 12, 2024 August 22, 2024 November 18, 2024	Pre-application submittal in support of Plug Power Limestone Project Additional information provided by the Army Corps for DOE review **Concurrence from USACE on Limestone Project**
US Fish and Wildlife Service		August 14, 2024 August 15, 2024 October 1, 2024	**DOE Notice of Intent to Prepare an Environmental Assessment and request for technical input on IPAC for project site** Transmittal of technical information for USFWS review. **Response and concurrence from USFWS**
US Department of Agriculture		September 16, 2024 September 19, 2024	**DOE Request for Farmland Conservation Rating** **Concurrence from USDA**

Only **bolded** correspondence included in Appendix.

**Note an individual letter was submitted to each aforementioned Tribe, but only one example letter is included in this appendix to reduce overall file size and number of pages.

Department of Energy
Washington, DC 20585

July 3, 2024

Jamie Zech
Senior Project Manager
Texas Commission on Environmental Quality
PO Box 13087
Austin, TX 78711

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power-Limestone Facility

Dear Jamie Zech,

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project).

Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the City of Graham, along Highway 209 (Figure 1). The project area is located entirely on private land and consists of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line (Figure 2). Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

Using private funds that are not subject to the federal loan guarantee under review by DOE, the Applicant has already completed the following site preparation activities: cleared, grubbed, and graded the 40-acre hydrogen production facility site; cleared, grubbed, and graded the 1.1-mile-long access road including conducted final grading and installation of the subbase, and installation of the permanent stream crossing; and finally, cleared and placed foundations for the transmission line structures in the right-of-way for the 13.6-mile transmission line.

The Applicant has applied to DOE's Clean Energy Financing Program for financial support (a federal loan guarantee) to complete construction of the Limestone facility, specifically installation of the manufacturing equipment and associated general building equipment and systems, final site development activities to hydrogen facility and transmission line, and startup of the facility.

DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to support completion of the Project. The DOE LPO is preparing an EA to evaluate and inform DOE's consideration of providing a federal loan guarantee to complete construction of the facility and ancillary facilities. The decision to prepare an EA was made in accordance with the requirements of NEPA, the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

The DOE NEPA regulations provide for the notification of host states of NEPA determinations and for the opportunity for host states to review EAs prior to DOE approval. This process is intended to improve coordination and to facilitate early and open communication. DOE will provide the draft EA to you for your review and comment.

If you or your staff would like to receive further information concerning this project or DOE's NEPA process, please contact me in the DOE Loan Programs Office at 202-526-7272, or email at LPO_Environmental@hq.doe.gov.

Respectfully,

Alicia Williamson

Alicia Williamson
NEPA Document Manager
Loan Programs Office

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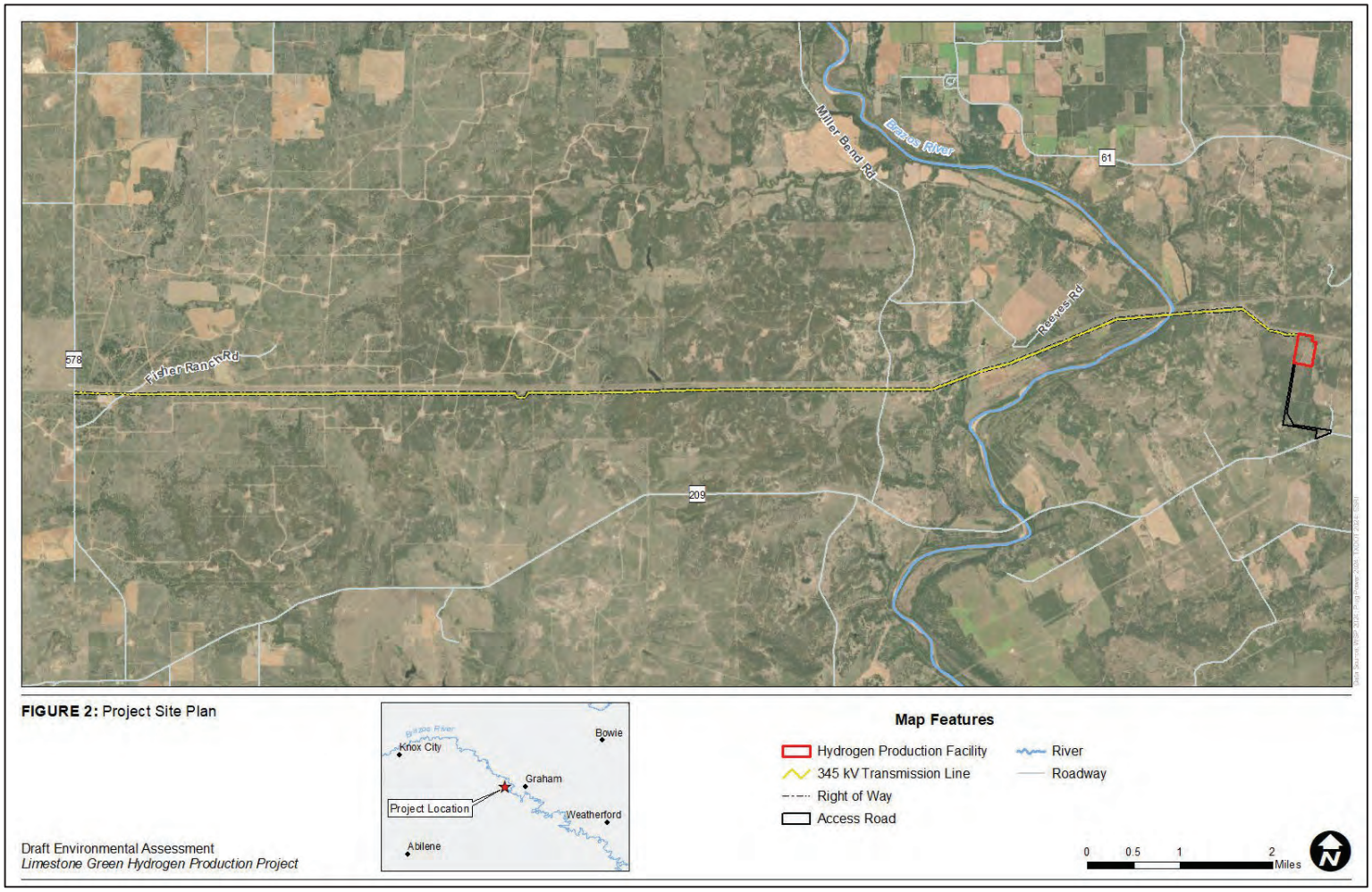
Date: 2024.07.03 17:06:25 -04'00'

Attachments:
Figure 1 Project Location
Figure 2 Project Site Plan



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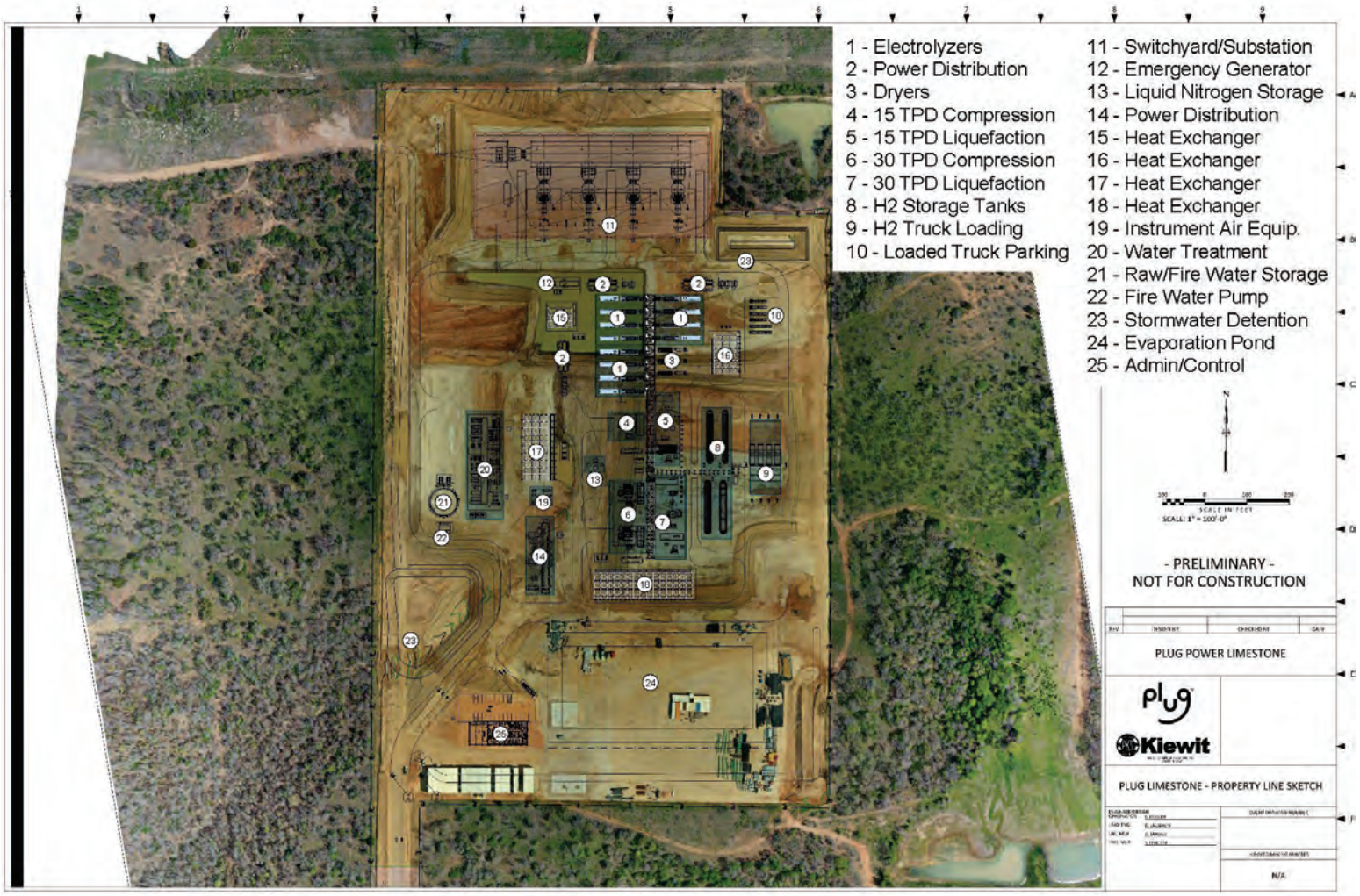

Figure 2: Project Site Plan

Department of Energy
Washington, DC 20585

July 3, 2024

National Environmental Policy Act, MC-118
Texas Commission on Environmental Quality
PO Box 13087
Austin, TX 78711-3087

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power-Limestone Facility

To Whom It May Concern:

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project).

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Using private funds that are not subject to the federal loan guarantee under review by DOE, the Applicant has already completed the following site preparation activities: cleared, grubbed, and graded the 40-acre hydrogen production facility site; cleared, grubbed, and graded the 1.1-mile-long access road including conducted final grading and installation of the subbase, and installation of the permanent stream crossing; and finally, cleared and placed foundations for the transmission line structures in the right-of-way for the 13.6-mile transmission line.

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DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to support completion of the Project. The DOE LPO is preparing an EA to evaluate and inform DOE's consideration of providing a federal loan guarantee to complete construction of the facility and ancillary facilities. The decision to prepare an EA was made in accordance with the requirements of NEPA, the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

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If you or your staff would like to receive further information concerning this project or DOE's NEPA process, please contact me in the DOE Loan Programs Office at 202-526-7272, or email at LPO_Environmental@hq.doe.gov.

Respectfully,

Alicia Williamson

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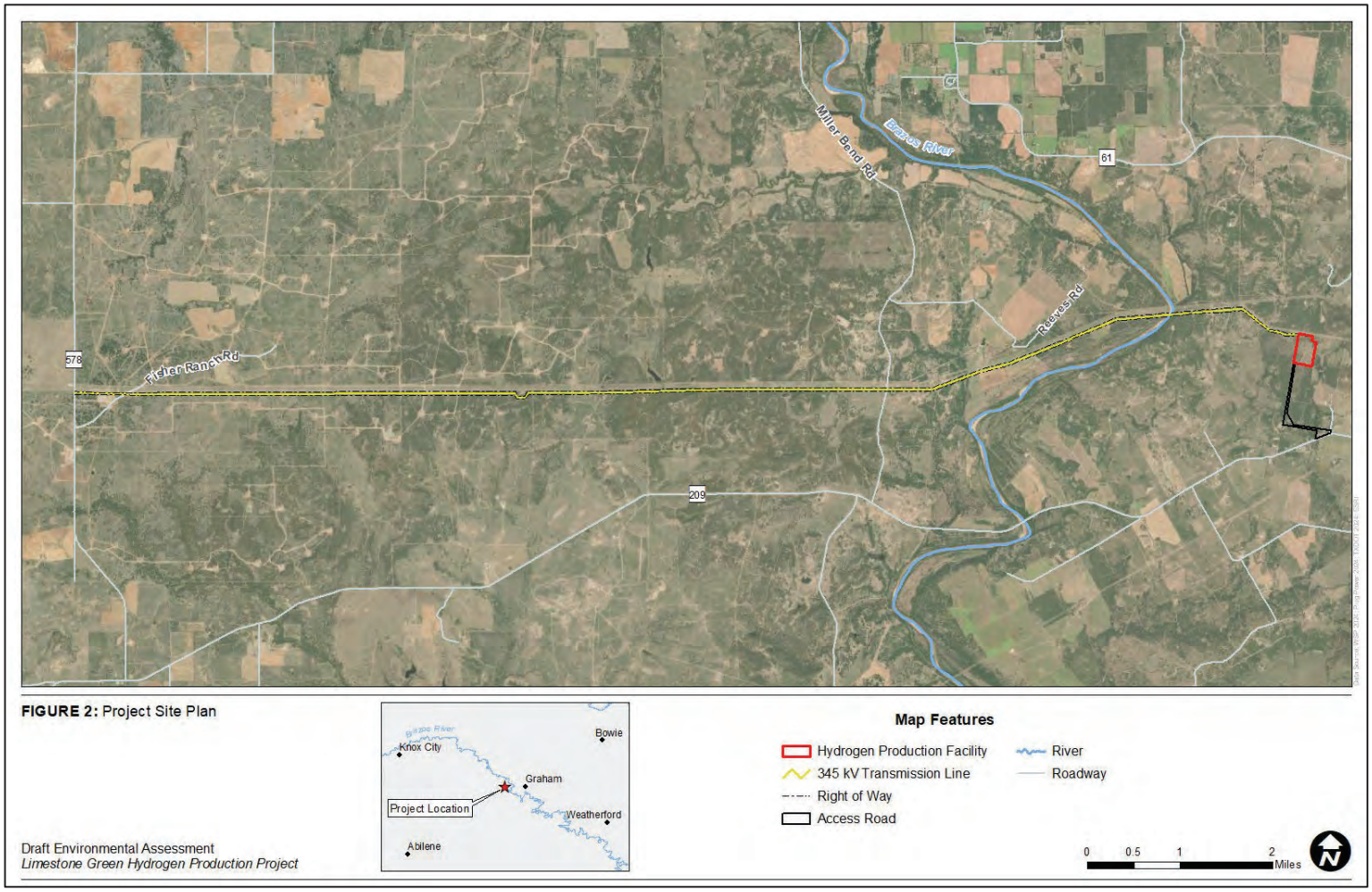
Alicia Williamson
NEPA Document Manager
Loan Programs Office

Attachments:
Figure 1 Project Location
Figure 2 Project Site Plan



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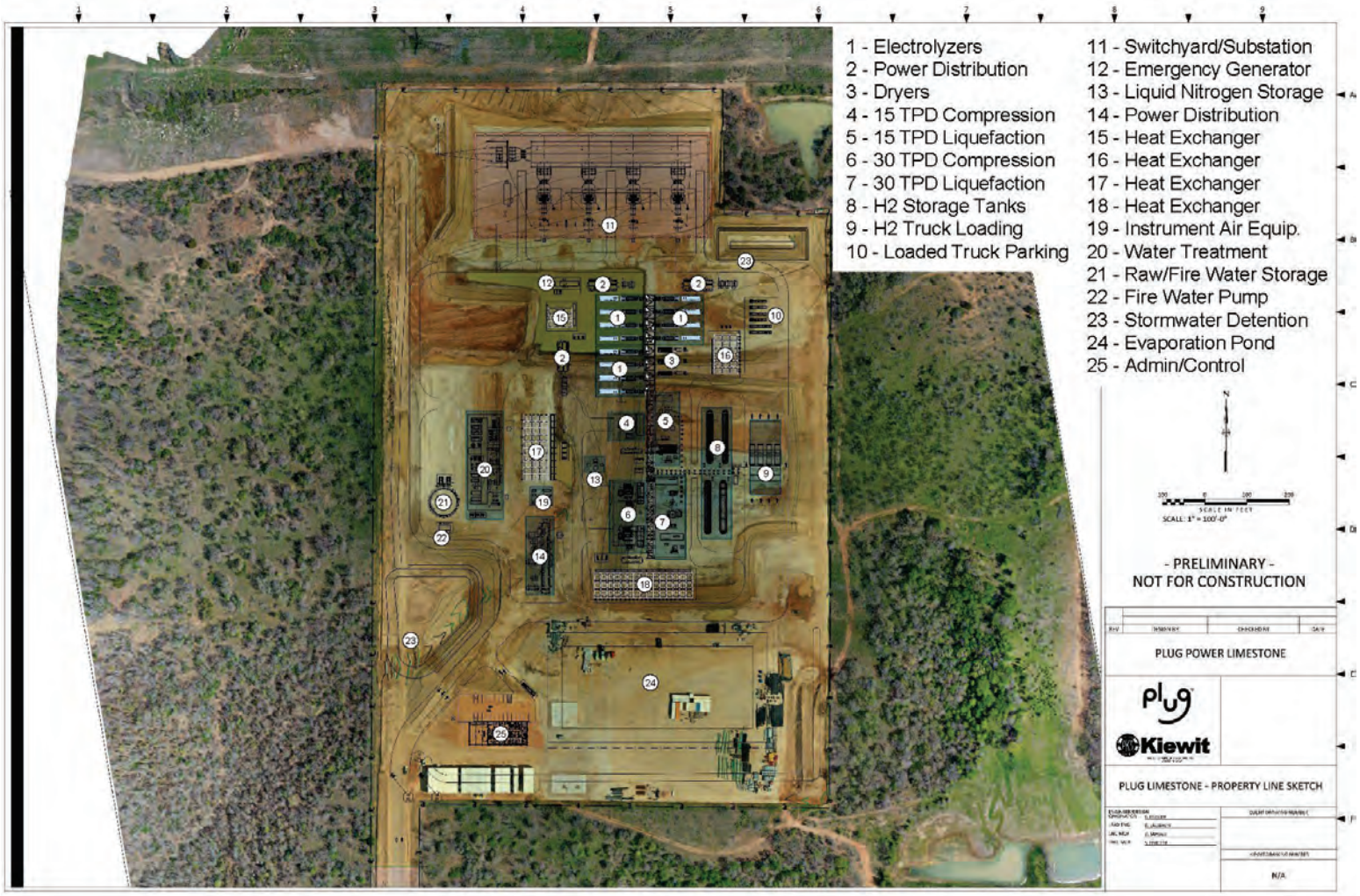

Figure 2: Project Site Plan

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 1, 2024

Alicia Williamson
Environmental Protection Specialist
US Department of Energy
Loan Programs Office- Environmental Compliance
Washington, DC 20585

Via: **E-mail**

Re: **TCEQ NEPA Request #2024-209. PLUG POWER-LIMESTONE FACILITY. Young County.**

Dear Ms. Williamson,

The Texas Commission on Environmental Quality (TCEQ) has reviewed the above-referenced project and offers the following comments:

The proposed action is located in Young County, which is currently designated attainment/unclassifiable for the National Ambient Air Quality Standards for all six criteria air pollutants. Federal Clean Air Act, §176(c) general conformity requirements do not apply for this action.

We recommend the environmental assessment address actions that will be taken to prevent surface and groundwater contamination.

Any debris or waste disposal should be at an appropriately authorized disposal facility.

Without knowing the complete process, there are a couple ways this could be regulated from a UIC standpoint. Depending on what the supply is for the hydrogen production and what the disposal options are would determine what is needed regulatorily for disposal of waste. If the waste is being injected underground then it would require, most likely, a Class I injection well permit from TCEQ, or it could be regulated under the Railroad Commission. The regulatory aspect for disposal of waste via injection depends on what is being utilized as the supply for hydrogen production. The waste disposal via injection could fall under the jurisdiction of the Railroad Commission or TCEQ.

Thank you for the opportunity to review this project. If you have any questions, please contact the agency NEPA coordinator at (512) 239-5538 or NEPA@tceq.texas.gov

Sincerely,

Ryan Vise,
Division Director
External Relations

Department of Energy
Washington, DC 20585

July 3, 2024

Stefania Munoz
National Environmental Policy Act, MC-118
Texas Commission on Environmental Quality
PO Box 13087
Austin, TX 78711-3087

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power-Limestone Facility

Dear Stefania Munoz:

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project).

Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the City of Graham, along Highway 209 (Figure 1). The project area is located entirely on private land and consists of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line (Figure 2). Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

Using private funds that are not subject to the federal loan guarantee under review by DOE, the Applicant has already completed the following site preparation activities: cleared, grubbed, and graded the 40-acre hydrogen production facility site; cleared, grubbed, and graded the 1.1-mile-long access road including conducted final grading and installation of the subbase, and installation of the permanent stream crossing; and finally, cleared and placed foundations for the transmission line structures in the right-of-way for the 13.6-mile transmission line.

The Applicant has applied to DOE's Clean Energy Financing Program for financial support (a federal loan guarantee) to complete construction of the Limestone facility, specifically installation of the manufacturing equipment and associated general building

equipment and systems, final site development activities to hydrogen facility and transmission line, and startup of the facility.

DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to support completion of the Project. The DOE LPO is preparing an EA to evaluate and inform DOE's consideration of providing a federal loan guarantee to complete construction of the facility and ancillary facilities. The decision to prepare an EA was made in accordance with the requirements of NEPA, the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

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Respectfully,

Alicia Williamson

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Date: 2024.07.03 17:11:42 -04'00'

Alicia Williamson
NEPA Document Manager
Loan Programs Office

Attachments:
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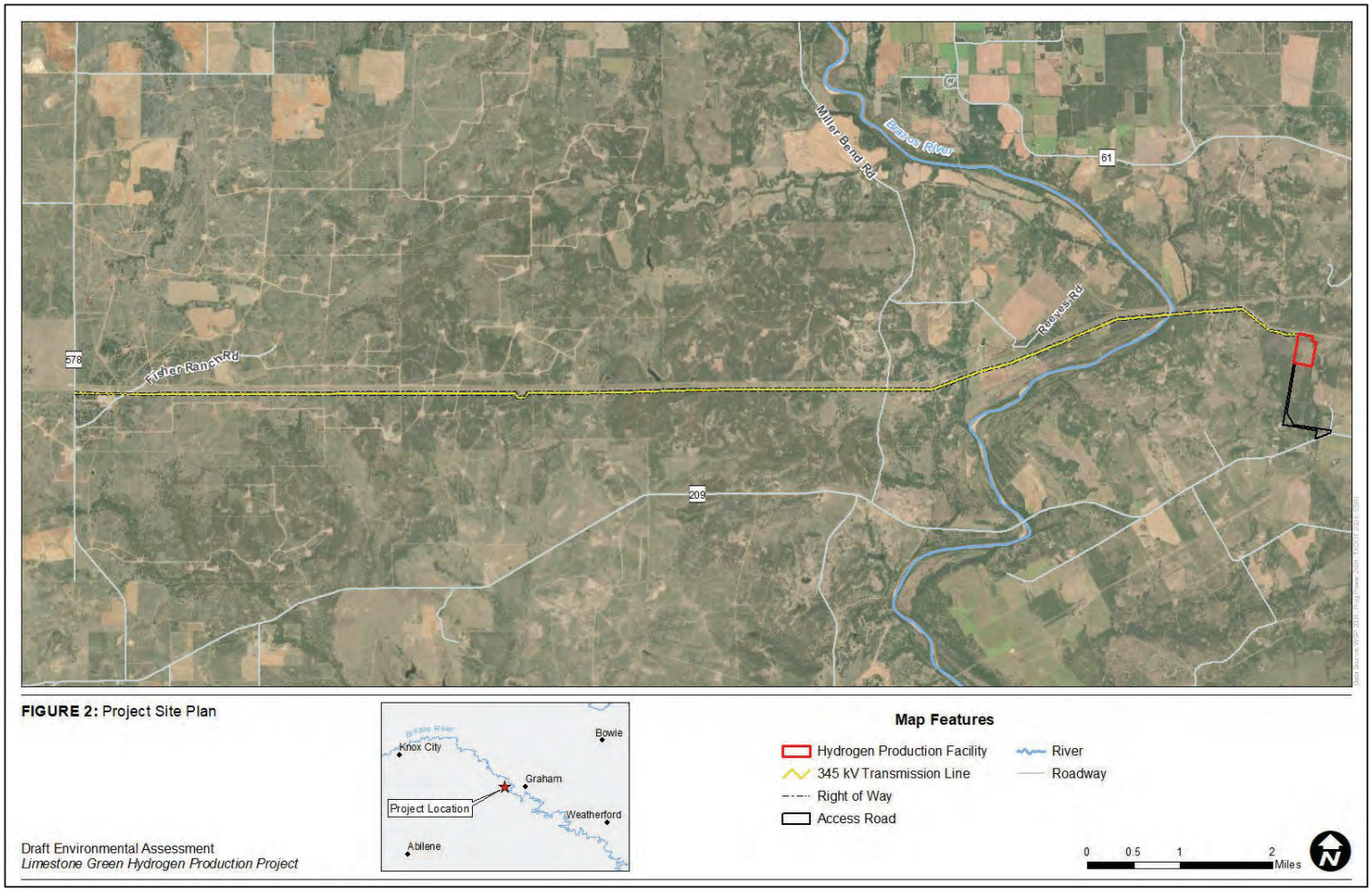
Figure 2 Project Site Plan



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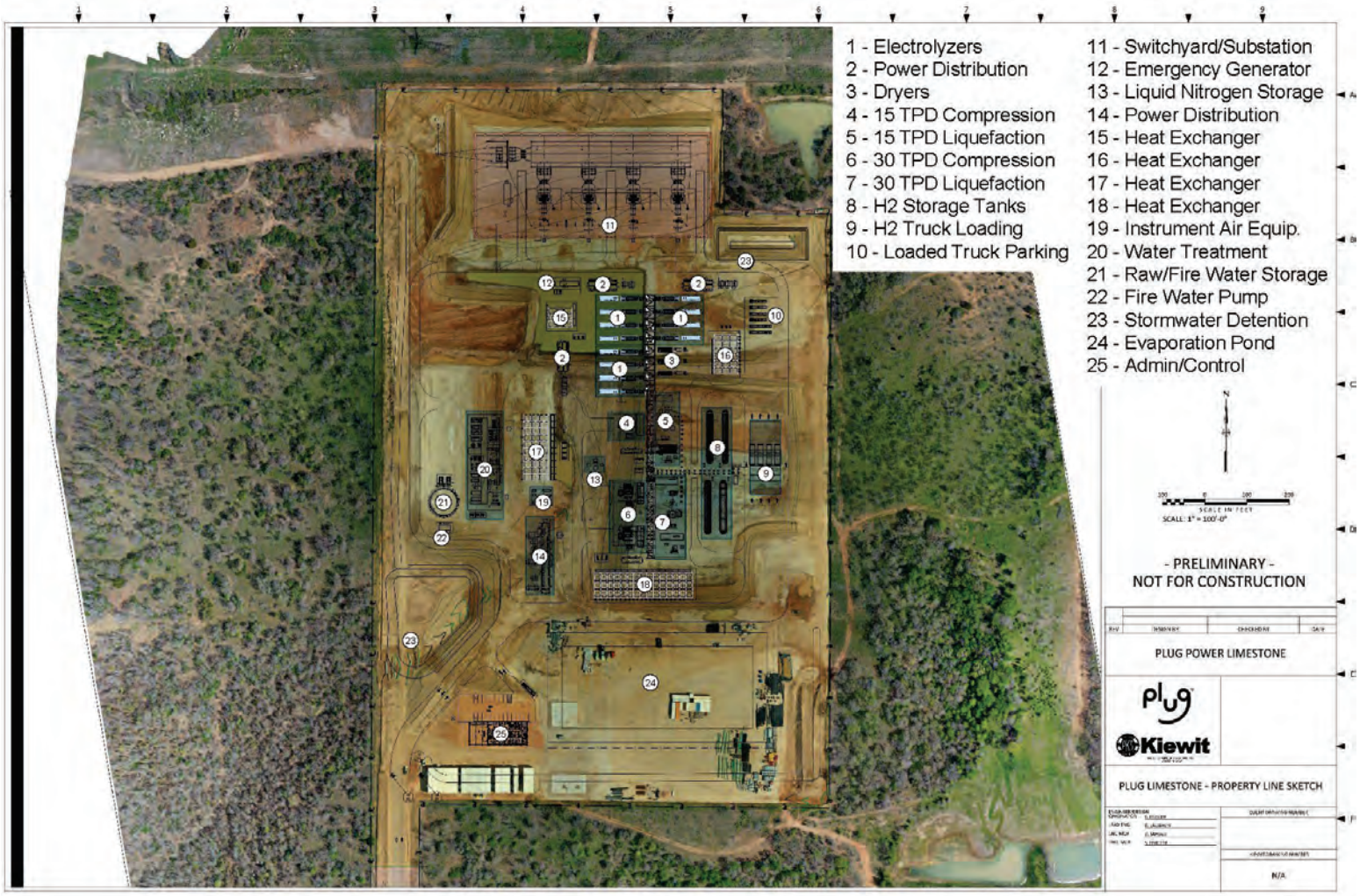

Figure 2: Project Site Plan

Department of Energy
Washington, DC 20585

July 3, 2024

Zach Husen, P.E.
Texas Department of Transportation
848 US 380
West Graham, TX 76450

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power-Limestone Facility

Dear Zach Husen,

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project).

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Respectfully,

Alicia Williamson

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NEPA Document Manager
Loan Programs Office

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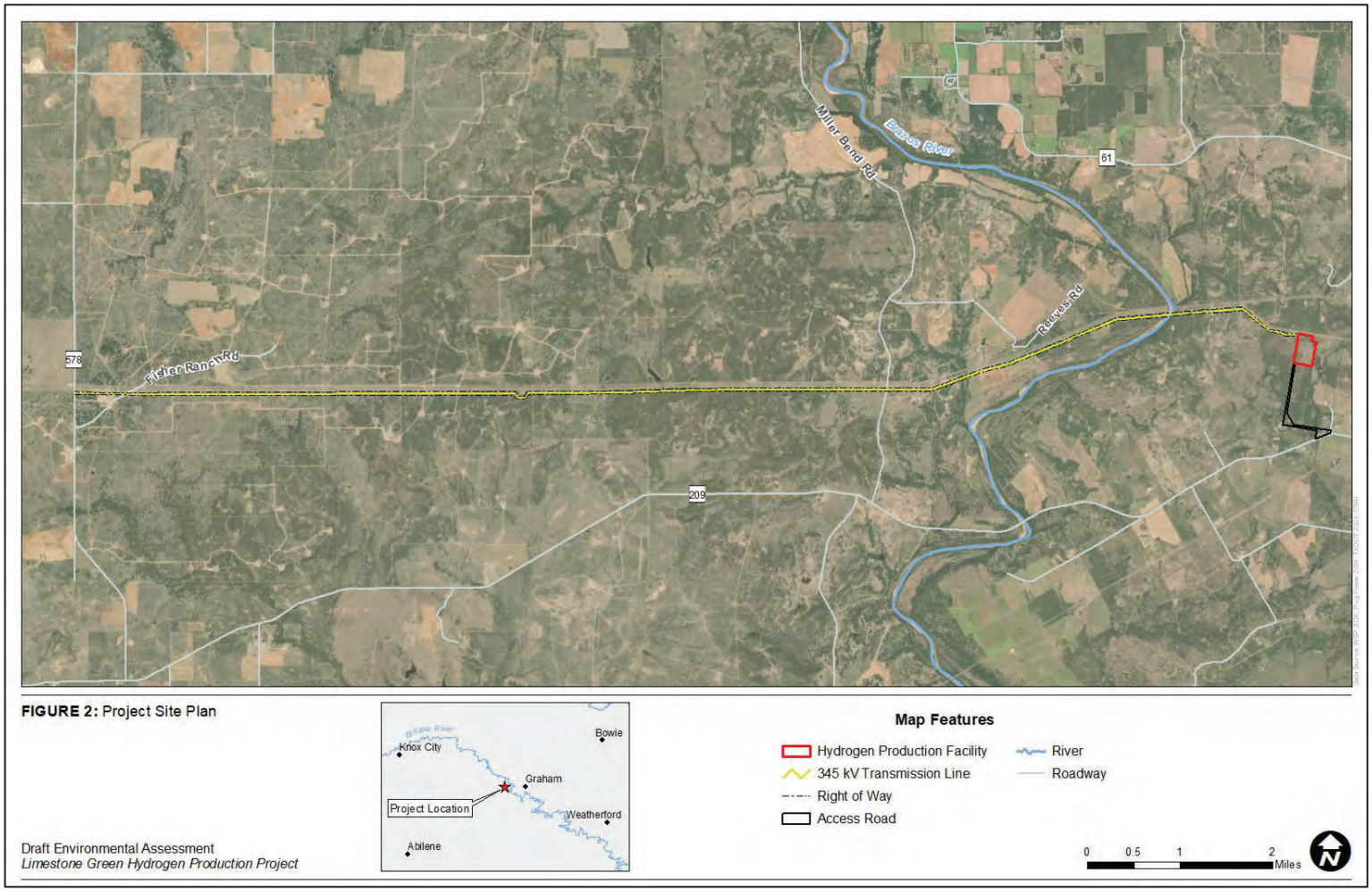

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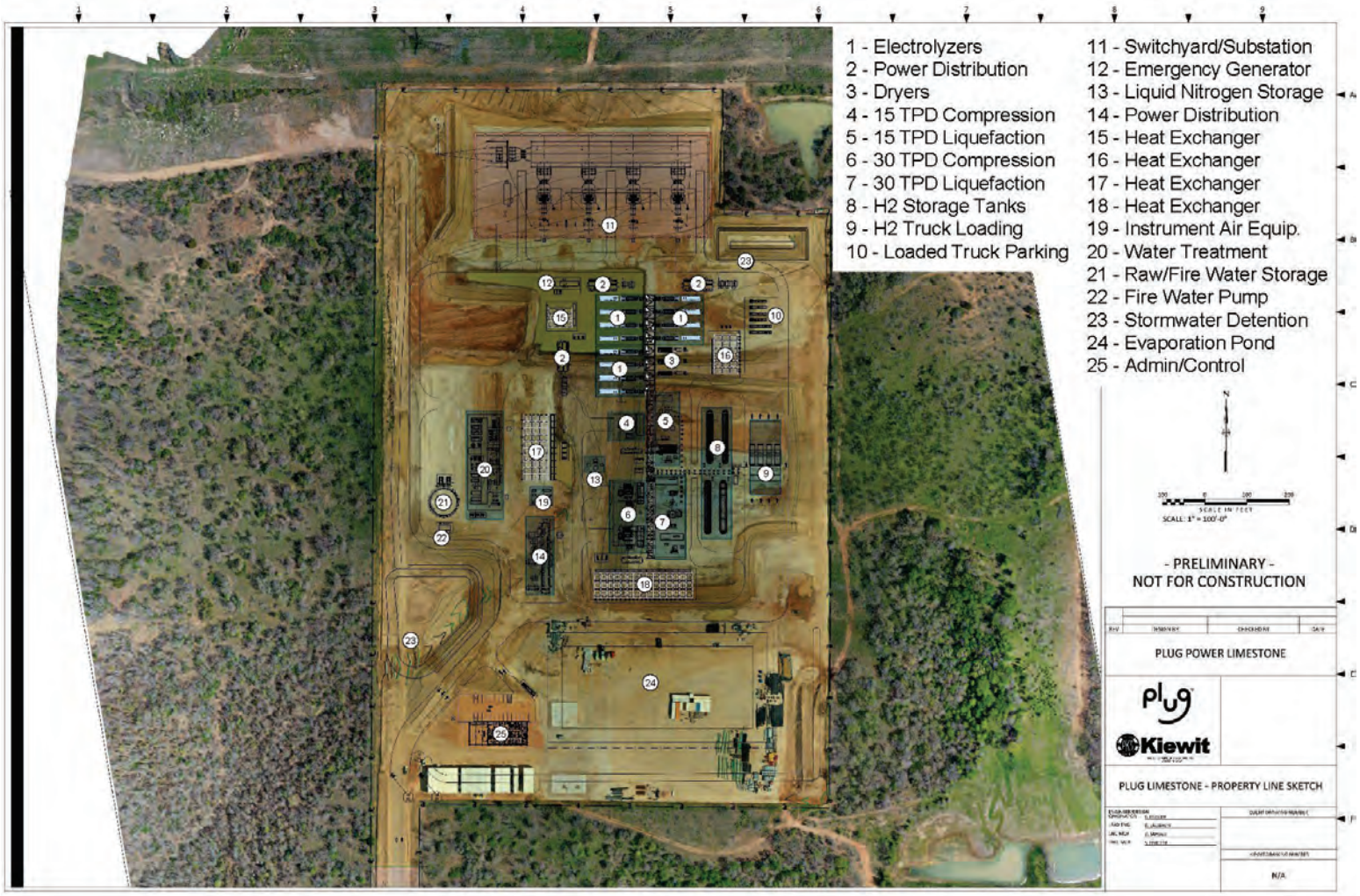

Figure 2: Project Site Plan

Department of Energy
Washington, DC 20585

July 3, 2024

Mathew Udenenwu
Wastewater Permitting Section Manager
Texas Commission of Environmental Quality
Applications Review and Processing Team (Mailing Code 148)
PO Box 13087
Austin, TX 78711

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power-Limestone Facility

Dear Mathew Udenenwu,

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project).

Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the City of Graham, along Highway 209 (Figure 1). The project area is located entirely on private land and consists of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line (Figure 2). Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

Using private funds that are not subject to the federal loan guarantee under review by DOE, the Applicant has already completed the following site preparation activities: cleared, grubbed, and graded the 40-acre hydrogen production facility site; cleared, grubbed, and graded the 1.1-mile-long access road including conducted final grading and installation of the subbase, and installation of the permanent stream crossing; and finally, cleared and placed foundations for the transmission line structures in the right-of-way for the 13.6-mile transmission line.

The Applicant has applied to DOE's Clean Energy Financing Program for financial support (a federal loan guarantee) to complete construction of the Limestone facility, specifically installation of the manufacturing equipment and associated general building

equipment and systems, final site development activities to hydrogen facility and transmission line, and startup of the facility.

DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to support completion of the Project. The DOE LPO is preparing an EA to evaluate and inform DOE's consideration of providing a federal loan guarantee to complete construction of the facility and ancillary facilities. The decision to prepare an EA was made in accordance with the requirements of NEPA, the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

The DOE NEPA regulations provide for the notification of host states of NEPA determinations and for the opportunity for host states to review EAs prior to DOE approval. This process is intended to improve coordination and to facilitate early and open communication. DOE will provide the draft EA to you for your review and comment.

If you or your staff would like to receive further information concerning this project or DOE's NEPA process, please contact me in the DOE Loan Programs Office at 202-526-7272, or email at LPO_Environmental@hq.doe.gov.

Respectfully,

Alicia Williamson

ALICIA WILLIAMSON
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Date: 2024.07.03 16:57:41 -04'00'

Alicia Williamson
NEPA Document Manager
Loan Programs Office

Attachments:
Figure 1 Project Location
Figure 2 Project Site Plan

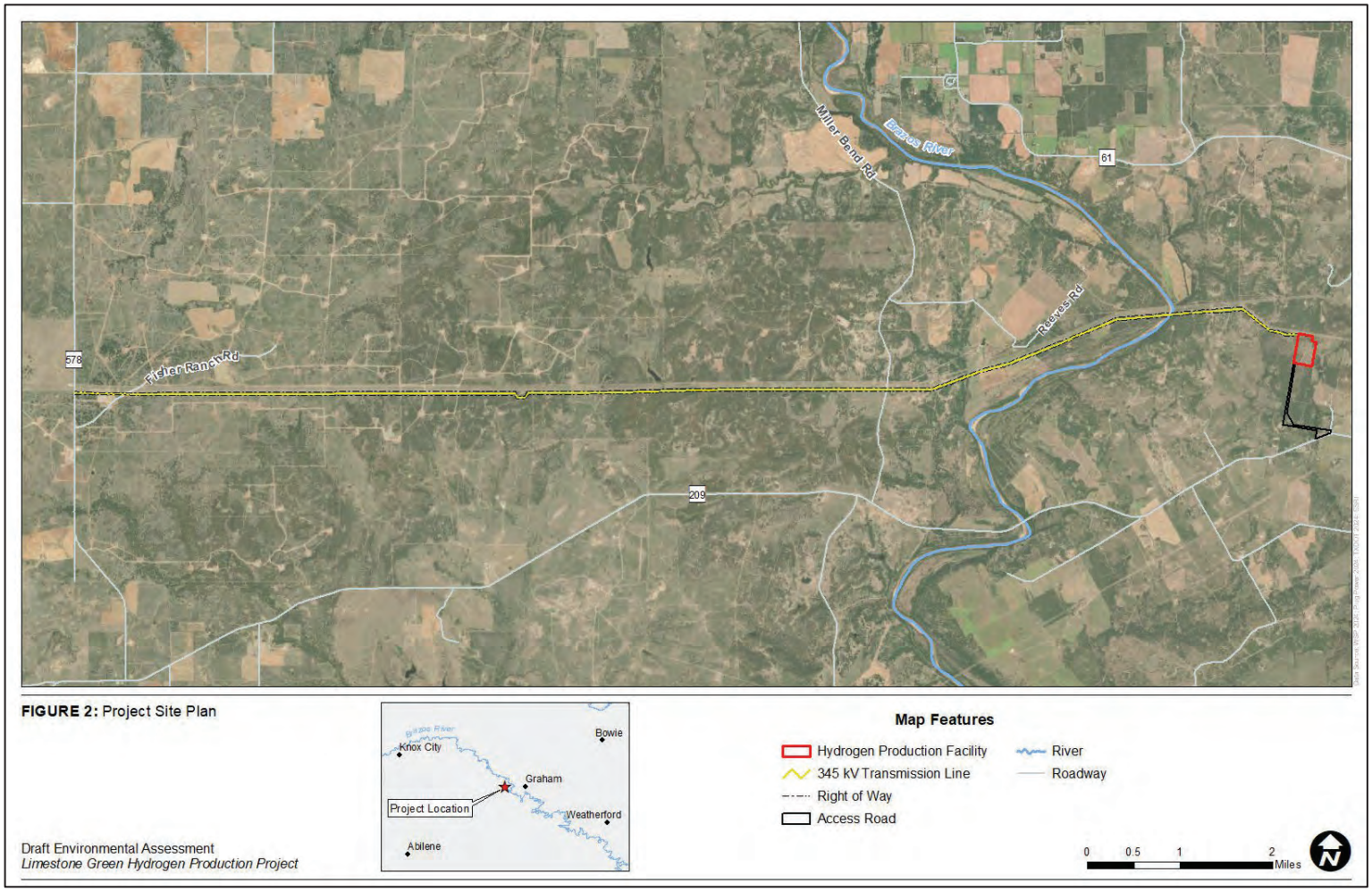

Figure 1: Project Location

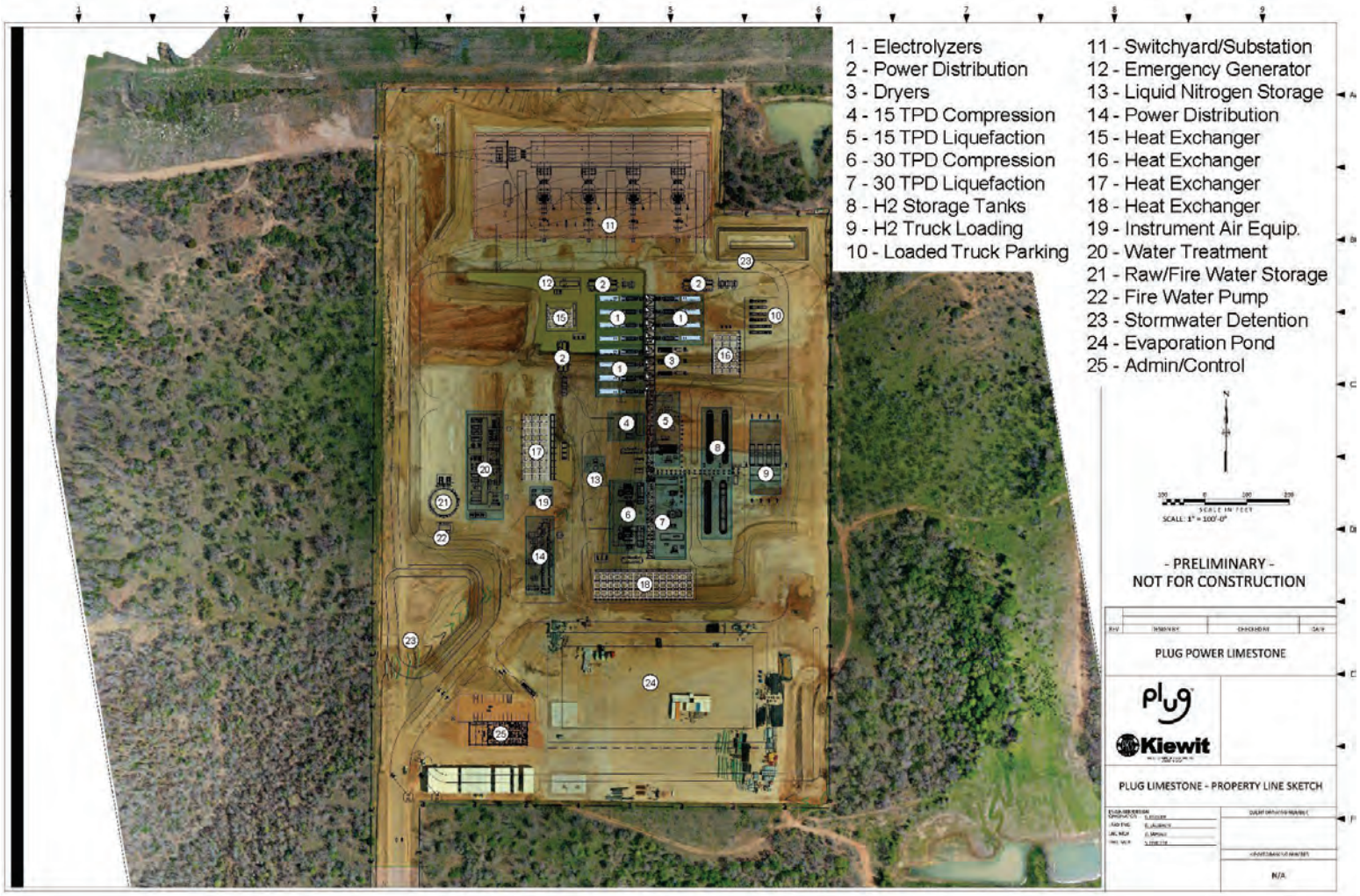

Figure 2: Project Site Plan

Department of Energy
Washington, DC 20585

July 3, 2024

Gregg Easley
Manager
Texas Commission on Environmental Quality Water
401 Coordinator; PO Box 13087
Austin, TX 78711

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power-Limestone Facility

Dear Gregg Easley,

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project).

Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the City of Graham, along Highway 209 (Figure 1). The project area is located entirely on private land and consists of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line (Figure 2). Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

Using private funds that are not subject to the federal loan guarantee under review by DOE, the Applicant has already completed the following site preparation activities: cleared, grubbed, and graded the 40-acre hydrogen production facility site; cleared, grubbed, and graded the 1.1-mile-long access road including conducted final grading and installation of the subbase, and installation of the permanent stream crossing; and finally, cleared and placed foundations for the transmission line structures in the right-of-way for the 13.6-mile transmission line.

The Applicant has applied to DOE's Clean Energy Financing Program for financial support (a federal loan guarantee) to complete construction of the Limestone facility, specifically installation of the manufacturing equipment and associated general building equipment and systems, final site development activities to hydrogen facility and transmission line, and startup of the facility.

DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to support completion of the Project. The DOE LPO is preparing an EA to evaluate and inform DOE's consideration of providing a federal loan guarantee to complete construction of the facility and ancillary facilities. The decision to prepare an EA was made in accordance with the requirements of NEPA, the Council on Environmental Quality regulations for implementing the Page 2 of 3 procedural provisions of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

The DOE NEPA regulations provide for the notification of host states of NEPA determinations and for the opportunity for host states to review EAs prior to DOE approval. This process is intended to improve coordination and to facilitate early and open communication. DOE will provide the draft EA to you for your review and comment.

If you or your staff would like to receive further information concerning this project or DOE's NEPA process, please contact me in the DOE Loan Programs Office at 202-526-7272, or email at LPO_Environmental@hq.doe.gov.

Respectfully,

Alicia Williamson

ALICIA WILLIAMSON
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Date: 2024.07.03 16:54:45 -04'00'

Alicia Williamson
NEPA Document Manager
Loan Programs Office

Attachments:
Figure 1 Project Location
Figure 2 Project Site Plan

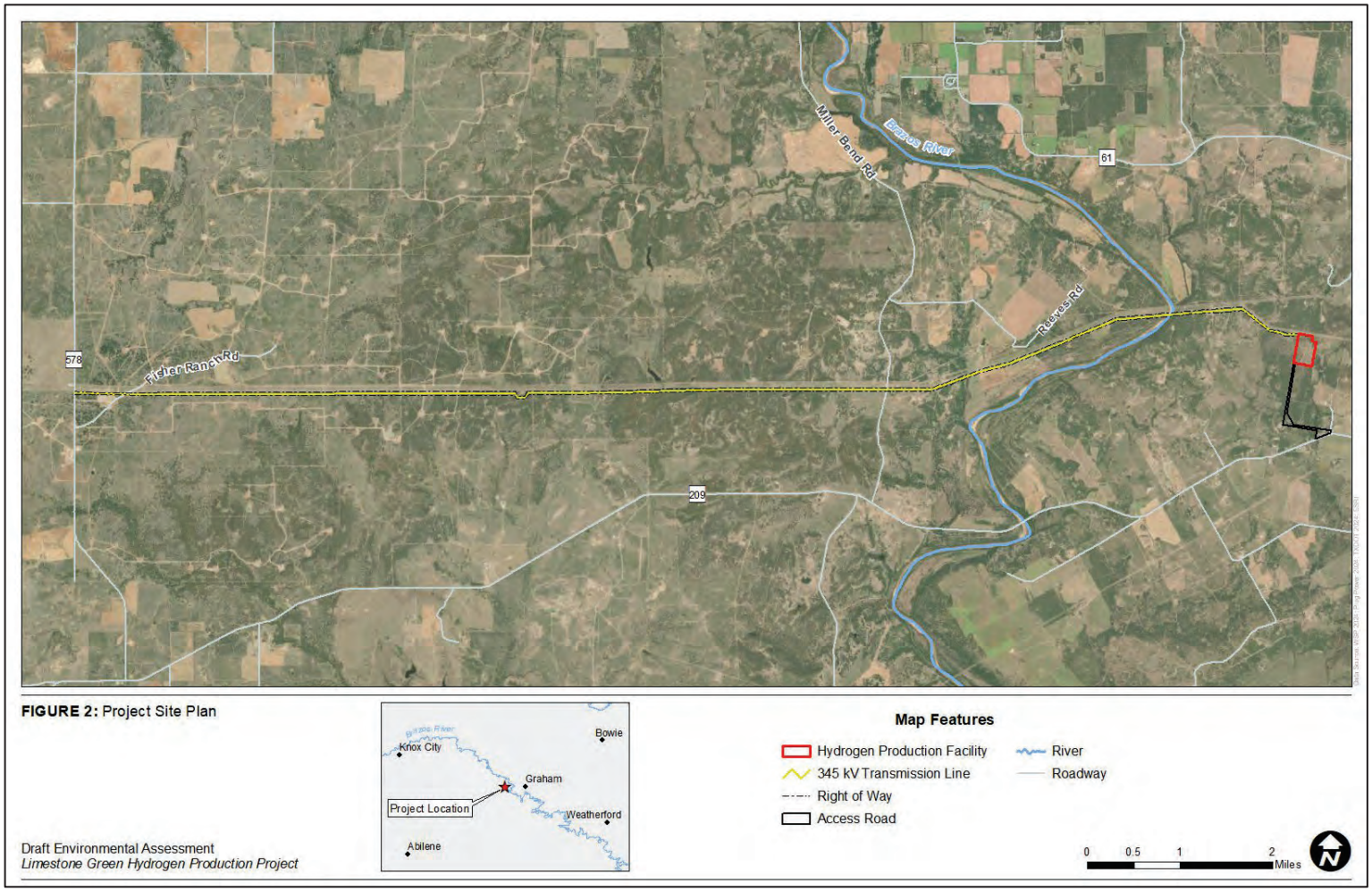

Figure 1: Project Location

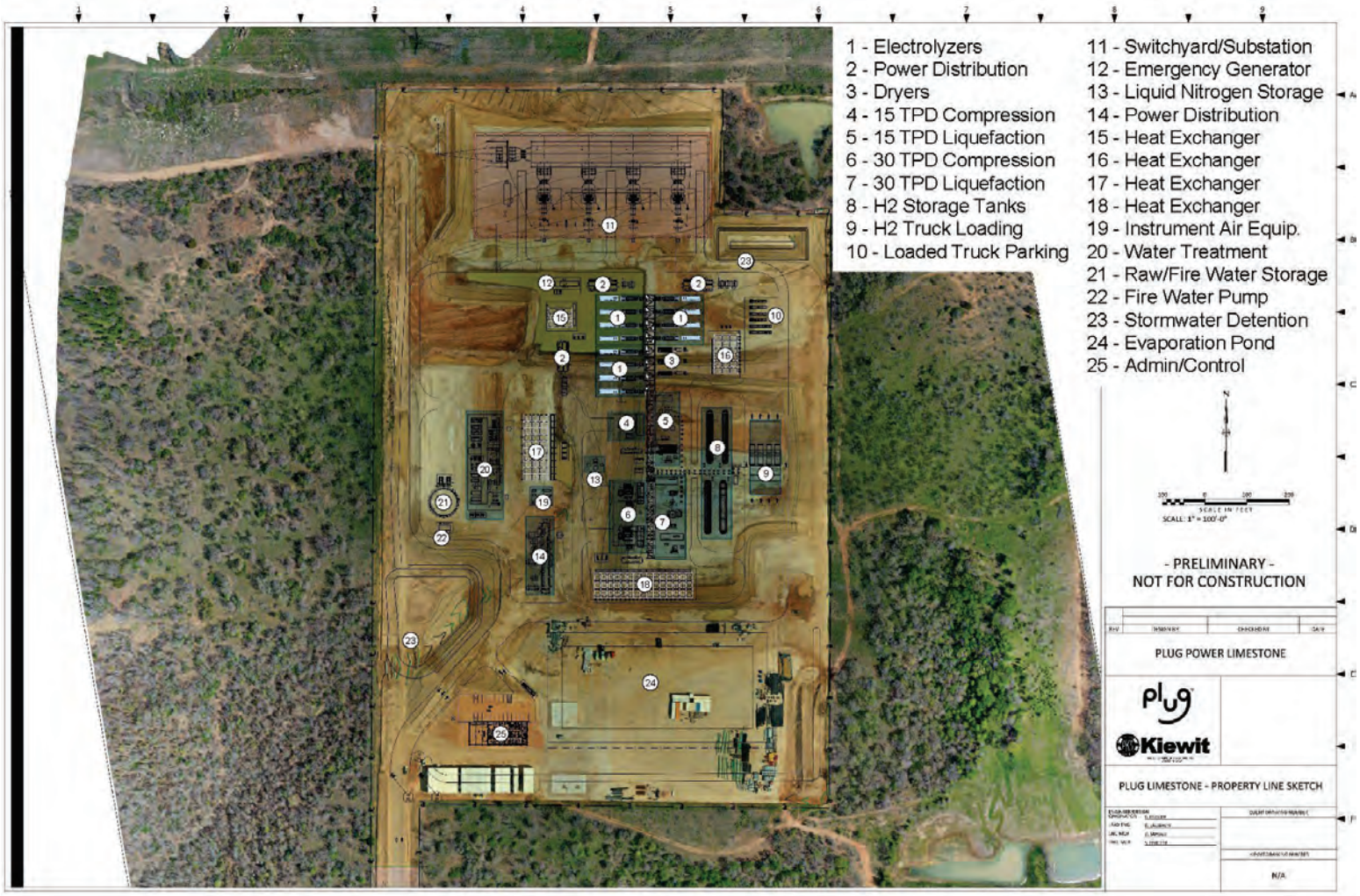

Figure 2: Project Site Plan

Department of Energy
Washington, DC 20585

July 3, 2024

Rebecca Villalba
Stormwater Team Lead
Texas Commission of Environmental Quality
Stormwater Team (Mail Code 148)
PO Box 13087
Austin TX 78711

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power-Limestone Facility

Dear Rebecca Villalba,

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project).

Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the City of Graham, along Highway 209 (Figure 1). The project area is located entirely on private land and consists of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line (Figure 2). Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

Using private funds that are not subject to the federal loan guarantee under review by DOE, the Applicant has already completed the following site preparation activities: cleared, grubbed, and graded the 40-acre hydrogen production facility site; cleared, grubbed, and graded the 1.1-mile-long access road including conducted final grading and installation of the subbase, and installation of the permanent stream crossing; and finally, cleared and placed foundations for the transmission line structures in the right-of-way for the 13.6-mile transmission line.

The Applicant has applied to DOE's Clean Energy Financing Program for financial support (a federal loan guarantee) to complete construction of the Limestone facility, specifically installation of the manufacturing equipment and associated general building

equipment and systems, final site development activities to hydrogen facility and transmission line, and startup of the facility.

DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to support completion of the Project. The DOE LPO is preparing an EA to evaluate and inform DOE's consideration of providing a federal loan guarantee to complete construction of the facility and ancillary facilities. The decision to prepare an EA was made in accordance with the requirements of NEPA, the Council on Environmental Quality regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508), and DOE's implementing procedures for compliance with NEPA (10 CFR Part 1021).

The DOE NEPA regulations provide for the notification of host states of NEPA determinations and for the opportunity for host states to review EAs prior to DOE approval. This process is intended to improve coordination and to facilitate early and open communication. DOE will provide the draft EA to you for your review and comment.

If you or your staff would like to receive further information concerning this project or DOE's NEPA process, please contact me in the DOE Loan Programs Office at 202-526-7272, or email at LPO_Environmental@hq.doe.gov.

Respectfully,

Alicia Williamson

ALICIA WILLIAMSON
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Date: 2024.07.03 16:52:06 -04'00'

Alicia Williamson
NEPA Document Manager
Loan Programs Office

Attachments:
Figure 1 Project Location
Figure 2 Project Site Plan

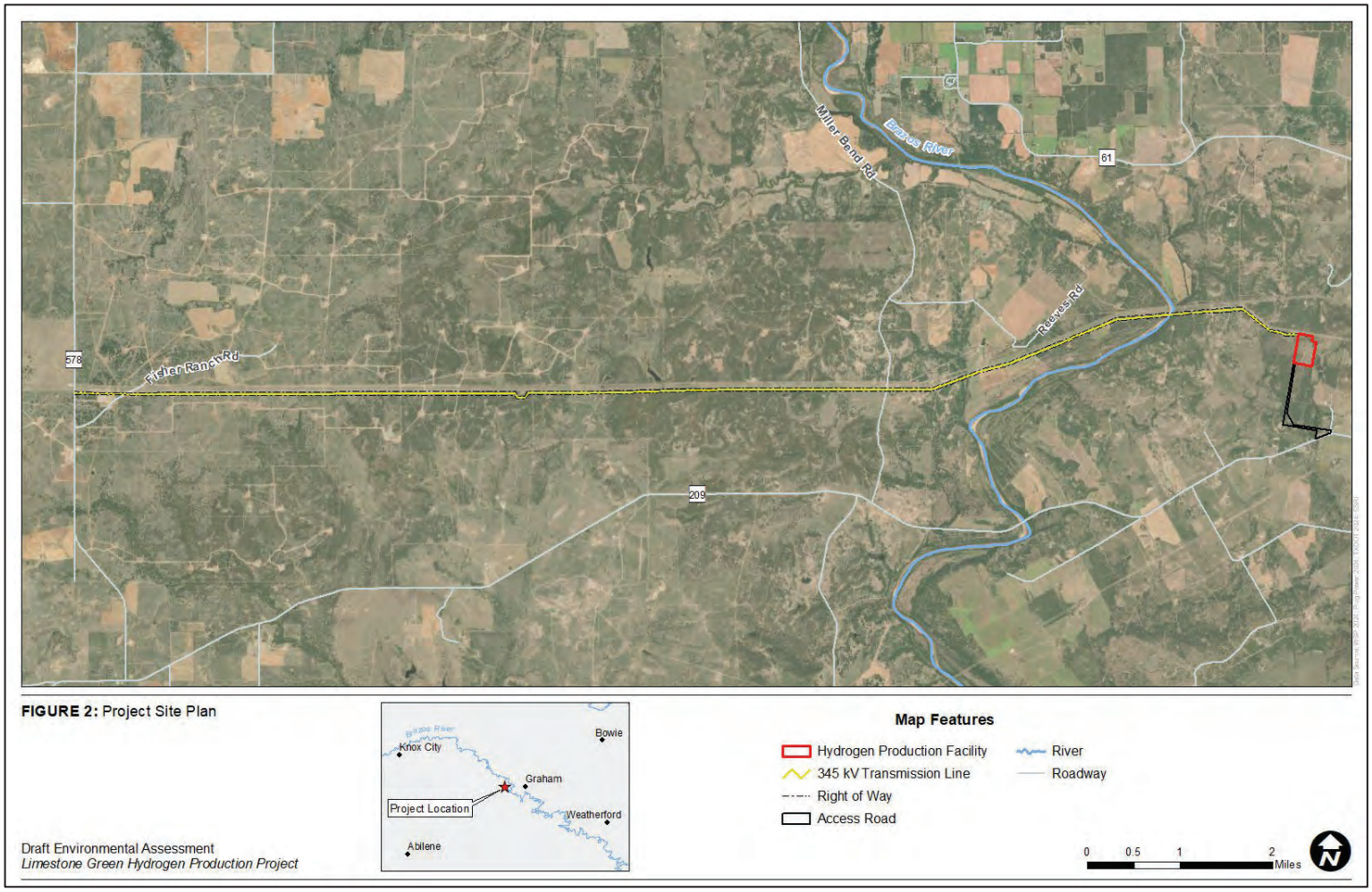


Figure 1: Project Location

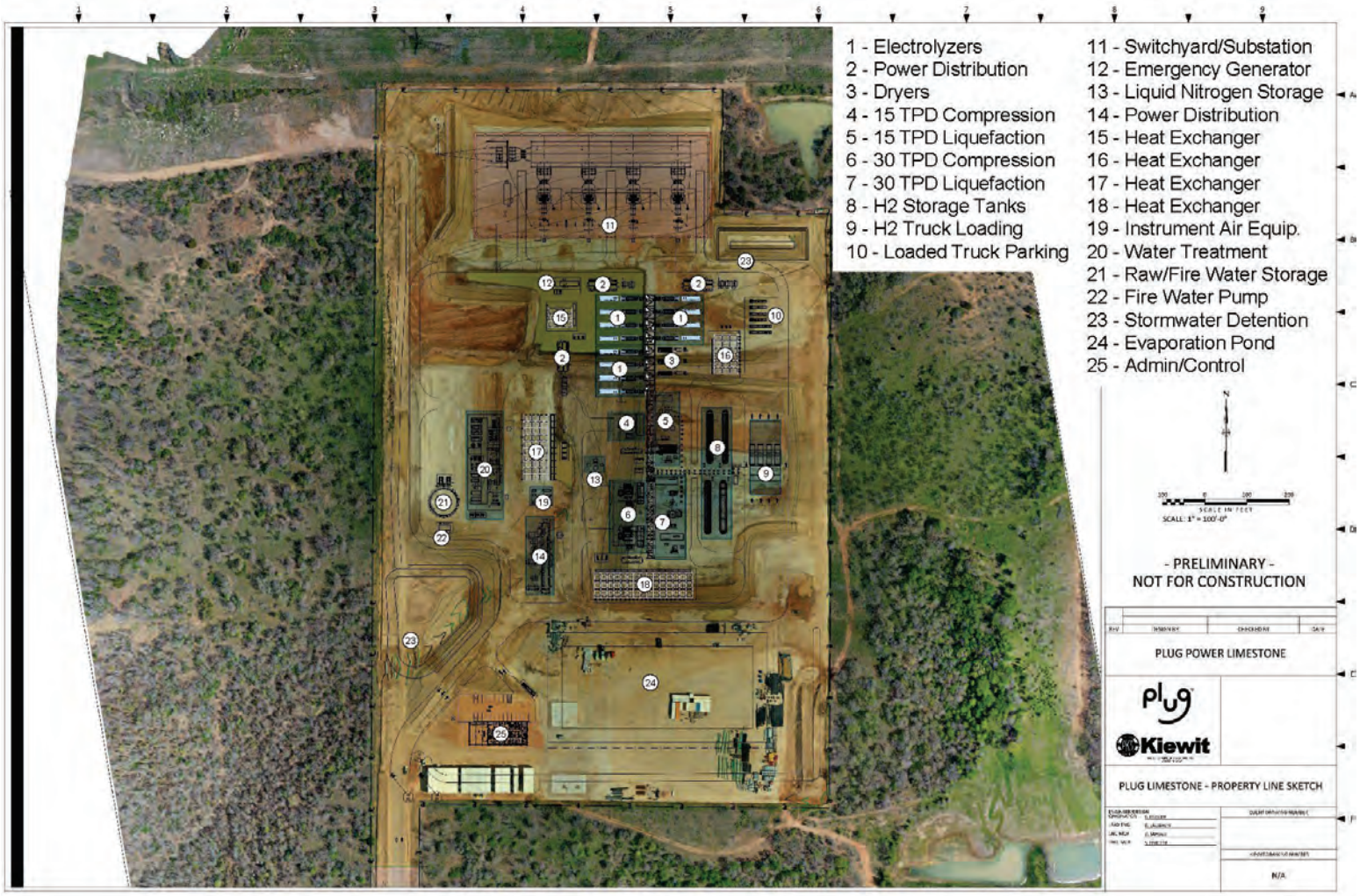


Figure 2: Project Site Plan

Department of Energy
Washington, DC 20585

July 3, 2024

Devon Frazier
Tribal Historic Preservation Officer
Absentee-Shawnee Tribe of Indians of Oklahoma
2025 South Gordon Cooper Drive
Shawnee OK 74801

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power-Limestone Facility

Dear Devon Fraizer,

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project). DOE has determined that issuance of this loan guarantee constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA). Therefore, as a part of the environmental review process, DOE is also conducting a historic resource review in compliance with Section 106 of the NHPA.

Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the City of Graham, along Highway 209 (Figure 1). The project area is located entirely on private land and consists of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line (Figure 2). Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

Using private funds that are not subject to the federal loan guarantee under review by DOE, the Applicant has already completed the following site preparation activities: cleared, grubbed, and graded the 40-acre hydrogen production facility site; cleared, grubbed, and graded the 1.1-mile-long access road including conducted final grading and installation of the subbase, and installation of the permanent stream crossing; and finally, cleared and placed foundations for the transmission line structures in the right-of-way for the 13.6-mile transmission line.

The Applicant has applied to DOE's Clean Energy Financing Program for financial support (a federal loan guarantee) to complete construction of the Limestone facility, specifically installation of the manufacturing equipment and associated general building equipment and systems, final site development activities to the hydrogen facility and transmission line, and startup of the facility. The Area of Potential Effect (APE) includes the Plug Power's 65.5 acre property of which majority has been previously disturbed prior to the initiation of the Federal undertaking.

This letter is intended to notify you of the proposed federal action/undertaking (a federal loan guarantee), identify if you have an interest in the proposed project and provide you with the opportunity to comment and/or engage DOE in government-to-government consultation on the proposed undertaking. Any comments or concerns you provide will help ensure that DOE considers Tribal interests and complies with its NEPA and NHPA Section 106 responsibilities.

I would greatly appreciate notification if you do or do not have an interest in the project site, as well as any comments or concerns you may have within thirty (30) days of receipt of this letter. If you have an interest in the project site, I will provide you with additional information pursuant to NEPA and the NHPA as it becomes available. Please provide your notification of interest and any comments or concerns by email to LPO_environmental@hq.doe.gov. I can also be reached by telephone at 202-526- 7272.

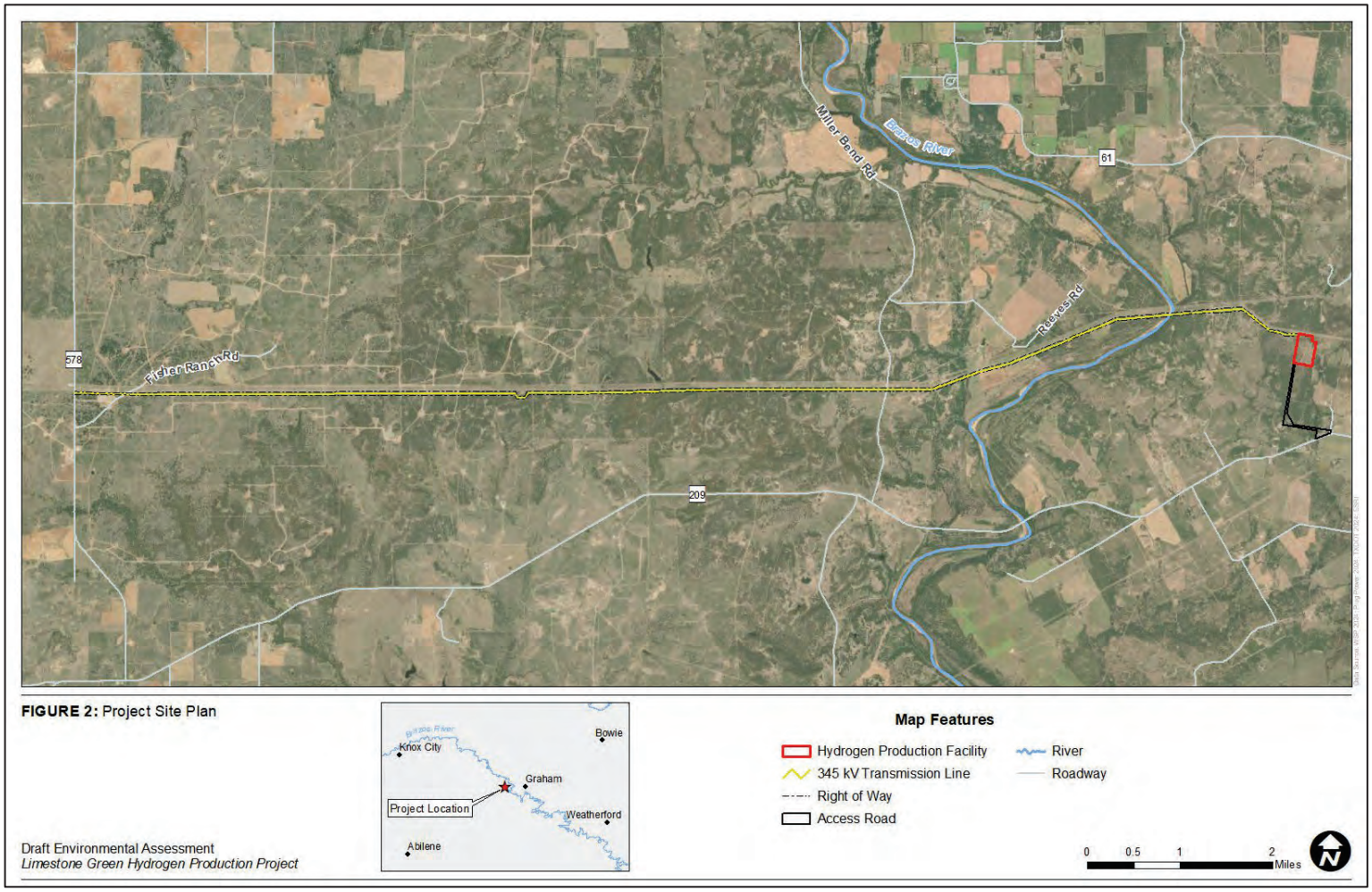
Respectfully,

Alicia Williamson

ALICIA WILLIAMSON Digitally signed by ALICIA WILLIAMSON Date: 2024.07.03 15:26:18 -04'00'

Alicia Williamson
NEPA Document Manager
Loan Programs Office

Attachments:
Figure 1 Project Location
Figure 2 Project Site Plan



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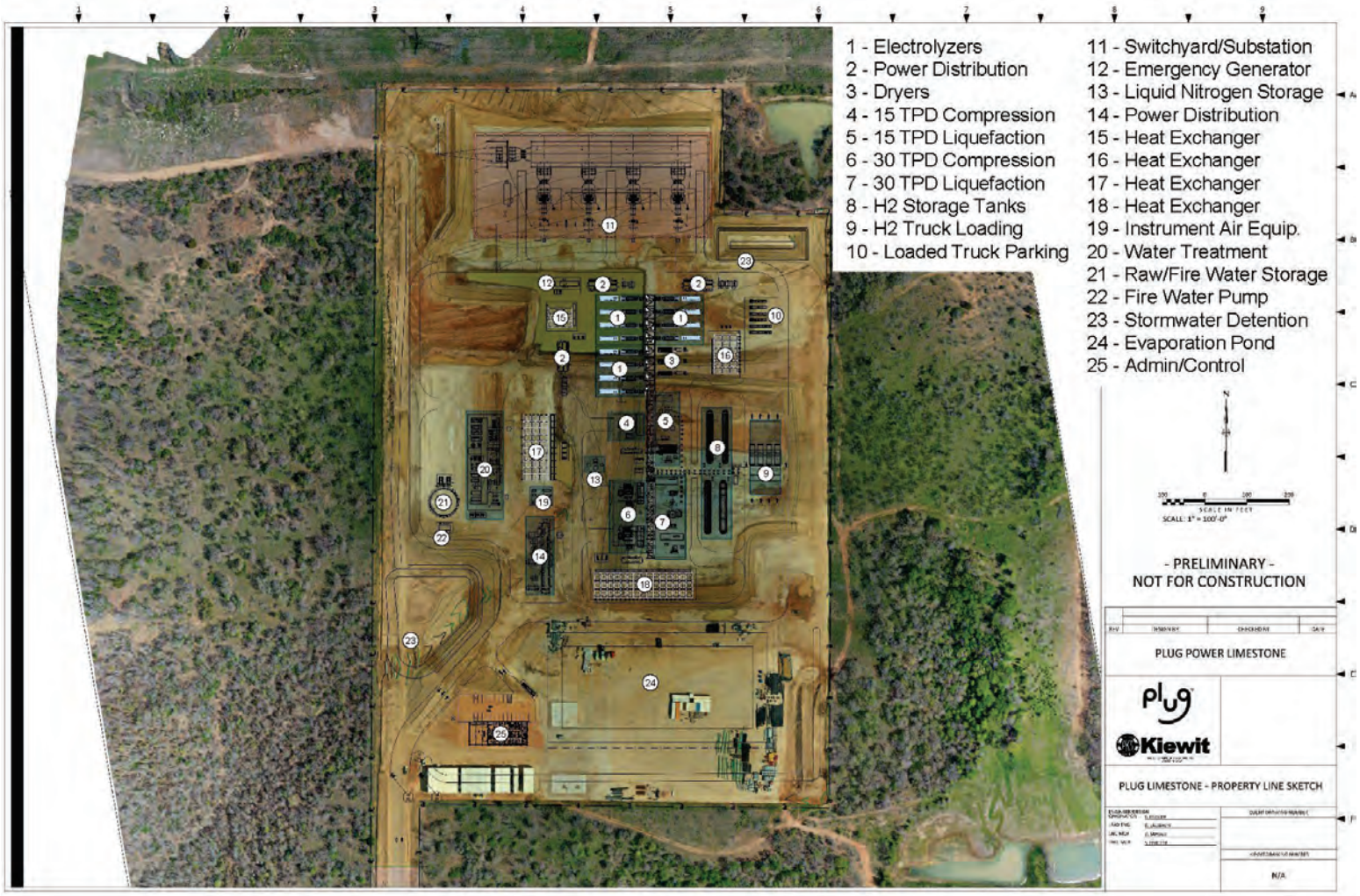

Figure 2: Project Site Plan

HAUDENOSAUNEE
MOHAWK • ONEIDA • ONONDAGA • CAYUGA • SENECA • TUSCARORA
TONAWANDA SENECA NATION
PO BOX 795 • 7027 MEADVILLE ROAD • BASOM, NEW YORK 14013
PHONE (716) 542-4244 • FAX (716) 542-4008
E-MAIL: tonseneca@aol.com

January 22, 2024

Todd Stribley
Michael Noble
Loan Programs Office
United States Department of Energy

Re: Plug Power Loan Application

Nya:wëh Sëg:nö', Mr. Stribley and Mr. Noble,

On behalf of the Tonawanda Seneca Nation, Council of Chiefs, I extend greetings to you and your associates and give thanks that all are enjoying good health.

The Nation writes to urge the Loan Programs Office (LPO) to reject a pending loan application from Plug Power. Plug has desecrated ancestral Seneca territory and now seeks to leverage LPO funding to stay in business while evading Federal review of the impacts of its proposed facility in Western New York on the Nation.

In 2021, the LPO met with Nation leaders regarding Plug Power's application for funding in relation to the facility planned for the Western New York Science and Technology Manufacturing Park ("STAMP").

April 2023, LPO staffers visited Western New York to tour the proposed Plug Power facility in advance of launching consultations with the Nation required by the National Environmental Protection Act (NEPA) and National Historic Preservation Act (NHPA). Plug Power rejected the Nation's request to participate in this visit, and LPO staff met separately with the Nation.

On June 23, the Nation received a letter from DOE stating:

"This letter is to inform you that Plug Power has withdrawn the development of the Project at the STAMP site from its application for Federal financial support. Therefore, LPO no longer has a Federal action or undertaking associated with the development of the Project at the STAMP site, and will no longer pursue Tribal consultations associated with the Project under the National Environmental Policy Act or the National Historic Preservation Act."

The Nation responded to the DOE via email asking for confirmation that Plug Power continued to seek funds from the LPO for other facilities and stating:

"If that is correct, could you help the Nation understand how DOE ensures that applicants do not simply move funding around among facilities in order to evade NEPA review? Given the history of the development at the STAMP site the Nation is quite concerned that federal funding could still be used by Plug Power to facilitate its STAMP project. We have seen time and again that developers have sought to evade federal review by narrowly and sometimes misleadingly characterizing the scope of their projects, to the detriment of the Nation."

In a June 27 email, DOE demurred, responding that the office was "unable to disclose any additional information regarding the Plug Power application" and directing the Nation to LPO's webpage on project monitoring.

On November 10, 2023, Plug Power filed with the SEC a "going concern" notice warning of the company's potential impending insolvency and expressing "substantial doubt that we will have sufficient capital to fund our operations through the next 12 months." In the wake of this disclosure, Plug Power CEO Andy Marsh told reporters that he expects a $1.5 billion dollar loan from DOE in mid-2024 and that the loan will make the "big work really start[] happening, to get [the STAMP] plant online." (Buffalo News, November 20, 2023).

There can be no doubt that Plug Power intends to use DOE funding for STAMP and that such use constitutes a major federal action under NEPA and an undertaking affecting historic properties under the NHPA. The Nation is outraged but not surprised that Plug Power intends to use LPO funding for STAMP, despite having nominally withdrawn its application. LPO should be outraged as well, particularly given Plug Power's rapidly devolving financial status and this administration's professed commitment to environmental justice, and should not allow Plug or any other loan applicant to skirt the environmental and cultural review required by Federal law.

For these reasons we call upon DOE to reject Plug Power's application. In the event DOE does not reject the application outright, we request immediate consultation with DOE on this matter, including on NEPA and NHPA review, which must be conducted prior to any decision to allocate federal funding to Plug Power.

Da:h ne'hoh,

Chief Roger Hill
Council of Chiefs
Tonawanda Seneca Nation

cc: Bryan Newland, Assistant Secretary – Indian Affairs
Heidi Todacheene, Senior Advisor to the Secretary of Interior
Peter Reuben, Office of Indian Nation Affairs, NYSDEC
Adriana Espinoza, Deputy Commissioner, Equity and Justice, NYSDEC

HAUDENOSAUNEE
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PHONE (716) 542-4244 • FAX (716) 542-4008
E-MAIL: tonseneca@aol.com

January 30, 2024

Todd Stribley
Michael Noble
Loan Programs Office
United States Department of Energy

Re: Plug Power Loan Application

Nya:wëh Sëg:nö', Mr. Stribley and Mr. Noble,

On behalf of the Tonawanda Seneca Nation, Council of Chiefs, I extend greetings to you and your associates and give thanks that all are enjoying good health.

The Nation wrote to the Loan Programs Office (LPO) on January 22, urging the LPO to reject a pending loan application from Plug Power. As we stated in our January 22 letter, DOE earlier informed the Nation that NEPA review of Plug Power's facility planned for the Western New York Science and Technology Manufacturing Park ("STAMP") was no longer required, because Plug Power had withdrawn that facility from its loan application. In fact, however, Plug Power CEO Andy Marsh has stated on the record that DOE funding will make the "big work really start[] happening, to get [the STAMP] plant online," confirming that any DOE funding to Plug Power must be conditioned on NEPA review of the Plug facility planned for STAMP.

In addition, on January 23, CEO Marsh repeatedly confirmed to investors in a Q4 earnings call that DOE funding will directly facilitate Plug Power's planned venture at STAMP. According to a transcript at https://seekingalpha.com/article/4664415-plug-power-inc-plug-q4-2023-earnings-call-transcript , CEO Marsh told investors that DOE funding "will play a pivotal role in scheduling our forthcoming plants in Texas and New York." In addition, CEO Marsh informed investors that while Plug Power has "slowed down investment in…hydrogen facilities in Texas and New York" due to cash shortages, "for money we've already spent in New York and Texas, once the DOE loan is officially approved, we'll be able to borrow that money, which is probably somewhere in the $400 million to $500 million range."

Further, the Nation recently learned of earlier comments made by CEO Marsh in November, which were reprinted in Greenwire on November 23, 2023:

> Plug Power is in the running to receive a $1.5 billion loan from the Department of

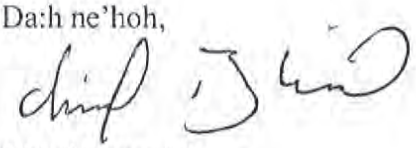
> Energy, according to the company. The loan will be "important" to support the New York build-out, according to Marsh, who said the plant there could experience "months delays, not long-term delays." Without the DOE loan, he said, he "won't spend more money in New York" at this time.

Although Plug Power has apparently informed the LPO that the DOE funding will not be used at STAMP, construction of the Plug Power STAMP project would be a "reasonably foreseeable" indirect effect of granting this federal funding. *See* Food & Water Watch v. FERC, 28 F.4th 277, 285 (D.C. Cir. 2022) ("NEPA requires agencies to "consider not only the direct effects, but also the indirect environmental effects" of proposed actions. Indirect effects are "caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Effects are "reasonably foreseeable" if they are "sufficiently likely to occur that a person of ordinary prudence would take [them] into account in reaching a decision.")

Even if DOE interpreted NEPA or the NHPA not to apply here, Biden Administration Executive Orders and policies support consultation with the Nation prior to approval of the Plug Power proposal. *See* Executive Order on Revitalizing Our Nation's Commitment to Environmental Justice for All, April 21, 2023, https://www.whitehouse.gov/briefing-room/presidential-actions/2023/04/21/executive-order-on-revitalizing-our-nations-commitment-to-environmental-justice-for-all/ ("continue to engage in consultation on Federal activities that have Tribal implications and potentially affect human health or the environment"); Memorandum of Understanding Regarding Interagency Coordination and Collaboration for the Protection of Indigenous Sacred Sites, November 2021, https://www.doi.gov/sites/doi.gov/files/mou-interagency-coordination-and-collaboration-for-the-protection-of-indigenous-sacred-sites-11-16-2021.pdf ("Federal agencies, including those that approve or fund projects, are responsible for assessing and considering the potential impacts of their decisions on sacred sites and historic properties of traditional cultural and religious importance.")

As the statements made by CEO Marsh make clear, DOE's approval of the Plug Power loan application will result in further development on the Plug facility at STAMP, which lies directly adjacent to the Nation's Big Woods. The Nation has repeatedly raised concerns about the negative impacts the STAMP Project will have on our reservation territory and ancestral lands, including destruction of cultural resources and historic properties. Consistent with Biden Administration policy, the Nation requests consultation with DOE regarding Plug Power's application and the impact it will have on the Nation.

Da:h ne'hoh,



Chief Roger Hill
Council of Chiefs
Tonawanda Seneca Nation

cc: Bryan Newland, Assistant Secretary – Indian Affairs
Heidi Todacheene, Senior Advisor to the Secretary of Interior
Peter Reuben, Office of Indian Nation Affairs, NYSDEC
Adriana Espinoza, Deputy Commissioner, Equity and Justice, NYSDEC

Department of Energy
Washington, DC 20585

February 29, 2024

Chief Roger Hill
Tonawanda Seneca Nation
PO Box 795
7027 Meadville Road
Basom, NY 14013

Subject: U.S. Department of Energy, Loan Programs Office engagement with Plug Power regarding its facility planned for Western New York Science and Technology Manufacturing Park

Dear Chief Hill:

Thank you for extending your greetings and good health, and I extend greetings to you and your associates and also give thanks that all are enjoying good health.

In response to the concerns you raised regarding the statements made by Plug Power and its facility planned for the Western New York Science and Technology Manufacturing Park (STAMP), the Department of Energy (DOE), Loan Programs Office (LPO) views the statements, which implied that DOE funding "will play a pivotal role in scheduling of forthcoming plants in Texas and New York" as inaccurate and misleading regarding the scope of the proposed Federal financial assistance under review by LPO. LPO has expressed this concern to Plug Power and has requested that Plug Power provide a public statement to clarify that the Federal financial assistance it has requested from LPO will not include support for its facility planned within the STAMP at this time.

In addition, LPO confirms that the response letter provided to you on June 21, 2023, stating Plug Power has withdrawn the development of the Project at the STAMP site from its current application for Federal financial support is still accurate. Should DOE ultimately decide to provide Federal financial support to Plug Power for its other development projects outside of the STAMP site, LPO's project monitoring and funding disbursement protocols and procedures ensure that Federal financial support is used for specific projects (see Attachment A, Summary of Monitoring and Disbursements).

Regarding your concern associated with the scope of LPO's pending environmental review under the National Environmental Policy Act (NEPA), "that the DOE funding will not be used at STAMP, construction of the Plug Power facility at the STAMP site would be a "reasonably foreseeable" indirect effect of granting this Federal funding," LPO will review this during the NEPA review process. LPO will ensure that the Tonawanda Seneca Nation is notified when LPO initiates its environmental review process, and will invite the Nation to engage in consultation.

LPO is committed to being open and transparent in working with the Tonawanda Seneca Nation and would like to thank the Nation for its time, participation, and feedback. Furthermore, if the Nation would like to meet with representatives from the DOE Office of Indian Energy Policy and Programs to discuss tribal community opportunities, please contact me at Todd.Stribley@hq.doe.gov, and I would be happy to facilitate a such a meeting.

If additional information is needed or the Nation would like to discuss this matter further, please feel free to contact Alicia Williamson at 202-586-7272 or Alicia.Williamson@hq.doe.gov.

Respectfully,

TODD STRIBLEY

Digitally signed by TODD STRIBLEY
Date: 2024.02.29 13:11:06 -07'00'

Todd Stribley
Director, Environmental Compliance
DOE Loan Programs Office

cc: Michael Noble, LPO Outreach and Business Development
Bryan Newland, Bureau of Indian Affairs, Assistant Secretary
Heidi Todacheene, U.S. Department of Interior, Senior Advisor to the Secretary
Peter Reuben, Office of Indian Nation Affairs, NYSDEC
Adriana Espinoza, Deputy Commissioner, Equity and Justice, NYSDEC
Paul Middleton, Chief Financial Officer
Sanjay Shrestha, Chief Strategy Officer
Chris Alexander, Strategy and Project Finance

Attachment A

Typical LPO Project Finance Funding Protocol

During construction of an approved project, on a regular basis (generally monthly), the borrower will provide the Loan Programs Office (LPO) with copies of all invoices for work that has been completed and or billed in accordance with the terms of the construction contract(s). In addition to these invoices, the borrower will represent and warrant among other things that:

- The work has indeed been done and the invoices are the expenses incurred in completing the work
- There is sufficient funding available to complete the plant and no other cost overages are anticipated at that time; and
- No construction delays have been identified to delay project completion.

The above information is provided in a funding request and will be reviewed by the LPO portfolio management team and our independent engineer. Once approved the portion of the expenses to be covered by the loan will be disbursed directly to the vendors and contractors who provided those invoices and did the work.

Under this procedure, funding is directed only for use to pay for eligible costs in connection with those projects that LPO has approved and provided funding for.

Also note that LPO's collateral is the project that LPO is financing and so we have every incentive to ensure that our loans are used only to build the plant that will serve as our collateral and source of repayment.

HAUDENOSAUNEE
MOHAWK • ONEIDA • ONONDAGA • CAYUGA • SENECA • TUSCARORA
TONAWANDA SENECA NATION
PO BOX 795 • 7027 MEADVILLE ROAD • BASOM, NEW YORK 14013
PHONE (716) 542-4244 • FAX (716) 542-4008
E-MAIL: tonseneca@aol.com

March 4, 2024

Todd Stribley
Loan Programs Office
United States Department of Energy
via email to todd.stribley@hq.doe.gov

Re: Plug Power Loan Application

Nya:wëh Sëg:nö', Mr. Stribley and Mr. Noble,

On behalf of the Tonawanda Seneca Nation, Council of Chiefs, I extend greetings to you and your associates and give thanks that all are enjoying good health.

We have received your letter of February 29, 2024. You have misunderstood our request, which is that the Department of Energy (DOE) engage in consultations with the Nation and reject Plug Power's loan application. We do not seek "clarification" of Plug Power CEO Andy Marsh's public statements. Those statements did not "imply" that DOE funding would facilitate construction at STAMP, but instead confirmed outright that "DOE funding will play a pivotal role in scheduling plants in Texas and New York." Marsh's statements to investors and the media convey a fact that is vitally important to the Tonawanda Seneca Nation: a $1.6 billion loan from DOE will allow Plug Power to resume and complete construction of Plug's industrial hydrogen production facility on our ancestral lands at STAMP, even if the funding is not sought specifically for that purpose. This fact is the basis for our January 30, 2024 request for consultation and denial of Plug Power's application.

We appreciate your commitment to consult with the Nation as soon as "the LPO initiates its environmental review process." We remind DOE that, per its Draft Policy on Consultation and Engagement with Indian Tribes, "[i]t is the policy of [DOE] to recognize and fulfill its legal obligations to … invite Indian tribes to consult on a government-to-government basis *whenever there is a DOE action with potential impacts* on tribal interests." DOE Draft Consultation Policy, https://www.energy.gov/sites/default/files/2023-11/DOE%20Policy%20-%20discussion%20draft.pdf (emphasis added); *See also* DOE Draft Order 144.1(c) ("DOE Elements *must invite Indian tribes early* and throughout the planning process to engage and consult whenever a Departmental plan or action *may have potential to impact* tribal lands, rights or interests..") https://www.energy.gov/sites/default/files/2023-11/DOE%20Order%20144.1-%20Discussion%20draft.pdf (emphasis added). We again request consultation now, not later.

In addition, we point out DOE's affirmation that the goal of consultation with Tribes and Nations potentially impacted by DOE actions "is to achieve consensus wherever possible." DOE Draft Order 144.1(c)(5). This commitment accords with President Biden's Uniform Standards for Tribal Consultation, which mandate that "agencies should strive for consensus with Tribes or a mutually desired outcome." *See* Memorandum on Uniform Standards for Tribal Consultation, President Joseph R. Biden, Jr., November 30, 2022, https://www.whitehouse.gov/briefing-room/presidential-actions/2022/11/30/memorandum-on-uniform-standards-for-tribal-consultation/.

Plug Power's public statements affirm that DOE funding for Plug Power has the "potential to impact tribal lands, rights [and] interests." The Plug Power facility planned for the STAMP site sits within Tonawanda Seneca ancestral territory and the Nation's Traditional Cultural Property, directly adjacent to and upstream from the Nation's treaty-confirmed Reservation territory. This facility, which would be enabled by funding from DOE, threatens harm to treaty-protected land and resources and to Tonawanda Seneca sacred sites.

We do not want handouts from the Federal Government. Our goal is to protect our Territory for the benefit of our people and future generations, and we seek to work diplomatically with the United States to ensure that federal funding does not facilitate the destruction of our land. Please contact the Nation office at 716-542-4244 or tonseneca@aol.com at your earliest convenience to schedule consultation.

Da:h ne'hoh,

Chief Roger Hill
Council of Chiefs
Tonawanda Seneca Nation

cc: Bryan Newland, Assistant Secretary – Indian Affairs
Heidi Todacheene, Senior Advisor to the Secretary of Interior
Peter Reuben, Office of Indian Nation Affairs, NYSDEC
Adriana Espinoza, Deputy Commissioner, Equity and Justice, NYSDEC

Department of Energy
Washington, DC 20585

July 22, 2024

Roger Hill, Chief
Council of Chiefs
Tonawanda Seneca Nation
PO Box 795
7027 Meadville Road
Bason, New York 14013

SUBJECT: U.S. Department of Energy intent to prepare an Environmental Assessment for a proposed Federal Loan Guarantee to Plug Power, Limestone Facility in Texas

Dear Chief Hill:

Title XVII of the Energy Policy Act of 2005 established a federal loan guarantee program for certain projects that employ innovative technologies and authorizes the Secretary of Energy to make loan guarantees available for those projects. The U.S. Department of Energy (DOE) Loan Programs Office (LPO) is preparing an Environmental Assessment (EA) pursuant to the National Environmental Policy Act (NEPA) to assist in determining whether to issue a Federal loan guarantee to Plug Power, Inc. (Plug Power) to support the development of the proposed Limestone green hydrogen production facility in Graham, Texas in Young County (the Project). DOE has determined that issuance of this loan guarantee constitutes an undertaking subject to Section 106 of the National Historic Preservation Act (NHPA).

The Project, as proposed by Plug Power, includes final project development of a green hydrogen facility on an unincorporated tract of land west of the City of Graham, along Highway 209 (Figure 1). The project area is located entirely on 65.5 acres of private land and consists of a 4-acre green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line (Figure 2). Additionally, the project site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

Using private funds that are not subject to the proposed federal loan guarantee under review by DOE, the Applicant has completed the following site preparation activities: cleared, grubbed, and graded the 40-acre hydrogen production facility site; cleared, grubbed, and graded the 1.1-mile-long access road including conducted final grading and installation of the subbase, and installation of the permanent stream crossing, and has cleared and installed the foundations for the transmission line structures in the right-of-way for the 13.6-mile transmission line.

In accordance with previous communications with the Tonawanda Seneca Nation, this letter is notifying you of the proposed federal action/undertaking (a federal loan guarantee) and providing you with the opportunity to comment and/or engage DOE in government-to-government consultation on the proposed undertaking. Please provide DOE LPO the Nation's desired consultation method, e.g. as an interested party in the NEPA and NHPA processes, or under a more formal government-to-government consultation process pursuant to Executive Order 13175. DOE LPO wants to ensure that the Nations interests and concerns are considered and included as part of the NEPA and NHPA processes, as appropriate. DOE LPO requests that you identify your desired consultation engagement process and provide any initial comments or concerns you may have within thirty (30) days of receipt of this letter. LPO will plan to provide you with information related to cultural and tribal resources collected for the Plug Power Limestone as it becomes available, as well as keep you informed of the NEPA process. Please submit your desired consultation process and any initial comments or concerns by email to LPO_environmental@hq.doe.gov.

The LPO looks forward to working with the Nation. If you would like to speak with me directly, I can be reached by telephone at 202-526- 7272 or via email at Alicia.Williamson@hq.doe.gov.

Respectfully,

Alicia Williamson

ALICIA WILLIAMSON

Digitally signed by ALICIA WILLIAMSON
Date: 2024.07.22 13:36:33 -04'00'

Alicia Williamson
NEPA Document Manager
Loan Programs Office

Attachments:
Figure 1 Project Location
Figure 2 Project Site Plan

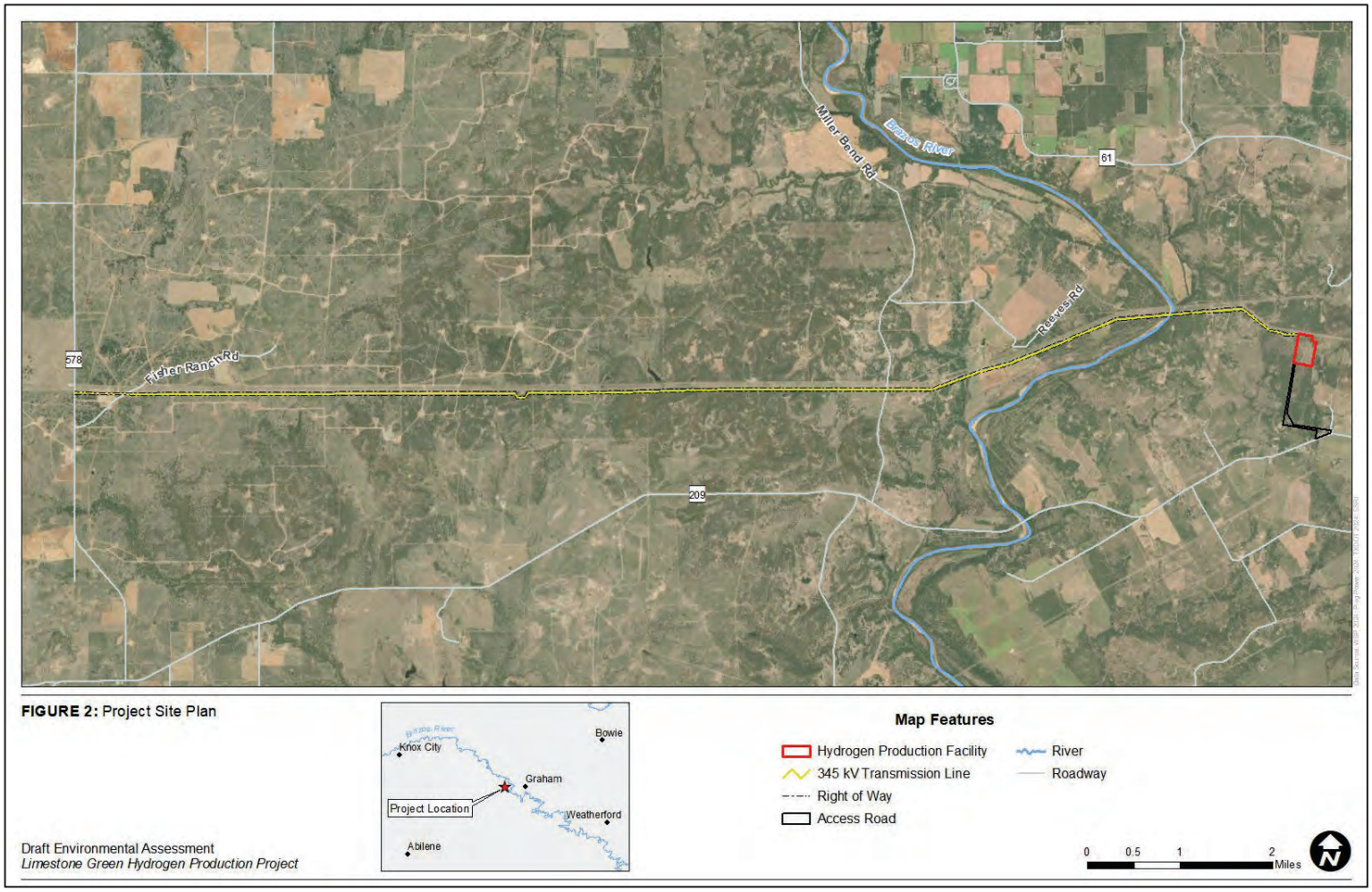


Figure 1: Project Location

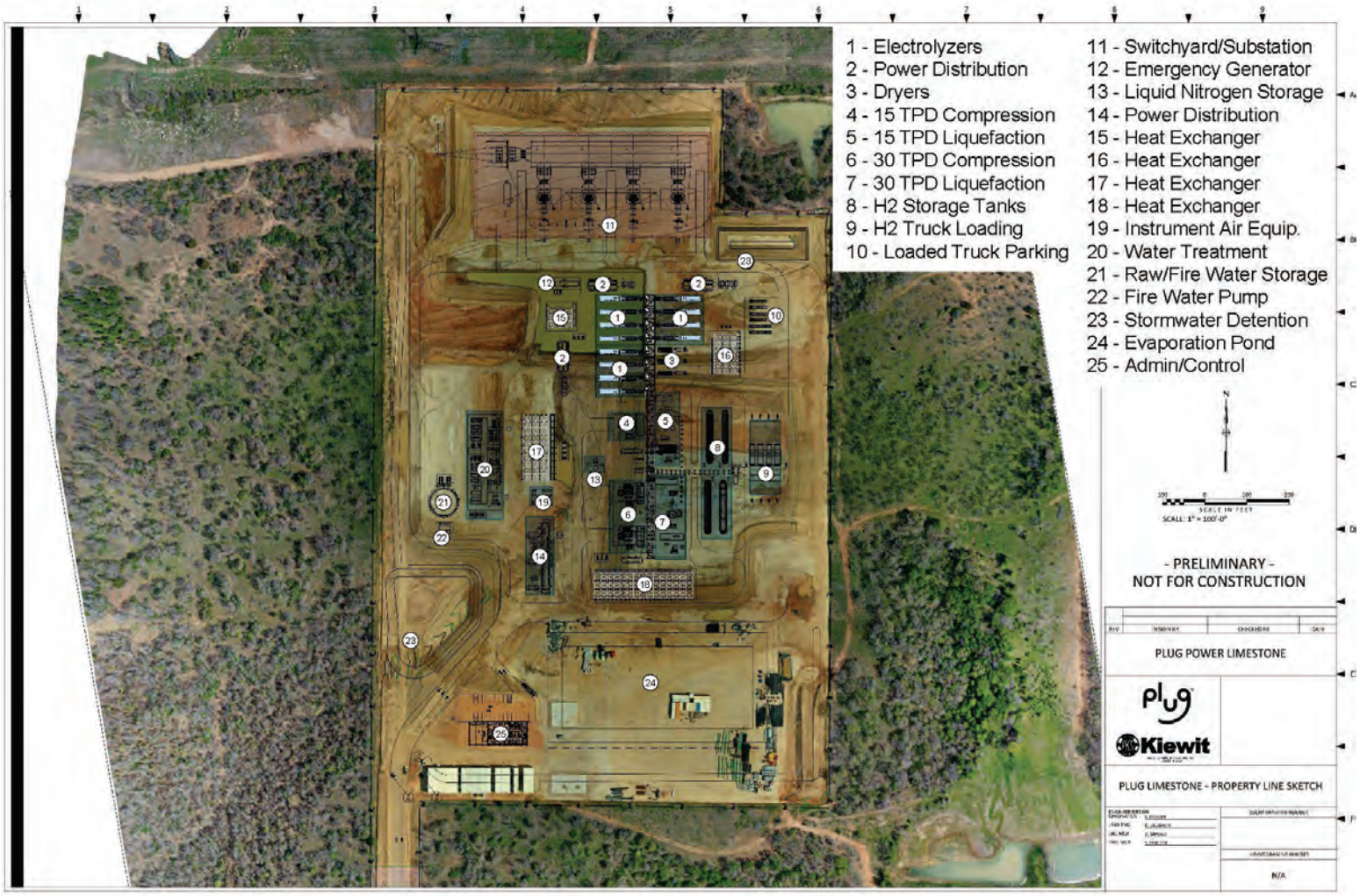


Figure 2: Project Site Plan

From: Temple, Andrew
To: Williamson, Alicia
Subject: [EXTERNAL] FW: SHPO submittal Plug Power
Date: Friday, November 29, 2024 12:11:55 PM
Attachments: image001.png
image002.png
image003.png
image005.png

Andrew Temple
Director of Government Affairs
m: 518.956.4967
plugpower.com

From: Rebel, Rob <Rob.Rebel@wsp.com>
Date: Thursday, November 21, 2024 at 12:40 PM
To: Alicia.Williamson@hq.doe.gov <alicia.williamson@hq.doe.gov>
Cc: Auten, Marc <Marc.Auten@wsp.com>, Temple, Andrew <ATemple@plugpower.com>
Subject: FW: SHPO submittal Plug Power

Alicia,

The submissions are via the THC portal. Below are the screenshots for the submissions of the scope of work, Viewshed Report, and Survey Report below. Let us know if you need anything else.

Thanks
Rob

Review Request Confirmation

Your request for consultation has been successfully submitted to the Texas Historical Commission.

Project Name: Limestone Green Hydrogen Production Project - Plug Power
Track Number: 202414380
Date Received: 8/15/2024 6:35:01 PM
Due Date: 9/14/2024 6:35:01 PM

Thank you!

Review Request Confirmation

Your request for consultation has been successfully submitted to the Texas Historical Commission.

Project Name: Limestone Green Hydrogen Production Project - Plug Power
Track Number: 202500323
Date Received: 9/12/2024 2:46:44 PM
Due Date: 10/12/2024 2:46:44 PM

Thank you!

Review Request Confirmation

Your request for consultation has been successfully submitted to the Texas Historical Commission.

Project Name: Limestone Green Hydrogen Production Project-Plug Power
Track Number: 202501718
Date Received: 9/26/2024 11:01:47 AM
Due Date: 10/26/2024 11:01:47 AM

Thank you!

Rob Rebel, P.E.*
**Licensed in CO, ND, NM, OR, and WY*

M+ 1 303-548-5097
WSP Hydrogen Hubs

From: Williamson, Alicia <alicia.williamson@hq.doe.gov>
Sent: Thursday, November 21, 2024 10:05 AM
To: Auten, Marc <Marc.Auten@wsp.com>
Cc: Temple, Andrew <ATemple@plugpower.com>; Rebel, Rob <Rob.Rebel@wsp.com>
Subject: SHPO submittal Plug Power

Marc-
Can you send over the letter/email submitted to the SHPO for the Limestone site?
Thanks-
Alicia

Alicia Williamson
Environmental Protection Specialist
US Department of Energy
Loan Programs Office-Environmental Compliance

(W) 202-586-7272
(C) 240-597-8830
alicia.williamson@hq.doe.gov

From:	Temple, Andrew
To:	Williamson, Alicia
Subject:	[EXTERNAL] FW: Limestone Green Hydrogen Production Project - Plug Power
Date:	Wednesday, October 16, 2024 5:21:55 PM
Attachments:	image002.png

THC SHPO Concurrence on the Above Ground Historic Architecture Report below:

Andrew Temple
Director of Government Affairs
m: 518.956.4967
plugpower.com

From: noreply@thc.state.tx.us <noreply@thc.state.tx.us>
Sent: Friday, October 11, 2024 4:33 PM
To: Hunter, John <john.a.hunter@wsp.com>; reviews@thc.state.tx.us <reviews@thc.state.tx.us>
Subject: Limestone Green Hydrogen Production Project - Plug Power

Image removed by sender.

Re: Project Review under Section 106 of the National Historic Preservation Act
THC Tracking #202500323
Date: 10/11/2024
Limestone Green Hydrogen Production Project - Plug Power
2264 FM209 Graham, TX
Graham,TX

Description: THC Tracking #202411190. Submitting architectural viewshed survey draft report for review.

Dear John A. Hunter:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff, led by Justin Kockritz and Danielle Julien, has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

- THC/SHPO concurs with information provided.
- No historic properties are present or affected by the project as proposed.

However, if historic properties are discovered or unanticipated effects on historic properties are found, work should cease in the immediate area; work can continue where no historic properties are present. Please contact the THC's History Programs Division at 512-463-5853 to consult on further actions that may be necessary to protect historic properties.

We have the following comments: The THC History Programs Division, let by Justin Kockritz, concurs that based on all available information, the twelve surveyed properties are not eligible for listing in the National Register of Historic Places; we also concur that the remaining eight historic-age properties that were inaccessible will not be affected by the project as proposed.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: justin.kockritz@thc.texas.gov, danielle.julien@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

for Joseph Bell, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

Subject: FW: Limestone Green Hydrogen Production Project-Plug Power
Sent: 10/21/2024, 5:14:16 AM
From: Hunter, John<john.a.hunter@wsp.com>
To: Rebel, Rob
Cc: Auten, Marc

SHPO concurrence!

Se below.

From: noreply@thc.state.tx.us <noreply@thc.state.tx.us>
Sent: Friday, October 18, 2024 5:22 PM
To: Hunter, John <john.a.hunter@wsp.com>; reviews@thc.state.tx.us
Subject: Limestone Green Hydrogen Production Project-Plug Power

TEXAS HISTORICAL COMMISSION
real places telling real stories

Re: Project Review under Section 106 of the National Historic Preservation Act
THC Tracking #202501718
Date: 10/18/2024
Limestone Green Hydrogen Production Project-Plug Power
Graham
Graham,TX

Description: THC Tracking No. 202414380. Phase I Intensive Archaeological Survey Draft Report for Review.

Dear John A. Hunter:
Thank you for your submittal regarding the above-referenced project. This response represents the comments of the State Historic Preservation Officer, the Executive Director of the Texas Historical Commission (THC), pursuant to review under Section 106 of the National Historic Preservation Act.

The review staff, led by Justin Kockritz and Danielle Julien, has completed its review and has made the following determinations based on the information submitted for review:

Above-Ground Resources

- No historic properties are present or affected by the project as proposed. However, if historic properties are discovered or unanticipated effects on historic properties are found, work should cease in the immediate area; work can continue where no historic properties are present. Please contact the THC's History Programs Division at 512-463-5853 to consult on further actions that may be necessary to protect historic properties.

Archeology Comments

- No historic properties affected. However, if cultural materials are encountered during construction or disturbance activities, work should cease in the immediate area; work can continue where no cultural materials are present. Please contact the THC's Archeology Division at 512-463-6096 to consult on further actions that may be necessary to protect the cultural remains.
- This draft report is acceptable. To facilitate review and make project information and final reports available through the Texas Archeological Sites Atlas, we appreciate submission of tagged pdf copies of the final report including one restricted version with all site location information (if applicable), and one

public version with all site location information redacted; an online abstract form submitted via the abstract tab on eTRAC; and survey area shapefiles submitted via the shapefile tab on eTRAC. For questions on how to submit these please visit our video training series at: https://www.youtube.com/playlist?list=PLONbbv2pt4cog5t6mCqZVaEAx3d0MkgQC Please note that these steps are required for projects conducted under a Texas Antiquities Permit.

We look forward to further consultation with your office and hope to maintain a partnership that will foster effective historic preservation. Thank you for your cooperation in this review process, and for your efforts to preserve the irreplaceable heritage of Texas. If the project changes, or if new historic properties are found, please contact the review staff. If you have any questions concerning our review or if we can be of further assistance, please email the following reviewers: justin.kockritz@thc.texas.gov, danielle.julien@thc.texas.gov.

This response has been sent through the electronic THC review and compliance system (eTRAC). Submitting your project via eTRAC eliminates mailing delays and allows you to check the status of the review, receive an electronic response, and generate reports on your submissions. For more information, visit http://thc.texas.gov/etrac-system.

Sincerely,

for Joseph Bell, State Historic Preservation Officer
Executive Director, Texas Historical Commission

Please do not respond to this email.

From:	Williamson, Alicia
To:	danielle.julien@thc.texas.gov
Cc:	justin.kockritz@thc.texas.gov
Subject:	US Dept of Energy Plug Power Limestone Site, Young County, Texas Section 106 consultation
Date:	Monday, November 25, 2024 2:18:00 PM

Dear Ms. Julien and Mr. Kockritz-

Pursuant to its authority under Title XVII of the Energy Policy Act of 2005 (EPAct), which established a Federal loan guarantee program, the U.S. Department of Energy (DOE), Loan Programs Office (LPO) is evaluating whether to provide a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project). Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the City of Graham, along Highway 209 on private land. The Project will consist of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line. Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant (DOE's proposed action and undertaking). The purpose of this letter is to seek the concurrence of the Texas Historical Commission's Office (THC) under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, 36 CFR Part 800. For this undertaking DOE has determined that a finding of "No Historic Properties Affected" to above ground or archaeological resources. All related documents and surveys to support this finding was submitted to THC's portal by the applicant's consultant, WSP, and received the following tracking numbers **202500323, 202411190 and 202501718, 202414380.** THC agreed with the surveys and information provided that no above ground or historic resources in the project area would be affected by email dated October 11, 2024 and October 18, 2024, respectively.

As part of the Section 106 process and for DOE record keeping, I respectfully request your concurrence on the finding of no affect to above ground or historic resources as described above by replying directly to this email. Thank you for your consideration in advance and please feel free to reach out with any questions.

Respectfully-
Alicia
Alicia Williamson
US Department of Energy

Loan Programs Office-Environmental Compliance
(W) 202-586-7272
(C) 240-597-8830
alicia.williamson@hq.doe.gov

From: Justin Kockritz
To: Williamson, Alicia; Danielle Julien
Subject: [EXTERNAL] Re: US Dept of Energy Plug Power Limestone Site, Young County, Texas Section 106 consultation
Date: Wednesday, December 4, 2024 3:08:57 PM
Attachments: thc_email_logo_65px_e6b590e5-b608-48df-a46f-bbaf70308c09.png
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thc_email_signature_email_18px_61592cdc-f8f6-43c2-83c5-648830375491.png

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Hi Alicia,

Yes, consistent with our correspondence with the project applicant's cultural resources contractor, WSP, the Texas Historical Commission concurs with DOE's finding that there are no historic or archeological properties that will be affected by the proposed Plug Power Limestone Green Hydrogen Production Project in Young County, Texas.

I will add this correspondence to our records for the project. If you have any questions, or if we can be of further assistance, please let us know.

Thank you

TEXAS HISTORICAL COMMISSION
REAL PLACES TELLING REAL STORIES

Justin Kockritz
Lead Project Reviewer, Federal Programs
History Programs Division
P.O. Box 12276, Austin, Texas 78711-2276
Phone: +1 512 936 7403
Fax: +1 512 463 5750
thc.texas.gov

From: Williamson, Alicia <alicia.williamson@hq.doe.gov>
Sent: Tuesday, December 3, 2024 3:15 PM
To: Danielle Julien <Danielle.Julien@thc.texas.gov>
Cc: Justin Kockritz <Justin.Kockritz@thc.texas.gov>
Subject: RE: US Dept of Energy Plug Power Limestone Site, Young County, Texas Section 106 consultation

Good afternoon-
I am reaching out today to follow up and see if there are any questions or updates regarding the request in the email below.
Please feel free to reach out anytime.
Thank you-

Alicia

Alicia Williamson
US Department of Energy
Loan Programs Office-Environmental Compliance
(W) 202-586-7272
(C) 240-597-8830
alicia.williamson@hq.doe.gov

From: Williamson, Alicia
Sent: Monday, November 25, 2024 2:19 PM
To: danielle.julien@thc.texas.gov
Cc: justin.kockritz@thc.texas.gov
Subject: US Dept of Energy Plug Power Limestone Site, Young County, Texas Section 106 consultation

Dear Ms. Julien and Mr. Kockritz-

Pursuant to its authority under Title XVII of the Energy Policy Act of 2005 (EPAct), which established a Federal loan guarantee program, the U.S. Department of Energy (DOE), Loan Programs Office (LPO) is evaluating whether to provide a Federal loan guarantee to Plug Power, Inc. Limestone Facility (Plug Power) to support the development of a proposed green hydrogen production facility in Graham, Texas in Young County (the Project). Plug Power will construct the Project on an unincorporated tract of land in Young County, Texas, west of the City of Graham, along Highway 209 on private land. The Project will consist of a 40-acre site for the green hydrogen production facility, a 1.1-mile-long access road to the facility from Highway 209, and an approximately 13.6-mile-long transmission line. Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant (DOE's proposed action and undertaking). The purpose of this letter is to seek the concurrence of the Texas Historical Commission's Office (THC) under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations, 36 CFR Part 800. For this undertaking DOE has determined that a finding of "No Historic Properties Affected" to above ground or archaeological resources. All related documents and surveys to support this finding was submitted to THC's portal by the applicant's consultant, WSP, and received the following tracking numbers **202500323, 202411190 and 202501718, 202414380.** THC agreed with the surveys and information provided that no above ground or historic resources in the project area would be affected by email dated October 11, 2024 and October 18, 2024, respectively.

As part of the Section 106 process and for DOE record keeping, I respectfully request your concurrence on the finding of no affect to above ground or historic resources as described

above by replying directly to this email. Thank you for your consideration in advance and please feel free to reach out with any questions.

Respectfully-

Alicia
Alicia Williamson
US Department of Energy
Loan Programs Office-Environmental Compliance
(W) 202-586-7272
(C) 240-597-8830
alicia.williamson@hq.doe.gov

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT
P. O. BOX 17300
FORT WORTH, TEXAS 76102-0300

November 18, 2024

Regulatory Division

SUBJECT: Project Number SWF-2024-00405, Limestone Green Hydrogen Project

Ms. Mandy Chadwick
Plug Power Limestone LLC
125 Vista Boulevard
Slingerlands, New York 12159
MChadwick@plugpower.com

Dear Ms. Chadwick:

This letter is in regard to information received August 12, 2024, and subsequent submittals dated September 6, 2024, September 26, 2024, October 3, 2024, and October 21, 2024, concerning a proposal for the construction of the Limestone Green Hydrogen Project located near the City of Graham, Young County, Texas. This project has been assigned Project Number SWF-2024-00405. Please include this number in all future correspondence concerning this project.

Under Section 404 of the Clean Water Act the U.S. Army Corps of Engineers (USACE) regulates the discharge of dredged and fill material into waters of the United States, including wetlands. USACE responsibility under Section 10 of the Rivers and Harbors Act of 1899 is to regulate any work in, or affecting, navigable waters of the United States. Based on the description of the proposed work, as illustrated on Figure 1: Potential Impacts to Waters of the United States, consisting of 1 page, (page 9), and other information available to us, we have determined this project will involve activities subject to the requirements of Section 404.

We have reviewed this project under the pre-construction notification procedures of Nationwide Permit General Condition 32 Federal Register, Vol. 86, No. 245, Monday, December 27, 2021. We have determined the discharge of dredged or fill materials into waters of the United States associated with this project appears to qualify for Nationwide Permit 14 for Linear Transportation Project. To use this permit, the permittee must ensure the work is in compliance with the specifications and conditions for the permit listed above, found at https://www.swf.usace.army.mil/Missions/Regulatory/Permitting/Nationwide-General-Permits/, and the special condition(s) listed below. Additionally, all activities must comply with the water quality certification conditions of the Texas Commission on Environmental Quality (TCEQ) located at https://www.swf.usace.army.mil/Portals/47/docs/regulatory/Permitting/General%20Permitting/TX_401_cert.pdf?ver=rIe8wttu6MRCA2s6Q4QQMg%3d%3d. Failure to comply with these specifications and conditions invalidates the authorization and may result in a violation.

Our verification for the construction of this activity under this nationwide permit is valid until March 14, 2026, unless prior to that date the nationwide permit is suspended, revoked, or modified such that the activity would no longer comply with the terms and conditions of the nationwide permit on a regional or national basis. The USACE will issue a public notice announcing the changes when they occur. Furthermore, activities that have commenced, or are under contract to commence, in reliance on a nationwide permit will remain authorized provided the activity is completed within 12 months of the date of the nationwide permit's expiration, modification, or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5(c) or (d).

Our review of this project also addressed its effects on threatened and endangered species. Based on the information provided, we have determined this project will not affect any species listed as threatened or endangered by the U.S. Fish and Wildlife Service within our permit area. However, please note you are responsible for meeting the requirements of General Condition 18 on endangered species.

The permittee must sign and submit to us the enclosed certification that the work, including any proposed mitigation, was completed in compliance with the nationwide permit. The permittee should submit the certification within 30 days of the completion of work.

This permit should not be considered as an approval of the design features of any activity authorized or an implication that such construction is considered adequate for the purpose intended. It does not authorize any damage to private property, invasion of property rights, or any infringement of federal, state, or local laws or regulations.

Thank you for your interest in our nation's water resources. If you have any questions concerning our regulatory program, please refer to our website at http://www.swf.usace.army.mil/Missions/Regulatory or contact Ms. Valerie Sewell at the address above, by telephone (817) 886-1782, or by email valerie.sewell@usace.army.mil, and refer to your assigned project number.

Please help the regulatory program improve its service by completing the survey on the following website: https://regulatory.ops.usace.army.mil/customer-service-survey/

Sincerely,

Jennifer R. Walker

For: Brandon W. Mobley
Chief, Regulatory Division

Enclosure:
Figure 1: Potential Impacts to Waters of the United States

Electronic Copy Furnished:
Ms. Alicia Williamson, Alicia.williamson@hq.doe.gov
Mr. Marc Auten, Marc.auten@wsp.com

PERMIT COMPLIANCE CERTIFICATION

U.S. Army Corps of Engineers Project Number: SWF-2024-00405

Type of Nationwide: Nationwide Permit 14 for Linear Transportation Projects

Name of Permittee: Plug Power Limestone LLC
125 Vista Boulevard
Slingerlands, New Your, 12159

Date of Issuance: November 18, 2024

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

Regulatory Division
CESWF-DE-R
U.S. Army Corps of Engineers
P.O. Box 17300
Fort Worth, Texas 76102-0300

Or email to: CESWF-Compliance@usace.army.mil

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit was completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

_____ _____

Signature of Permittee Date

From: Williamson, Alicia
To: sean_edwards@fws.gov
Cc: Buckingham, Matthew A; Dragon-Moore, Sydney R
Subject: Plug Power Limestone Project in Young County, Texas
Date: Wednesday, August 14, 2024 11:58:00 AM

Hello Mr. Edwards-
The US DOE Loan Programs Office is in the process of preparing an EA in support of the proposed Plug Power hydrogen production facility in Young County, Texas (Limestone project). I received your information from the project's environmental consultant, Tim Langer, who has been working on the Ecology sections of the document.

Is it possible to chat with you this week about the Threatened and Endangered species review for this project? I am free all afternoon tomorrow and Friday.
Thank you in advance for your time and consideration.

Respectfully-
Alicia

Alicia Williamson
Environmental Protection Specialist
US Department of Energy
Loan Programs Office-Environmental Compliance
(W) 202-586-7272
(C) 240-597-8830
alicia.williamson@hq.doe.gov

From: Edwards, Sean
To: Williamson, Alicia
Cc: Johnson, Aydin (CONTR)
Subject: Re: [EXTERNAL] RE: Technical Assistance on Plug Power Limestone site Email 2 of 3
Date: Tuesday, October 1, 2024 4:28:00 PM

Alicia,

I have reviewed the shared materials addressing potential impacts to the whooping crane and other federally listed species resulting from the proposed Plug Power Limestone Project (Project) planned in Young County, Texas. Upon review of the Whooping Crane Habitat Assessment, the Biological Assessment developed for this project, and prior USFWS correspondence with our North Dakota Ecological Services Field Office, we concur that the Project and its proposed actions would be Not Likely To Adversely Affect the whooping crane. This concurrence is based upon project conservation measures pledging to mark transmission lines (according to APLIC guidelines) within one mile of suitable wetland stopover habitat within the 95% migratory corridor, as well as additional measures to mark the 13 "Rank 1" spans, five of which are outside the one mile buffer. A total of 31 line spans would be marked with bird flight diverters.

Thank you again for the opportunity to coordinate on the Plug Power Limestone Project and please contact me with any additional needs or questions.

Kind Regards,

Sean Edwards
Fish & Wildlife Biologist
U.S. Fish & Wildlife Service
3233 Curtis Dr.
Fort Worth, TX 76116

From: Williamson, Alicia <alicia.williamson@hq.doe.gov>
Sent: Monday, September 16, 2024 10:22 AM
To: Edwards, Sean <sean_edwards@fws.gov>
Cc: Dragon-Moore, Sydney R <sydney_dragon-moore@fws.gov>; Buckingham, Matthew A <matthew_buckingham@fws.gov>; Johnson, Aydin (CONTR) <aydin.johnson@hq.doe.gov>
Subject: RE: [EXTERNAL] RE: Technical Assistance on Plug Power Limestone site Email 2 of 3

Email 2 of 3.

Thank you-
Alicia

From: Edwards, Sean <sean_edwards@fws.gov>
Sent: Monday, September 16, 2024 10:50 AM
To: Williamson, Alicia <alicia.williamson@hq.doe.gov>
Cc: Dragon-Moore, Sydney R <sydney_dragon-moore@fws.gov>; Buckingham, Matthew A <matthew_buckingham@fws.gov>; Johnson, Aydin (CONTR) <aydin.johnson@hq.doe.gov>
Subject: Re: [EXTERNAL] RE: Technical Assistance on Plug Power Limestone site

Alicia,

I'm sorry to keep coming back with the same response but for whatever reason I'm still not receiving any of the attachments your prior emails have mentioned (like the agreement between FWS and WAPA, the biological assessment on the whooping crane, and supporting technical documents related to the Limestone Site also mentioned prior). Let's try one more time and then we may have to resort to some other type of file sharing option.

Kind Regards,

Sean Edwards
Fish & Wildlife Biologist
U.S. Fish & Wildlife Service
3233 Curtis Dr.
Fort Worth, TX 76116

From: Williamson, Alicia <alicia.williamson@hq.doe.gov>
Sent: Thursday, September 12, 2024 1:57 PM
To: Edwards, Sean <sean_edwards@fws.gov>
Cc: Dragon-Moore, Sydney R <sydney_dragon-moore@fws.gov>; Buckingham, Matthew A <matthew_buckingham@fws.gov>; Johnson, Aydin (CONTR) <aydin.johnson@hq.doe.gov>
Subject: RE: [EXTERNAL] RE: Technical Assistance on Plug Power Limestone site

Hello Sean-
Hope your week is going well.

Just wanted to check and see if you had any questions or needed anything additional about the Plug Power-Limestone project.
Looking forward to hearing your feedback on our proposal.

Thank you in advance for the consideration.
Respectfully-

Alicia

Alicia Williamson
Environmental Protection Specialist
US Department of Energy
Loan Programs Office-Environmental Compliance
(W) 202-586-7272
(C) 240-597-8830
alicia.williamson@hq.doe.gov

From: Williamson, Alicia
Sent: Friday, August 30, 2024 5:32 PM
To: Edwards, Sean <sean_edwards@fws.gov>
Cc: Dragon-Moore, Sydney R <sydney_dragon-moore@fws.gov>; Buckingham, Matthew A <matthew_buckingham@fws.gov>; Johnson, Aydin (CONTR) <aydin.johnson@hq.doe.gov>
Subject: RE: [EXTERNAL] RE: Technical Assistance on Plug Power Limestone site

Sean-
Apologies for missing your email yesterday. Ive been out on sick leave.
Not sure why the documents did not come through last time. Likely operator error .

Please see attached biological assessment on the whooping crane and supporting technical documents related to the Limestone Site. Let me know if they do not come through this time around.
Enjoy the long weekend.
Alicia

Alicia Williamson
Environmental Protection Specialist
US Department of Energy
Loan Programs Office-Environmental Compliance
(W) 202-586-7272
(C) 240-597-8830
alicia.williamson@hq.doe.gov

From: Edwards, Sean <sean_edwards@fws.gov>
Sent: Thursday, August 29, 2024 3:58 PM
To: Williamson, Alicia <alicia.williamson@hq.doe.gov>
Cc: Dragon-Moore, Sydney R <sydney_dragon-moore@fws.gov>; Buckingham, Matthew A <matthew_buckingham@fws.gov>; Johnson, Aydin (CONTR) <aydin.johnson@hq.doe.gov>

Subject: Re: [EXTERNAL] RE: Technical Assistance on Plug Power Limestone site

Alicia,

Thank you for circling back with this reminder! I will expedite a response to hopefully resolve our discussion regarding the Limestone Hydrogen Plug Power Project. I have searched my email archives for your original email on August 15 and the attachments don't appear. Can you please resend those and I will put together a response ASAP. Please note that I will be out of the office Friday - Monday, and I will respond no later than Tuesday September 3.

Kind Regards,

Sean Edwards
Fish & Wildlife Biologist
U.S. Fish & Wildlife Service
3233 Curtis Dr.
Fort Worth, TX 76116

From: Williamson, Alicia <alicia.williamson@hq.doe.gov>
Sent: Wednesday, August 28, 2024 3:00 PM
To: Edwards, Sean <sean_edwards@fws.gov>
Cc: Dragon-Moore, Sydney R <sydney_dragon-moore@fws.gov>; Buckingham, Matthew A <matthew_buckingham@fws.gov>; Johnson, Aydin (CONTR) <aydin.johnson@hq.doe.gov>
Subject: [EXTERNAL] RE: Technical Assistance on Plug Power Limestone site

Sean-
I just wanted to circle back with you about the Plug Power project and see if there were any additional questions on the information we submitted.
Thank you-
Alicia

Alicia Williamson
Environmental Protection Specialist
US Department of Energy
Loan Programs Office-Environmental Compliance
(W) 202-586-7272
(C) 240-597-8830

alicia.williamson@hq.doe.gov

From: Williamson, Alicia
Sent: Thursday, August 15, 2024 2:17 PM
To: Edwards, Sean <sean_edwards@fws.gov>
Cc: Dragon-Moore, Sydney R <sydney_dragon-moore@fws.gov>; Buckingham, Matthew A <matthew_buckingham@fws.gov>; Johnson, Aydin (CONTR) <aydin.johnson@hq.doe.gov>
Subject: Technical Assistance on Plug Power Limestone site

Sean/Matthew/Sydney
Thank you again for meeting with us to discuss the Plug Power Limestone project. Attached is additional technical information for the Service to consider in assessing the potential effects of the Limestone project transmission line on the whooping crane, including the agreement between FWS and WAPA outlining critical background information regarding species protection measures. We are looking to get agreement from FWS that marking 31 out of 74 line spans marked for this project will be sufficient to minimize the risk to whooping cranes, and bird species in general.

Please let me know if you have any further questions or would like to discuss in more detail.
Respectfully-
Alicia

Alicia Williamson
Environmental Protection Specialist
US Department of Energy
Loan Programs Office-Environmental Compliance
(W) 202-586-7272
(C) 240-597-8830
alicia.williamson@hq.doe.gov

September 16, 2024

Jeannine Wendel
County Executive Director
Farm Service Agency
United States Department of Agriculture

SUBJECT: U.S. Department of Energy, Plug Power – Limestone Project Hydrogen Production Facility in Graham, Texas

Dear Ms. Wendel:

Pursuant to its authority under Title XVII of the Energy Policy Act of 2005 which established a federal loan guarantee program for certain projects that employ innovative technologies the U.S. Department of Energy (DOE) is evaluating whether to provide a Federal loan to Plug Power, Inc. Limestone Facility (Plug Power - Limestone) to support the development of a proposed green hydration production facility in Graham, Texas (the Project). Plug Power will construct the Project on an unincorporated tract of land west of the City of Graham, along Highway 209 (Figure 1). The purpose of this letter is to consult (DOE's proposed action and undertaking).

The DOE undertaking (providing a loan to Plug Power in Graham, Texas) would support an approximately 40-acre site for the green hydrogen production facility and an approximately 13.6-mile-long transmission line (Figure 2). Additionally, the site would house ancillary and support facilities such as warehouse and storage buildings, hydrogen storage vessels, an electrical substation, and a water pre-treatment plant.

DOE is aware that the Natural Resources Conservation Service (NRCS) has general responsibility for implementing the Farmland Protection Policy Act (FPPA) and to review projects that may affect prime, unique, or statewide important farmland. Since DOE is proposing to issue a loan for the construction of the Plug Power - Limestone Project, we are assuming responsibility for complying with the FPPA. As part of that process, DOE has completed Parts I, III, and VI of the enclosed form (Attachment 3); we ask that NRCS completes Parts II, IV, and V of the form. Pursuant to §658.4(g) of the FPPA, after DOE makes a final decision on the project, DOE will return a copy of the Form AD-1006 to the NRCS, indicating the final decision of the agency to the NRCS field office.

If you have any questions or would like to discuss this project further, please contact me in the DOE Loan Programs Office at (202) 586-7272, or email at Alicia.Williamson@hq.doe.gov.

Respectfully,

Alicia Williamson

Alicia Williamson
NEPA Document Manager
Loan Programs Office

Attachments:

Attachment 1: Site Location Map
Attachment 2: Project Site Plan
Attachment 3: AD-1006 for Limestone Project

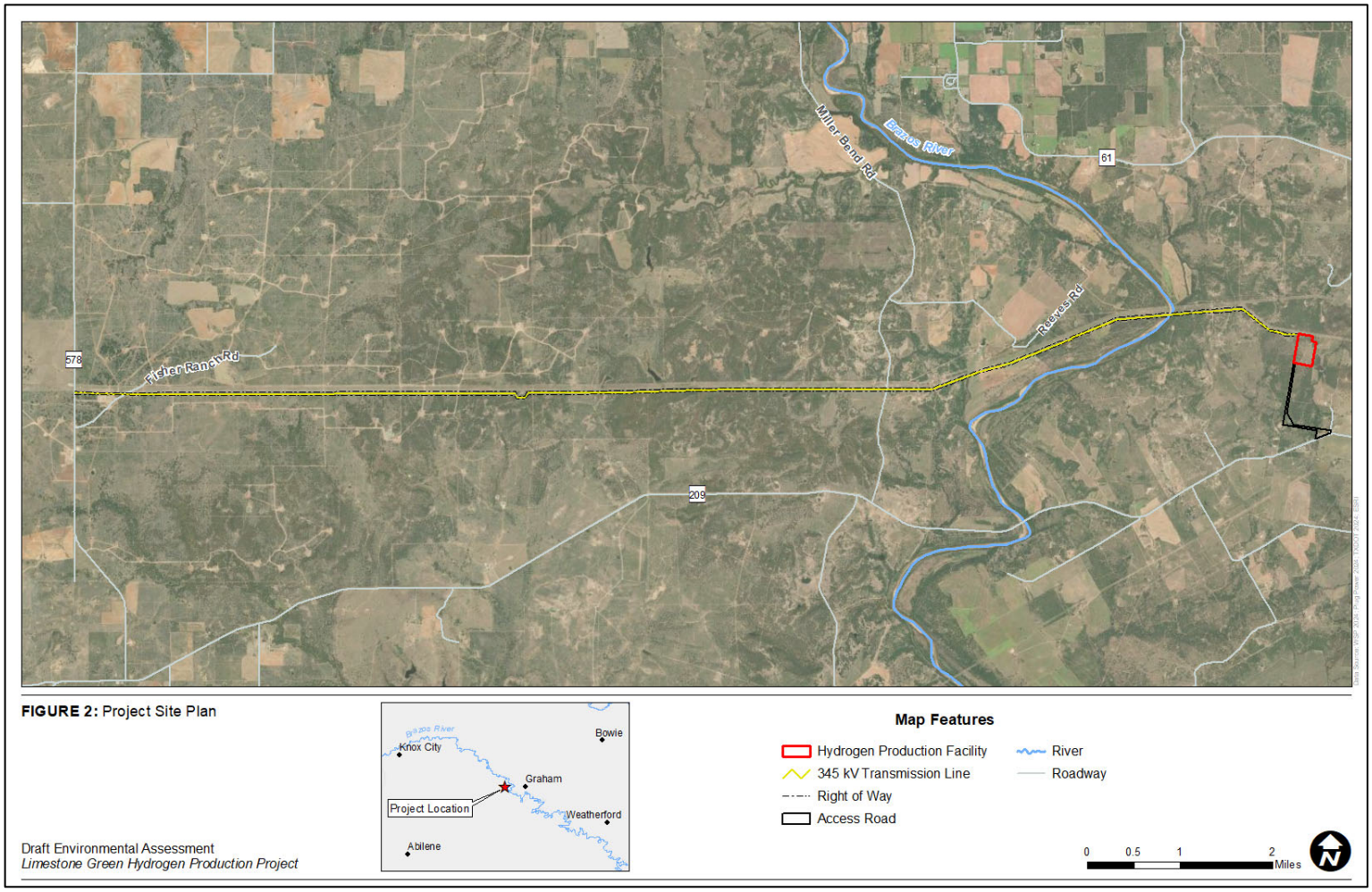

Figure 1: Project Location

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 09/05/2024	
Name of Project Plug Power-Limestone Project	Federal Agency Involved US DOE	
Proposed Land Use Green Hyrdogen Production Facility	County and State Young County, Texas	
PART II *(To be completed by NRCS)*	Date Request Received By NRCS	Person Completing Form:

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☐	NO ☐	Acres Irrigated	Average Farm Size

Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	41.58			
B. Total Acres To Be Converted Indirectly	25.84			
C. Total Acres In Site	67.42			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide Important or Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)				

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	15			
2. Perimeter In Non-urban Use	(10)	10			
3. Percent Of Site Being Farmed	(20)	0			
4. Protection Provided By State and Local Government	(20)	0			
5. Distance From Urban Built-up Area	(15)	15			
6. Distance To Urban Support Services	(15)	15			
7. Size Of Present Farm Unit Compared To Average	(10)	0			
8. Creation Of Non-farmable Farmland	(10)	0			
9. Availability Of Farm Support Services	(5)	1			
10. On-Farm Investments	(20)	4			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	3			
TOTAL SITE ASSESSMENT POINTS	160	63	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	63	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	63	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☑

Reason For Selection:

Name of Federal agency representative completing this form: Alicia Williamson	Date:

(See Instructions on reverse side) **Form AD-1006 (03-02)**

USDA Natural Resources Conservation Service
U.S. DEPARTMENT OF AGRICULTURE

Texas State Office
101 S. Main Street
Temple, TX, 76501

September 19, 2024

United States Department of Energy

Attention: Alecia Williamson, NEPA Document Manager

Subject: Proposed U.S. Department of Energy, Plug Power - Limestone Project Hydrogen Production Facility in Graham, Texas

We have reviewed the information provided in your correspondence dated September 16, 2024 concerning the Proposed U.S. Department of Energy, Plug Power - Limestone Project Hydrogen Production Facility in Graham, Texas. This review is part of the National Environmental Policy Act (NEPA) evaluation for the United States Department of Energy (DOE). We have evaluated the proposed site as required by the Farmland Protection Policy Act (FPPA).

The proposed project consists of Prime Farmland and we have completed the Farmland Conversion Impact Rating form (AD-1006) for the site. The combined rating of the site is **133**. The FPPA law states that sites with a rating less than 160 will need no further consideration for protection and no additional evaluation is necessary. We encourage the use of accepted erosion control methods during the construction of this project.

If you have further questions, please contact me at (254) 742-9951 or by email at chris.holle@usda.gov.

Sincerely,

Chris Holle

Chris Holle
USDA/NRCS

Attachment: Plug Power-Limestone Project_TX503_AD-1006

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 9/16/24
Name of Project Plug Power-Limestone Project	Federal Agency Involved United States Department of Energ
Proposed Land Use Green Hygrogen Production Facility	County and State Young County, Texas
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 9/17/2024 9:15:52 AI / Person Completing Form: Chris Holle

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES	NO	Acres Irrigated	Average Farm Size
	☑	☐	1,863	674.0

Major Crop(s)	Farmable Land In Govt. Jurisdiction	Amount of Farmland As Defined in FPPA
Corn, Cotton, Small Grains	Acres: 574,982 % 96.58888453	Acres: 255517.841513 % 42.9234015E

Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS
NCCPI	NONE	9/19/24

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	42			
B. Total Acres To Be Converted Indirectly	0			
C. Total Acres In Site	42			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	1			
B. Total Acres Statewide Important or Local Important Farmland	0			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	0.0072			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	56			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	56			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	15			
2. Perimeter In Non-urban Use	(10)	10			
3. Percent Of Site Being Farmed	(20)	0			
4. Protection Provided By State and Local Government	(20)	0			
5. Distance From Urban Built-up Area	(15)	15			
6. Distance To Urban Support Services	(15)	15			
7. Size Of Present Farm Unit Compared To Average	(10)	0			
8. Creation Of Non-farmable Farmland	(10)	0			
9. Availability Of Farm Support Services	(5)	1			
10. On-Farm Investments	(20)	4			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	3			
TOTAL SITE ASSESSMENT POINTS	160	63	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	63	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	63	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☑

Reason For Selection:

Name of Federal agency representative completing this form: Alicia Williamson | Date:

(See Instructions on reverse side)

Form AD-1006 (03-02)

APPENDIX B PERMITS AND APPROVALS

Appendix B. Project-Required Federal, State, and Local Permits and Approvals

Permit/Approval	Agency or Office	Status
Federal		
Clean Water Act Section 404 Permit	U.S. Army Corps of Engineers	Nationwide Permit (NWP) 14 verification letter was received on November 18, 2024.
Endangered Species Act Section 7 Consultation	U.S. Fish and Wildlife Service	Informal consultation was completed on October 1, 2024.
National Historic Preservation Act Section 106	U.S. Department of Energy/ Texas Historical Commission	Consultation was completed on October 21, 2024.
Emergency Planning and Community Right-to-Know Act Section 312 Tier II Reporting	U.S. Environmental Protection Agency / Texas Commission of Environmental Quality	Tier II forms will be submitted annually once the project is operational.
State		
Clean Water Act Section 401 – State Water Quality Certificate	Texas Commission on Environmental Quality	Section 401 Water Quality Certification is pre-approved for projects that meet the terms and conditions of the NWP's under Section 404. Due to the Memorandum of Agreement (MOA) between TCEQ and USACE, any NWP meets Texas water quality standards for all Tier 1 projects, which are less then three (3) acres of wetland disturbance and 1,500 feet of stream disturbance. The Project is a Tier 1 project.
General Permit to Dispose Hydrostatic Test Water General Permit (GP) TXG670000 (Construction)	Texas Commission on Environmental Quality	Application has not been submitted.
Stormwater Construction General Permit (CGP) TXR150000 Notice of Intent (NOI) and Storm Water Pollution Prevention Plan (SWPPP) (Construction)	Texas Commission on Environmental Quality	Coverage under TXR150000 began in January 2023 for the hydrogen production facility and in October 2023 for the transmission line.
Stormwater Multi-Sector General Permit (MSGP) for Industrial Facilities TXR050000 and SWPPP (Operation)	Texas Commission on Environmental Quality	A notice of intent will need to be submitted prior to project operations.
General Permit to Dispose of Wastewater, WQG100000 (Operation)	Texas Commission on Environmental Quality	Permit was obtained on September 15, 2020, and expires on September 15, 2025.
Air Quality Permit (Operation)	Texas Commission on Environmental Quality	Permit by Rule (PBR) documentation completed and will be kept onsite for compliance. Coverage began September 2023.
Highway Use Agreement	Texas Department of Transportation	Agreement executed November 15, 2023.

Access Driveway Permit from FM 0209 (Construction)	Texas Department of Transportation	Permit was issued in January 2023.
Utility Installation Request (UIR)	Texas Department of Transportation	Approval was provided in June 2023
State Fire Marshal	Fire Safety Inspection	To be submitted prior to operations.
Local		
Septic Permit	Young County	To be submitted prior to operations.
Highway Use Agreement	Young County	Plug Power and Young County have entered into a Highway Use Agreement.
Certificate of Occupancy	Young County	To be submitted prior to operations.

APPENDIX C LIST OF PLUG POWER COMMENTERS

Appendix C

The LPO received approximately 150 letters from various commenters from November 11 through December 4, 2024 in opposition to the Plug Power Gateway site. An example of the letter followers the list of commenters.

Uphold the Treaty, STOP STAMP List of Commenters received up until December 4, 2024.

List of Commenters:

Ariane Fulk
Evelyn Wackett
Jason Michalski
Justin Herne
Karl Hildenbrand
Katharine Tussing
Maureen Schiener
Evan Lowenstein
Kathleen Gill
Jessie Cherofsky
Georgette Stockman
Elizabeth Carivan
David Gordon
Kathleen Dunn-Raynoha
Charles Bowman
Allyson Sawyer
Gina Schelemanow
Ellis McDaniel
Karen Smith
Christel Markevich
Clare Sutton
Bobbi Fitzgerald
Arthur Barnes
Ryan Madden
Molly Ornati
Jackie Weisberg
Charles Moon
Cliff Fonstein
Danielle Nagle
Onalie Pettit
Catherine Tisa
Marguerite Frarey

Edna Kriner-Kirby Ariel Llewellyn
Jenica Faye
James Burnette
Taylor Jaffe
Howard Henry
Monique Fitzgerald
Mike Brady
Alfred Ruggiero
Elizabeth Johnson
Colin Tucker
Elizabeth Grant
Lauren Krueger
Diane Ciurczak
Niki Cross
Lynne Hadley
Gary Ciurczak
Xaver Kandler
Allen Blair
Elizabeth Speck
Eunice Ko
Connie Habash
David Agness
Sara Gronim
Cecilia Yearsley
Jane Potenzo
Joelle Pretty
Kyle Leonard
Stefanie Erdmann
Marie Scarles
Dorothy Janick
Kirk Scirto
David Yearsley

Lauren Berger
John Keevert
Rebecca James
David Sutliff-Atias
Susan Hellman
Lou Anne DaRin
Lisabeth Frarey
Terry Miller
Erin Milliken
Kristen Van Hooreweghe Amy Kahn
Laura Nelson
Holly Rockwell, Justice & Care for Creation Coordinator, Sisters of St. Joseph of Rochester
Siri Ketha
Anne Moss
William Forrest
Jill Macy
Kimberley Nelson
Lillian Lennox Whitehead
Maria Testa
Shirley Bright-Neeper
Sara Gronim
Cliff Fonstein
Zasu Scott
Keith Abel
Rachel Coyle
JILL MONACELLI
Sheila Place
Maureen Dunphy
Sharon Levy
Leah Saada-Sherman

Susan Steepy
Liseli Haines
Alexander Bornemann
Richard Codding
Anna Castonguay Sandra St. Louis
Willow Parchment Miles Serena
Margaret Wooster
Sarah Ayala
Haley Doerger
Nina DiLapi
Nate Buckley
Marie Giacinto
Lori Vroegindewey
Cora Fisher
Bridget McFadden
Eileen Kelly
Katherine Gressel
Laura Hulbert
Samantha Gore
Julie Hollar
Jeanne Bergman
Margery Cooper
Molly Ornati
Jodie Leidecker
Howard Stern
Audrey Garrett
Helen Beichel
Laura Shapiro
Emma Steele
Theres Wegmann
Nat Jean
Maggie Fishman
Melissa Scott
Sonia Romero Villanueva
John Magisano
Eileen Moran

Sofia Gonzales
David Rosenfeld
Anne Byrd
Astrid Hoffius
Masiel Smith
Alex Baldwin
Rebecca Plattus
S Homan
Diehl Heidi
Charlotte Crowe
Victoria Augustine
Richard Codding
Judith Wellman
Alex Baldwin
Lynn Tondrick
Mary Jacobs
Pauline David-Sax
Jane Sutter Brandt
Evelyn Wackett
Aaron Miller
Timothy Judson
Moira Cleary
Rosanne Emery
Shirley Wright
Alfred Ruggiero
Ann Harbison
Dwain Wilder
Leola Specht
Ian Morgan
Armage Barrette – Cotto
Barbara Anger
Alex Candage
Nicole Windhausen
Yvette Hewitt
Cynthia Wickwire Lundquist
Kathleen Gill

DIONNA WENDT
Joshua WENDT
Oma Jeter
Jean-Paul Bourque
Steve V.
Christine Frank
Ann Nowicki
MaryAnn Denning
Nick Dawson
Linda Hanna
Phyllis Tierney

From: Ariane Fulk
To: Williamson, Alicia
Subject: [EXTERNAL] Uphold the Treaty, STOP STAMP
Date: Monday, November 11, 2024 8:18:17 AM

Dear Dept of Energy Loan Programs Office Environmental Compliance Officer Alicia Williamson,

In solidarity with the Tonawanda Seneca Nation, I commemorate the 230th Anniversary of the signing of the Treaty of Canandaigua on November 11, 2024 by calling on State and Federal officials to honor the Treaty, respect the Nation's sovereign rights, and stop the industrial development of the WNY STAMP site on the boundary of the Nation's reservation territory.

The 1794 Treaty of Canandaigua is one of the most important treaties to the Haudenosaunee and remains the law of the land to this day. The treaty upholds Haudenosaunee sovereignty by establishing "a firm and permanent friendship" between the Haudenosaunee and the United States, and enshrines the right of Haudenosaunee to the "free use and enjoyment" of their lands.

Construction of the STAMP mega-industrial site, which lies next to and upstream from the Nation's pristine Big Woods and waterways including Tonawanda Creek, violates this historic agreement and is being carried out without proper consultation with the Nation's Council of Chiefs.

I call on the Department of Energy to reject Plug's application for tax dollars to shore up its shaky finances, and call on Plug to shutter its STAMP facility permanently.

I demand that impacts on the Nation and its treaty rights be considered prior to any federal funding for Edwards Vacuum, and call on Edwards to suspend construction pending this review.

Finally, I demand that GCEDC must not be granted SEQR lead agency in the permitting process for any prospective data center tenant at STAMP.

Sincerely,
Ariane Fulk
arianes.new.pen@gmail.com