



Bonanza Energy Facility in Klamath County, Oregon

Notice of Intent to Apply for a Site Certificate

August 2020

Submitted to
Oregon Energy Facility Siting Council

Prepared for
Hecate Energy Bonanza LLC



Bonanza Energy Facility in Klamath County, Oregon

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Acronyms and Abbreviations

ACDP	Air Contaminant Discharge Permit
Applicant	Hecate Energy Bonanza LLC
ASC	Application for Site Certificate
BPA	Bonneville Power Administration
CFR	<i>Code of Federal Regulations</i>
c/o	care of
DEQ	Oregon Department of Environmental Quality
DSL	Oregon Department of State Lands
EFSC	Energy Facility Siting Council
EFU	Essential Farm Use
ESCP	erosion and sediment control plan
FAA	Federal Aviation Administration
GCR	ground coverage ratio
IPaC	<i>Information, Planning, and Conservation System</i>
Jacobs	Jacobs Engineering Group Inc.
kV	kilovolt
LLC	limited liability company
MW	megawatt
NHD	<i>National Hydrography Dataset</i>
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWI	<i>National Wetlands Inventory</i>
O&M	operations and maintenance
OAR	Oregon Administrative Rule
ODA	Oregon Department of Agriculture
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Energy
OR	Oregon Route
ORBIC	Oregon Biodiversity Information Center
ORS	Oregon Revised Statute
PCS	power conversion station
POI	point of interconnection
SHPO	State Historic Preservation Office
USACE	U.S. Army Corps of Engineers
U.S.C.	<i>United States Code</i>

USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

Exhibit A. Applicant Information

OAR 345-020-0011(1)(a)

(a) **Exhibit A.** *Information about the applicant and participating persons, including:*

- (A) *The name and address of the applicant including all co-owners of the proposed facility, the name, mailing address, email address and telephone number of the contact person for the NOI, and if there is a contact person other than the applicant, the name, title, mailing address, email address and telephone number of that person;*

Response:

Name and mailing address of Applicant:

Hecate Energy Bonanza LLC
c/o Hecate Energy NAF LLC
621 West Randolph Street, #2
Chicago, IL 60661

Applicant Contact Person with Mailing Address, Email Address, and Telephone Number:

Paul Turner, Ph.D.
Vice President Business Development
Hecate Energy LLC
621 West Randolph Street, #2
Chicago, IL 60661
pturner@hecateenergy.com
602-750-6369

Contact persons other than the Applicant:

Paul Seilo
Jacobs Engineering Group Inc.
2020 SW 4th Avenue, Suite 300
Portland, OR 97207
paul.seilo@jacobs.com
503-736-4012

Timothy L. McMahan
Stoel Rives LLP
760 SW 9th Avenue, Suite 3000
Portland, OR 97205
tim.mcmahan@stoel.com
503-294-9517

- (B) *The contact name, mailing address, email address and telephone number of all participating persons, other than individuals, including but not limited to any parent corporation of the applicant, persons upon whom the applicant will rely for third-party permits or approvals related to the facility, and persons upon whom the applicant will rely in meeting any facility standard adopted by the Council;*

Response:

Parent Corporation:

Hecate Energy NAF LLC
621 West Randolph Street, #2

Chicago, IL 60661

Contact Name, Mailing Address, Email Address, and Telephone Number:

Paul Turner, Ph.D.
Vice President Business Development
Hecate Energy LLC
621 West Randolph Street, #2
Chicago, IL 60661
pturner@hecateenergy.com
602-750-6369

(C) *If the applicant is a corporation:*

- (i) *The full name, official designation, mailing address, email address and telephone number of the officer responsible for submitting the NOI;*
- (ii) *The date and place of its incorporation;*
- (iii) *A copy of its articles of incorporation and its authorization for submitting the NOI; and*
- (iv) *In the case of a corporation not incorporated in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon;*

Response: The Applicant is not a corporation.

- (D) *If the applicant is a wholly owned subsidiary of a company, corporation or other business entity, in addition to the information required by paragraph (C), the full name and business address of each of the applicant's full or partial owners;*

Response: Hecate Energy NAF LLC is the parent company of Hecate Energy Bonanza LLC.

Business Address:

Hecate Energy NAF LLC
621 West Randolph Street, #2
Chicago, IL 60661

- (E) *If the person submitting the NOI is an association of citizens, a joint venture or a partnership:*
- (i) *The full name, official designation, mailing address, email address and telephone number of the person responsible for submitting the NOI;*
 - (ii) *The name, business address and telephone number of each person participating in the association, joint venture or partnership and the percentage interest held by each;*
 - (iii) *Proof of registration to do business in Oregon;*
 - (iv) *A copy of its articles of association, joint venture agreement or partnership agreement and a list of its members and their cities of residence; and*
 - (v) *If there are no articles of association, joint venture agreement or partnership agreement, the applicant must state that fact over the signature of each member;*

Response: The person submitting the Notice of Intent (NOI) is not an association of citizens, a joint venture, or a partnership.

(F) *If the applicant is a public or governmental entity:*

- (i) *The full name, official designation, mailing address, email address and telephone number of the person responsible for submitting the NOI; and*
- (ii) *Written authorization from the entity's governing body to submit an NOI;*

Response: The Applicant is not a public or governmental entity.

(G) *If the applicant is an individual, the individual's mailing address, email address and telephone number; and*

Response: The Applicant is not an individual.

(H) *If the applicant is a limited liability company:*

- (i) *The full name, official designation, mailing address, email address and telephone number of the officer responsible for submitting the NOI;*
- (ii) *The date and place of its formation;*
- (iii) *A copy of its articles of organization and its authorization for submitting the NOI; and*
- (iv) *In the case of a limited liability company not registered in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.*

Response:

Officer Responsible for Submitting the NOI:

Hecate Energy Bonanza LLC
c/o Hecate Energy NAF LLC
Attn: Paul Turner
621 West Randolph Street, #2
Chicago, IL 60661
pturner@hecateenergy.com
602-750-6369

Resident Attorney-In-Fact:

Timothy L. McMahan
Stoel Rives LLP
760 SW 9th Avenue, Suite 3000
Portland, OR 97205
tim.mcmahan@stoel.com
503-294-9517

The Applicant is a limited liability company (LLC) originally organized as Hecate Energy Bonanza LLC under the laws of Delaware on September 12, 2014. The Articles of Incorporation for Hecate Energy Bonanza LLC and authorization for submitting this NOI are contained in Attachment A.

Stoel Rives LLP is licensed to do business in Oregon. A Certificate of Compliance for Stoel Rives to do business in Oregon is contained in Attachment A.

Exhibit B. Facility Description

OAR 345-020-0011(1)(b)

(b) **Exhibit B.** Information about the proposed facility, including:

(A) A description of the proposed energy facility, including as applicable:

Response:

Overview of Proposed Facility

Hecate Energy Bonanza LLC (Applicant) proposes to construct and operate the Bonanza Energy Facility (Facility) in Klamath County, Oregon (Figure G-1). The Facility will be a flexible power generation and storage center that uses hybrid technologies to provide a consistent source of renewable energy for existing and evolving markets. The Facility will generate electricity from solar arrays consisting of solar photovoltaic (PV) modules connected to electrical infrastructure such as inverters, transformers, and a substation. The solar generating capacity will range from 150 megawatts (MW) to 300 MW. PV modules contain solar cells that generate electricity by means of the PV effect, in which the semiconductor materials found inside the solar cells interact with photons from the sun to generate an electrical current that can be collected and supplied to the electric power grid. The solar modules will be mounted onto metal fixed-tilt or tracker structures and grouped into arrays (i.e., modules wired in series and in parallel) within the solar array area shown on the Facility layout map (Figure G-2). The electric output from the solar array area will feed into inverters, which take the direct current output of the solar modules and convert it into the alternating current used by the electric power grid. This output of each inverter will then be “stepped up” in voltage before connecting to the proposed onsite Facility substation via direct buried cables. At the Facility’s substation, the voltage will in turn be stepped up to 500 kilovolts (kV) and transferred approximately 8 miles south to the point of interconnect (POI) with the electric power grid via a 500-kV generation-tie transmission line. The POI occurs at the Bonneville Power Administration’s (BPA’s) existing Captain Jack Electric Substation.

The Facility will also incorporate a battery storage system capable of storing and delivering up to 1,100 MW. While not proposed at this time, potential future buildout of the Facility may include an air-cooled, natural gas-fired peaker generating facility, a related or supporting Bonanza natural gas pipeline to the existing Malin natural gas compressor station, and a related or supporting water supply pipeline to the existing water well within the Facility site boundary. The Applicant will propose a natural gas-fired peaker generating facility only if needed to provide firm regional power supply.

The Applicant intends to begin Facility construction in 2023 pending a site certificate from the Energy Facility Siting Council (EFSC).

Design Options

Manufacturers and models of equipment have not been finalized. While solar modules, racking, inverters, and other components are mostly interchangeable and substantially similar to other products of the same kind on the market, manufacturers are continually making updates and refinements to existing models. This, combined with the fact that prices for specific components tend to decline over time, means that final specifications of selected models and manufacturers typically are not known until shortly prior to construction. As such, the descriptions provided herein are representative of typical products, but the precise description and number of individual components may change. If a natural gas-fired peaker generating facility is proposed, the Applicant will seek authorization through a future site certificate amendment.

Facility Site Boundary

The Facility site boundary encompasses the various Facility components, structures, and systems, as well as related and supporting facilities identified and described in this NOI.

- (i) *The nominal electric generating capacity and the average electrical generating capacity, as defined in ORS 469.300;*

Electric Generating Capacity

Response: The Facility will consist of 150 to 300 MW of alternating current nominal and average generating capacity as defined in Oregon Revised Statute (ORS) 469.300(4)(c). The specific electric generating capacity will depend on the solar module technology selected at final design but will not exceed 300 MW.

- (ii) *Major components, structures and systems, including a description of the size, type and configuration of equipment used to generate electricity and useful thermal energy;*

Response:

Major Components, Structures, and Systems

Solar Modules. The solar PV modules will be installed to form array blocks within the solar array area shown on Figure G-2 (Facility Layout). The final number of modules will be determined by power ratings (in Watts) of the specific modules chosen prior to construction. Additional components of each array block include the fixed-tilt or tracking system/racks, posts, cabling, inverters, and transformers. Additional detail on each component is provided in the paragraphs below.

Tables and Trackers. The solar PV modules will be mounted to steel fixed-tilt or tracker tables, which will consist of metal table frames or “racks” with a rotating drive gear that can rotate up to 60 degrees in an east to west direction such that the modules track the sun throughout the day in order to increase solar production. The modules will be approximately 4 feet off the ground when fully stowed. When fully rotated, the highest point of the module will be approximately 8 feet off the ground, while the minimum distance to the ground when fully rotated will be approximately 2 feet.

Posts. Each fixed tilt or tracker table will be bolted to steel posts driven into the ground to serve as the foundation. The post depths will vary depending on soil conditions, which will be confirmed via a detailed geotechnical investigation, but are typically driven to a depth of at least 3 to 4 feet below the surface. Post locations will be determined by the ground coverage ratio (GCR), which is the ratio of the area of the modules to the total area within the array. The GCR for the Facility is currently planned to be approximately 35 percent, meaning that the area occupied by the modules (when fully rotated) will be approximately 35 percent of the area within the array.

Cabling. Electrical cables connecting the modules to each other are typically mounted to the back of the modules using cable trays or wire harnesses. Several rows of modules are then collected in a combiner box located at the end of one of the rows. Other electrical cables within arrays may be buried to a depth of up to 3 feet.

Inverters, Transformers, and Switchgear. The direct current output from the PV modules will be combined in parallel in combiner boxes and then converted into alternating current via the inverters. The output from the inverters will be fed into transformers that step up the voltage. The combination of the inverters and transformers is referred to as a power conversion station (PCS). The transformers will then convey the power via underground collector lines to the switchgear, which consists of an industry-standard electrical protection device that controls, protects, and isolates electrical equipment. The technology is dynamic and rapidly changing. Additional detail will be provided in the ASC.

- (iii) *Methods for waste management and waste disposal, including, to the extent known, the amount of wastewater the applicant anticipates, the applicant's plans for disposal of wastewater and storm water, and the location of disposal;*

Response: The Facility will not use water resources in the generation of electricity and will not produce wastewater for disposal, nor will it produce significant quantities of solid waste. Further details of sewage treatment, water, stormwater drainage, and solid waste management during both construction and operation are discussed in Exhibit K of this NOI.

- (iv) *For thermal power plants:*

I. *A discussion of the source, quantity and availability of all fuels proposed to be used in the facility to generate electricity or useful thermal energy;*

II. *Methods for disposal of waste heat;*

Response: The above rule is not applicable to solar energy generation. Therefore, this rule does not apply to the construction or operation of the Facility.

- (v) *For transmission lines, approximate transmission line voltage, load carrying capacity and type of current;*

Response: Depending on the ultimate generating capacity built within the Facility's solar array area, an approximately 8-mile-long, 500-kV generation-tie transmission line with a load-carrying capacity of 1,100 MW will connect the Facility substation to the POI; see Figure G-2 (Facility Layout).

- (vi) *For pipelines, approximate operating pressure and delivery capacity in thousand cubic feet per day;*

Response: The above rule is not applicable to solar energy generation.

- (vii) *For surface facilities related to underground gas storage, estimated daily injection and withdrawal rates, horsepower compression required to operate at design injection or withdrawal rates, operating pressure range and fuel type of compressors;*

Response: The above rule is not applicable to solar energy generation and no underground gas storage is proposed as part of this Facility. Therefore, this rule does not apply to the construction or operation of the Facility.

- (viii) *For facilities to store liquefied natural gas, the approximate volume, maximum pressure, liquefaction and gasification capacity in thousand cubic feet per hour;*

Response: The above rule is not applicable to solar energy generation and the proposed Facility will not store liquefied natural gas. Therefore, this rule does not apply to the construction or operation of the Facility.

- (B) *A description of major components, structures and systems of each related or supporting facility; and*

Response:

Related or Supporting Facilities

The related or supporting facilities detailed in this response include the collector lines, PCS, battery storage system, onsite Facility substation, 500-kV generation-tie transmission line, POI, operations and maintenance (O&M) building, service roads and gated access points, access roads, and construction areas.

Collector Lines. Collector lines will carry power from the PCS switchgear to the proposed onsite Facility substation. The medium-voltage conductors will run underground for improved reliability. The collector lines will be directly buried at a depth of up to 3 feet; however, some portion of the conductors may also be above ground. Exact collector line routing within the Facility site boundary is still being determined.

Battery Storage System. An integrated battery storage system is included in the Facility. Battery storage technology can be used to: (1) smooth the intermittent generation of solar PV arrays; (2) store energy for later delivery during periods of peak demand; or (3) enhance power grid integration services via voltage support, frequency regulation, and ramp control. The Applicant will choose a battery storage technology based on the intended use specified in the power purchase agreement. The battery storage system could be capable of storing and delivering up to 1,100 MW of power to the electric power grid and will be charged directly by the 300-MW solar facility or off of the 500-kV transmission line grid when there is excess wind and solar energy available from Oregon, Washington, or California.

The Facility will include lithium-ion batteries, flow batteries, or other battery storage technology. The 1,100 MW of power will be held in a series of independent buildings within the proposed battery storage area shown on Figure G-2. The actual footprint of the battery storage system could vary based on the final design and battery technology.

Onsite Facility Substation. The proposed onsite Facility substation will be situated on at least 2 acres of land within the Facility site boundary and will include the following typical equipment:

- Incoming feeder breakers
- Main step-up transformer to 500-kV
- Control enclosure
- Dead-end and shield pole
- Support steel
- Auxiliary station service transformer
- Circuit breaker
- Transformer
- Motor-operated disconnect switch

Generation-tie Transmission Line. The Facility will deliver electric power to the regional power grid by a 500-kV generation-tie transmission line, approximately 8 miles in length, extending from the Facility site to the BPA Captain Jack Electric Substation. The proposed generation-tie transmission line will consist of a series of transmission structures ranging in height from 100 to 165 feet. The average span between transmission structures is approximately 1,000 feet, with a range from 380 to 1,500 feet.

The final route and configuration of the 500-kV generation-tie transmission line (for example, number of transmission structures and transmission structure type, heights, spans, and location) will depend on final

design and engineering as well as geotechnical, natural resources (e.g., wetlands and wildlife), cultural resources, and landowner considerations to minimize site impacts. Preliminary engineering and route selection is based on U.S. Geological Survey (USGS) topographic maps followed by field verification.

Point of Interconnection. The Facility will be connected at the selected POI on BPA's system. The POI will include the following equipment to enable the interconnection:

- Control house
- Circuit breaker
- Metering, communications, protection, and control
- Circuit switcher
- Protection and control panel
- SCADA and metering equipment

Operations and Maintenance Building. The Facility may include an O&M building within the Facility site boundary. The need and design for an O&M building has not been determined and further detail will be provided in the ASC. If restroom facilities are needed, any required water will be obtained from offsite municipal or commercial sources via bilateral agreements or participating landowners with adequate existing water rights. Additional detail about water sources will be provided in the ASC. Electric power and telephone may be provided via local service providers. The O&M building may provide locker-room facilities for operations and maintenance personnel. Additionally, this building may include office space, lunch room, and conference room areas. This single-story structure may include the control room, shift supervisor office, and miscellaneous electrical equipment space.

Service Roads and Gated Access Points. The Facility will be fenced with a security fence, typically consisting of chain-link or notch-style fencing. The security fence will either be 6 feet tall with two strands of barbed wire, or 8 feet tall with no barbed wire. The security fence will feature gated access at points within the solar array area. Private service roads will be provided inside the security fence to ensure the Facility is accessible to maintenance vehicles year-round; however, the final configuration of any potential private services roads will be determined in conjunction with the County Fire District, which may require gravel perimeter or access roads for fire-fighting purposes.

Access Roads. A permanent access road will be located within the easement of the 500-kV generation-tie transmission line corridor. The Applicant will site the permanent access road to minimize disturbances to the agricultural and grazing land uses.

Construction Areas. During construction, temporary laydown areas within the Facility site boundary will be used to stage construction activities and organize equipment and supplies. A temporary construction trailer will be installed onsite, consisting of an office space, storage, and breakroom facilities. A gravel parking and storage area will be located adjacent to the construction trailer.

(C) *The approximate dimensions of major facility structures and visible features.*

Response: The approximate dimensions of major and related or supporting Facility structures and visible features are provided below.

Approximate Dimensions of Facility Structures and Visible Features

The most notable features of the Facility are the: (1) solar modules; (2) PCS; (3) collector lines; (4) proposed onsite substation; (5) POI; (6) generation-tie transmission line; (7) battery storage system

and potential future air-cooled, natural gas-fired peaker generating facility;¹ and (8) O&M building. The estimated dimensions of the structures, as currently available, including related or supporting facilities, are summarized below.

Solar Modules. A standard tracker table consists of 90 to 120 modules, which totals 270 to 360 feet in total length however, micrositing considerations along the perimeter of the Facility will necessitate reductions in standard block size. As stated under Major Components, Structures, and Systems above, when mounted on the fixed-tilt or table tracking systems, the PV solar module will be approximately 4 feet off the ground when level and, when fully rotated, the highest point will be approximately 8 feet off the ground when fully tilted in the morning and evening.

Power Conversion Station. As stated under Major Components, Structures, and Systems above, each PCS will be approximately 20 feet wide, 40 feet long, and up to 10 feet tall, which includes 8 to 9 feet of height for the inverter and transformer, as well as up to 1 foot for the concrete mounting pad.

Collector Lines. Collector lines will carry power from the PCS to the proposed onsite Facility substation. The medium-voltage conductors will run underground for improved reliability. The collector lines will be directly buried at a depth up to 3 feet; however, some portion of the conductors may also be above ground. Any overhead collector line segments will likely be placed on steel or wood monopoles at least 30 feet high and subject to the requirements of the National Electrical Safety Code (NESC).

Proposed Onsite Substation. The proposed Facility substation will occupy at least 2 acres onsite.

Point of Interconnection. The POI dimensions and equipment will be determined through further communication with BPA. Equipment that may be contained in the POI is listed above.

Generation-tie Transmission Line. The 500-kV generation-tie transmission line easements will be up to 150 feet wide and will occur within the 1,000-foot-wide generation-tie transmission line corridor shown on Figure G-2 (Facility Layout). The entire 1,000-foot-wide corridor will be evaluated to allow for micrositing considerations and siting flexibility within the corridor route. The 500-kV generation-tie transmission line route from the Facility's proposed substation to the POI will be approximately 8 miles in length and will be supported on a series of transmission structures. Transmission structures will range in height from 100 to 165 feet subject to the requirements of the NESC. Transmission structures will typically rest on concrete footings..

Battery Storage System. The proposed battery storage system will likely be housed in 11 separate enclosed structures that are 600 feet in length, 600 feet in width, and up to 30 feet in height.

Operations and Maintenance Building. The need and design for an O&M building has not been determined and further detail will be provided in the ASC. The O&M building will likely be a smaller single-story building.

¹ At this time, the natural gas-fired peaker generating facility is hypothetical and not proposed. Reference to this Facility component is identified for full disclosure purposes, for potential future inclusion by way of a site certificate amendment.

Exhibit C. Facility Location

OAR 345-020-0011(1)(c)

- (c) **Exhibit C.** *A description of the location of the proposed energy facility site and the proposed site of each related or supporting facility and all areas that might be temporarily disturbed during construction of the facility, including the approximate land area of each.*

Response:

Location and Land Area of the Energy Facility Site

Figure G-2 (Facility Layout) shows the proposed Facility site boundary located approximately 1 mile southeast of Bonanza in Klamath County, Oregon. The Facility site is bifurcated by East Langell Valley Road and Teare Lane. The solar array area within the Facility site boundary encompasses portions of Sections 13, 23, 24, 25, and 26, Township 39 South, Range 11 East and Sections 17, 18, 19, and 20, Township 39 South, Range 12 East. The solar array will be constructed within the approximately 1,851 acres of private land for which the Applicant has negotiated an exclusive, long-term option to purchase.

The Facility site boundary encompasses the solar modules, collector lines, battery storage system, PCS, onsite Facility substation, POI, O&M building, access roads, along with private service roads and gated access points from East Langell Valley Road and Teare Lane. Construction and laydown areas will be located within the Facility site boundary.

As presented in this NOI, the overall Facility site boundary including the proposed 500-kV generation-tie transmission line corridor encompasses approximately 2,733 acres.

Location and Land Area of Related or Supporting Facilities

Generation-tie Transmission Line. The approximately 150-foot-wide right-of-way for the 500-kV generation-tie transmission line will be located within the approximately 1,000-foot-wide generation-tie transmission line corridor shown on Figure G-2. The 500-kV generation-tie transmission line from the Facility's proposed substation to the POI will be approximately 8 miles in length. The generation-tie transmission line corridor shown within the Facility site boundary encompasses portions of Sections 23, 24, 25, 26, 27, 33, and 34, Township 39 South, Range 11 East and Sections 3, 4, 9, 10, 15, 22, and 23, Township 40 South, Range 12 East. The generation-tie transmission line corridor occurs on approximately 882 acres of private land for which the Applicant is in the process of negotiating exclusive, long-term options to lease. A permanent access road will be located within the easement of the 500-kV generation-tie transmission line corridor. The Applicant will site the permanent access road to minimize disturbances to the agricultural and grazing effectiveness of the underlying land.

Point of Interconnection. The Facility will interconnect with BPA's existing Captain Jack Electric Substation (Figure G-2). The POI is positioned directly adjacent to the existing Captain Jack Electric Substation with exact dimensions to be determined by BPA.

Exhibit D. Alternative Locations

OAR 345-020-0011(1)(d)

- (d) **Exhibit D.** *If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline that, by itself, is an energy facility under the definition in ORS 469.300, identification of at least two proposed corridors, as defined in OAR 345-001-0010, or identification of a single proposed corridor with an explanation of why alternate corridors are unlikely to better meet the applicant's needs and satisfy the Council's standards. The applicant must include an explanation of the basis for selecting the proposed corridors and, for each proposed corridor, the information described in subsections (e), (g), (i), (j), (k), (n) and (p) that is available from existing maps, aerial photographs, and a search of readily available literature.*

Response: The proposed Facility is not a pipeline or a transmission line as defined in ORS 469.300, and does not include a pipeline or transmission line that by itself is an energy facility under ORS 469.300(11).

Exhibit E. Permits Needed for Construction and Operation

OAR 345-020-0011(1)(e)

- (e) ***Exhibit E.*** Identification of all federal, state and local government permits related to the siting of the proposed facility, a legal citation of the statute, rule or ordinance governing each permit, and the name, address, email address and telephone number of the agency or office responsible for each permit. For each permit, the applicant must provide a preliminary analysis of whether the permit should or should not be included in and governed by the site certificate.

Response: Table E-1 identifies the federal, state, and local government permits needed to construct and operate the Facility and provides an assessment of whether the permit should or should not be included in and governed by the site certificate. Additional Facility design information and forthcoming fieldwork will be used to determine the applicability of each permit.

Table E-1. Permits Required for Construction and Operation of the Proposed Facility

Permit	Agency	Authority	Description
Federal			
Clean Water Act, Section 404	U.S. Army Corps of Engineers, Portland District Attention: Anita Andazola Eugene Field Office 211 E. 7th Avenue, Suite 105 Eugene, OR 97401-2722 Anita.M.Andazola@usace.army.mil 541-465-6894	Clean Water Act, Section 404 (33 U.S.C. § 1344); 33 CFR §§ 320, 323, 325-28, and 330	A Section 404 Permit will be required if dredge or fill occurs in waters of the United States. This federal process is not within the jurisdiction of EFSC and therefore should not be included in the site certificate.
Notice of Proposed Construction or Alteration (Form 7460.1)	Federal Aviation Administration Attention: Dan Shoemaker Airspace Specialist Seattle Obstruction Evaluation Group Dan.Shoemaker@faa.gov	Federal Aviation Act of 1958 (14 U.S.C. § 44718); 14 CFR § 77	Applicant proposing construction or alterations that may affect navigable airspace pertaining to potential glare from the Facility's solar modules could be required to file a Notice of Proposed Construction or Alteration with the FAA. This notice may be required for construction of structures within specified distances of runways or helipads. No permit will be issued by the FAA. Moreover, given that this federal process is not within the jurisdiction of EFSC, it therefore should not be included in the site certificate.
Supplemental Notice of Actual Construction or Alteration (Form 7460-2)	Federal Aviation Administration Attention: Dan Shoemaker Airspace Specialist Seattle Obstruction Evaluation Group Dan.Shoemaker@faa.gov 425-227-2791	Federal Aviation Act of 1958 (14 U.S.C. Section 44718); 14 CFR Section 77	If a Notice of Proposed Construction or Alteration with the FAA is required, then submission of the Supplemental Notice of Actual Construction or Alteration form must be filed within 5 days after construction reaches its greatest height as specified in the No Hazard Determination. No permit will be issued by the FAA. Moreover, given that this federal process is not within the jurisdiction of EFSC, it therefore should not be included in the site certificate.
State			
Energy Facility Site Certificate	Oregon Department of Energy and Energy Facility Siting Council Attention: Maxwell Woods 550 Capitol Street N.E. Salem, OR 97301 Maxwell.Woods@oregon.gov 503-378-5050	ORS 469.300 et seq.; OAR Chapter 345, Divisions 1, 15, 21-24, 26-27	The Facility is an "energy facility" as defined in ORS Chapter 469.300(11) and must be authorized through a site certificate issued by EFSC.
Removal-Fill Permit	Oregon Department of State Lands Attention: Heidi Hartman 1645 NE Forbes Road., Suite 112 Bend, OR 97701 541-388-6060	ORS 196; OAR Chapter 141, Division 85	A Removal-Fill Permit is required if 50 cubic yards or more of material is removed, filled, or altered within a jurisdictional water of the State.

Table E-1. Permits Required for Construction and Operation of the Proposed Facility

Permit	Agency	Authority	Description
			If removal or fill activities occurs in waters of the state, the Removal-Fill Permit should be included in and governed by the site certificate under ORS 469.401(3).
Onsite Sewage Disposal Construction-Installation Permit	Oregon Department of Environmental Quality Water Quality Onsite Program Attention: Bob Marshall Eastern Region 800 SE Emigrant #330 Pendleton, OR 97801 541-276-4063 800-304-3513	ORS 454 and 468B; OAR Chapter 340, Divisions 71 and 73	Facilities with an onsite sewage disposal system must obtain a Construction-Installation Permit before construction. The Facility will have a daily sewage flow of fewer than 2,500 gallons. If sewage disposal is required for the O&M building, the Applicant's third-party contractor will obtain this permit. Therefore, this permit should not be included in and governed by the site certificate.
National Pollutant Discharge Elimination System 1200-C Construction Stormwater Discharge Permit	Oregon Department of Environmental Quality - Water Quality Division Attention: Jackie Ray Eastern Region 800 SE Emigrant #330 Pendleton, OR 97801 541-278-4605	Clean Water Act, Section 402 (33 U.S.C. § 1342); 40 CFR § 122; ORS 468 and 468B; OAR Chapter 340, Division 45	A NPDES 1200-C permit is required for construction activities that will disturb 1 or more acres of land. The Applicant will obtain this permit directly from DEQ. Given that this permit is outside the jurisdiction of EFSC, it should not be included in and governed by the site certificate.
401 Water Quality Certification	Oregon Department of Environmental Quality 700 NE Multnomah St., Suite 600 Portland, OR 97204 503-229-5695	Clean Water Act, Section 401 (33 U.S.C. § 1341); OAR Chapter 340, Division 48	Water quality certification is required for projects that are processed under the U.S. Army Corps of Engineers Section 404 Nationwide Permits. The Applicant will obtain this permit directly from DEQ as it is outside the jurisdiction of EFSC and should not be included in and governed by the site certificate.
Water Right Permit or Water Use Authorization	Oregon Water Resources Department Water Rights Section District 17 Attention: Danette Watson 305 Main Street Klamath Falls, OR 97601 541-883-4182	ORS 537; OAR Chapter 690, Divisions 310, 340, 410 and 507	The Applicant does not anticipate the need for a water right or use authorization, and intends to obtain water for Facility construction and operation from an existing source with a valid water right. Water could be transported to the site via water trucks from an offsite municipal or commercial source via bilateral agreements. If water for construction and operation is not available from permitted sources, the Applicant will obtain the necessary water right permit or use authorization directly from the Oregon Water Resources Department. Given that this permit, if needed, is outside the jurisdiction of EFSC, it should not be included in and governed by the site certificate.
General Water Pollution Control Facilities Permit, WPCF-1700-B, Washwater Discharge from Equipment Cleaning	Oregon Department of Environmental Quality Eastern Region 700 SE Emigrant, Suite 330 Pendleton, OR 97801 541-276-4063	ORS 468B; OAR Chapter 340, Division 45	The solar modules may be washed one or twice annually and the washwater will be released to the ground and allowed to evaporate and infiltrate. The Applicant or a third-party contractor who will conduct solar module washing activities will seek coverage under the WPCF-1700-B permit from DEQ following completion of construction and before initiating any

Table E-1. Permits Required for Construction and Operation of the Proposed Facility

Permit	Agency	Authority	Description
			washing activities. Therefore, this permit should not be included in and governed by the site certificate.
Basic Air Contaminant Discharge Permit	Oregon Department of Environmental Quality – Air Quality Division Eastern Region 475 NE Bellevue, Suite 110 Bend, OR 97701 541-633-2026	Clean Air Act (42 U.S.C. Section 7401 et seq.). 40 CFR Parts 50, 51, and 52 ORS Chapters 468 and 468A OAR Chapter 340, Division 216	A Basic ACDP authorizes the permittee to operate a stationary or portable concrete manufacturing plant that produces more than 5,000 but less than 25,000 cubic yards per year output. If a portable concrete manufacturing plant is required for Facility construction, a Basic ACDP will be obtained from DEQ. The Applicant's third-party contractor will obtain this permit directly from DEQ, in the unlikely event it is needed. Given that this permit, if needed, is outside the jurisdiction of EFSC, it should not be included in and governed by the site certificate.
Oversize Load Movement Permit/Load Registration	Oregon Department of Transportation Motor Carriers Transportation Division 550 Capitol Street NE Salem, OR 97301 Christy Jordan Christy.A.Jordan@odot.state.or.us 503-378-6192	ORS Chapter 818.030; OAR Chapter 734, Divisions 51, 82	This permit authorizes oversized loads. Movement of construction cranes and other equipment and materials may require this permit. If needed, the Applicant's third-party contractor will obtain this permit and load registration from the Oregon Department of Transportation before transporting large or overweight equipment. Therefore, this permit should not be included in and governed by the site certificate.
Permit to Construct a State Highway Approach	Oregon Department of Transportation ODOT District 11 2557 Altamont Drive Klamath Falls, OR 97603 541-883-5662	OAR Chapter 734, Division 51	Access from Oregon state highways requires an access permit, which may be issued by the local Oregon Department of Transportation District Office. If needed, the Applicant's third-party contractor will obtain this permit directly from the Oregon Department of Transportation and therefore this permit should not be included in and governed by the site certificate.
Permit to Occupy or Perform Operations Upon a State Highway	Oregon Department of Transportation ODOT District 11 2557 Altamont Drive Klamath Falls, OR 97603 541-883-5662	OAR Chapter 734, Division 51	Utility installations within the right-of-way of a state highway in Oregon require a permit issued by the Oregon Department of Transportation. If needed, the Applicant's third-party contractor will obtain this permit directly from the Oregon Department of Transportation and therefore this permit should not be included in and governed by the site certificate.
Archaeological Excavation Permit	Oregon Parks and Recreation Department, State Historic Preservation Office 725 Summer Street NE, Suite C Salem, OR 97301 Matt Diederich, MAIS mattew.diederich@oregon.gov 503-986-0577	ORS Chapters 97, 358, and 390; OAR Chapter 736, Division 51 (Permit and Conditions for Excavation or Removal of Archaeological or Historical Materials on Private Land	This permit is required if excavation is needed within the boundaries of a known cultural site regardless of land ownership. If disturbance to cultural sites cannot be avoided, a SHPO Archaeological Permit will be required to determine if cultural sites are eligible for listing under the NRHP. An excavation permit will also be required for any data recovery mitigation efforts within an NRHP-eligible site.

Table E-1. Permits Required for Construction and Operation of the Proposed Facility

Permit	Agency	Authority	Description
			During Facility construction, if a previously unidentified archaeological site is discovered, all construction will cease, and the Applicant will report the finding to SHPO immediately. In that instance, SHPO will require this permit. Should this permit be required, the Applicant will obtain it from SHPO. Therefore, this permit should not be included in and governed by the site certificate.
Local			
Conditional Use Permit	Klamath County Planning Division Erik Nobel, Planning Director Klamath County Government Center 305 Main Street Klamath Falls, Oregon 97601 enobel@klamathcounty.org 541-885-3644	Klamath County Land Development Code Sections 54.015(X) and 55.025(R)	Construction and operation of "Photovoltaic solar power generation facilities as commercial utility facilities for the purpose of generating power for public use by sale," is a conditional use in the County's Exclusive Farm Use (EFU) zone. Construction and operation of "New electric transmission lines with right-of-way widths of up to 100 feet as specified in ORS 772.210" is a conditional use in the County's Forestry (F) zone. The Applicant elects to obtain an EFSC determination under ORS Chapter 469.504(1)(b). Under ORS 469.401(3), following issuance of the site certificate, the County, upon the Applicant's submission or the proper application and fee, shall issue the permits addressed in the site certificate, subject only to the conditions set forth in the site certificate and without hearings or other proceedings.
Driveway and Road Approach Permit	Klamath County Public Works Department Jeremy Morris, Director Klamath County Government Center 305 Main Street Klamath Falls, Oregon 97601 jmorris@klamathcounty.org 541-883-4696	ORS Chapter 374.305 and Klamath County Public Works Department	Klamath County Driveway and Road Approach Permits are required whenever an applicant needs to connect to a right-of-way under the jurisdiction of Klamath County. The Applicant's third-party contractor will obtain right-of-way use permits (as needed) directly from Klamath County. Therefore, this permit should not be included in and governed by the site certificate.
Right-of-Way Permit	Klamath County Public Works Department Jeremy Morris, Director Klamath County Government Center 305 Main Street Klamath Falls, Oregon 97601 jmorris@klamathcounty.org 541-883-4696	Klamath County Public Works Department	Klamath County right-of-way use permits are required whenever an individual, contractor, or utility company needs to perform work in the County's public road right-of-way. The Applicant's third-party contractor will obtain right-of-way use permits (as needed) directly from Klamath County. Therefore, this permit should not be included in and governed by the site certificate.

Table E-1. Permits Required for Construction and Operation of the Proposed Facility

Permit	Agency	Authority	Description
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Notes:

ACDP	=	Air Contaminant Discharge Permit
CFR	=	<i>Code of Federal Regulations</i>
DEQ	=	Oregon Department of Environmental Quality
FAA	=	Federal Aviation Administration
NPDES	=	National Pollutant Discharge Elimination System
NRHP	=	National Register of Historic Places
OAR	=	Oregon Administrative Rule
SHPO	=	State Historic Preservation Office
U.S.C.	=	United States Code
WPCF	=	Water Pollution Control Facilities

Exhibit F. Property Ownership

OAR 345-020-0011(1)(f)

(f) **Exhibit F.** *A list of the names and mailing addresses of property owners, as described in this rule:*

- (A) *The list must include all owners of record, as shown on the most recent property tax assessment roll, of property located:*
 - (i) *Within 100 feet of property which the subject of the NOI, where the subject property is wholly or in part within an urban growth boundary;*
 - (ii) *Within 250 feet of property which is the subject of the NOI, where the subject property is outside an urban growth boundary and not within a farm or forest zone; or*
 - (iii) *Within 500 feet of property which is the subject of the NOI, where the subject property is within a farm or forest zone; and*
- (B) *In addition to incorporating the list in the NOI, the applicant must submit the list to the Department in an electronic format acceptable to the Department.*

Response: As required by OAR 345-020-0011(1)(f)(A)(iii), a list of the names and mailing addresses of Klamath County owners of record of property located inside the proposed Facility site boundary and within 500 feet of the property line crossed by the proposed Facility site boundary is provided in Table F-1 of Attachment F. Owing to the large size of surrounding parcels in the farm and forest zones, the Applicant has also elected to notify property owners out to 1,000 feet from the Facility property line. A separate list of property owners between 500 and 1,000 feet from the property line crossed by the proposed Facility site boundary is included in Table F-2 of Attachment F. The Applicant compiled these lists based on the most recent property tax assessment data provided by the Klamath County Assessor's Office on July 27, 2020. The Applicant has provided the same lists to the Oregon Department of Energy (ODOE) in an electronic Excel format suitable for the production of mailing labels.

Figure F-1 in Attachment F-1 shows the Klamath County property tax lots within 1,000 feet of the property lines crossed by the proposed Facility site boundary. The tax lot lines and labels are at a scale large enough to be legible so that ODOE can identify a property on the map and cross-reference the name and address of the property owner on the Excel spreadsheet.

Exhibit G. Facility Maps

OAR 345-020-0011(1)(g)

(g) **Exhibit G.** A map or maps showing:

Response: Attachment G contains a series of maps (Figures G-1 through G-6) showing the information required under OAR 345-020-0011(1)(g). These figures are further described in the responses below.

- (A) *The proposed locations of the energy facility site, all related or supporting facility sites and all areas that might be temporarily disturbed during construction of the facility in relation to major roads, water bodies, cities and towns, important landmarks and topographic features;*
- (B) *The proposed locations of the corridors the applicant has identified under subsection (d) in relation to major roads, water bodies, cities and towns, important landmarks and topographic features;*

Response: Figures G-1 and G-2 show the location of the Facility site boundary in relation to major roads, waterbodies, cities and towns, important landmarks, and topographic features.

- (C) *The study areas for the proposed facility as defined in OAR 345-001-0010;*
- (D) *The topography of the study areas including streams, rivers, lakes, major roads and contour lines;*

Response: Figure G-3 shows the boundaries and topography (including streams, rivers, lakes, major roads, and contours) of the study areas for protected areas (20 miles), scenic and aesthetic resources and public services (10 miles), recreational opportunities (5 miles), threatened and endangered plant and animal species areas (5 miles), land use (0.5 mile), and fish and wildlife habitat (0.5 mile). The Applicant developed this map to correspond with the study areas defined under OAR 345-001-0010(59). The Applicant understands that ODOE will formally establish these "study areas" in the Project Order.

- (E) *All protected areas in the study area as defined in OAR 345-001-0010 for impacts to protected areas;*

Response: Figure G-4 shows protected areas in the 20-mile study area as defined in OAR 345-001-0010(59) and as designated in OAR 345-022-0040.

- (F) *The location of any potential waters of the state or waters of the United States that are on or adjacent to the site; and*

Response: Figure G-5 shows the locations of any potential waters of the state or waters of the United States, as represented in the National Wetlands Inventory, that are on or adjacent to the Facility site.

- (G) *For energy generation facilities, the approximate locations of any other energy generation facilities that are known to the applicant to be permitted at the state or local level within the study area as defined in OAR 345-001-0010 for impacts to public services.*

Response: Figure G-6 shows the locations of the energy generation facilities that are known to the Applicant to be permitted within the study areas for scenic and aesthetic resources and public services (10 miles).

Exhibit H. Nongenerating Energy Facility

OAR 345-020-0011(1)(h)

- (h) ***Exhibit H.*** *If the proposed facility is a non-generating energy facility for which the applicant must demonstrate need under OAR 345-023-0005, identification of the rule in division 23 of this chapter under which the applicant intends to demonstrate need and a summary statement of the need and justification for the proposed facility.*

Response: The proposed Facility is not a nongenerating energy facility. Therefore, this exhibit is not applicable.

Exhibit I. Land Use

OAR 345-020-0011(1)(i)

- (i) ***Exhibit I.*** A statement indicating whether the applicant intends to satisfy the Council's land use standard, OAR 345-022-0030, by obtaining local land use approval under ORS 469.504(1)(a) or by seeking a Council determination under ORS 469.504(1)(b).

Response: The proposed Facility and related or supporting facilities are in Klamath County. The Applicant will satisfy the Council's land use standard, OAR 345-022-0030, by seeking a Council determination of compliance with Klamath County land use standards under ORS 469.504(1)(b).

Exhibit J. Environmental Impacts

OAR 345-020-0011(1)(j)

- (j) **Exhibit J.** *Identification of significant potential environmental impacts of construction and operation of the proposed facility on the study areas, including those impacts affecting air quality, surface and ground water quality and availability, wildlife and wildlife habitat, threatened and endangered plant and animal species, historic, cultural and archaeological resources, scenic and aesthetic areas, recreation, and land use.*

Response: This exhibit identifies potential environmental impacts of construction and operation of the proposed Facility on the study areas. Responses are organized into the following sections:

- Air Quality
- Surface and Groundwater Quality and Availability (includes wetlands and waters of the state and United States)
- Wildlife and Wildlife Habitat [study area, as defined in OAR 345-001-0010(59)(c), is 0.5 mile]
- Threatened, Endangered, and Sensitive Plant and Animal Species [study area, as defined in OAR 345-001-0010(59)(a), is 5 miles]
- Historic, Cultural, and Archaeological Resources (study area is within the site boundary)
- Scenic, Aesthetic, and Protected Areas [study area for scenic and aesthetic resources is 10 miles, as defined in OAR 345-001-0010(59)(b), and study area for protected areas is 20 miles, as defined in OAR 345-001-0010(59)(e)]
- Recreation [study area, as defined in OAR 345-001-0010(59)(d) is 5 miles]
- Land Use [study area, as defined in OAR 345-001-0010(59)(c), is 0.5 mile]

Air Quality

During construction, air pollutant combustion emissions will be generated from diesel and gasoline engines in the various vehicles and construction equipment used in the construction of the Facility.

Fugitive dust may be generated from vehicle traffic on paved and unpaved roads and from equipment during construction activities. The Applicant will apply dust control measures, and will describe these further in the Application for Site Certificate (ASC).

The operation of the Facility will have no effect on air quality. During Facility operations, air pollutant sources will be limited to a small amount of fleet vehicles and equipment used by maintenance staff. The emissions and fugitive dust from these vehicles and equipment will be minor and will not exceed state emissions thresholds. Therefore, these emissions are not quantified and do not require a permit from DEQ.

A Basic ACDP permit may be required from DEQ if a portable concrete batch (manufacturing) plant is needed to provide concrete during construction. Obtaining the ACDP will be the responsibility of the batch plant owner or third-party contractor selected for Facility construction.

Surface and Groundwater Quality and Availability

Surface and Groundwater Quality

During construction, the proposed Facility will not discharge pollutants to surface water or groundwater. Any temporary impacts from construction-related stormwater will be regulated under the conditions of the

NPDES 1200-C permit and the associated erosion and sediment control plan (ESCP). Both the NPDES permit and the ESCP will be issued by DEQ.

During operations, the O&M building will discharge domestic wastewater to a licensed onsite septic system.

Surface and Groundwater Availability

During construction, it is estimated that approximately 11.5 million gallons of water will be needed for dust control and concrete production. Up to 31,500 gallons per day will be used over an approximate 12-month construction period. Daily water use will vary depending on the timing of construction and the weather (e.g., water use for dust control will increase in dry, windy summer conditions). The water will be supplied from an existing source with a valid water right. This could mean that water is transported to the site by water trucks from an offsite municipal or commercial source via bilateral agreements.

The Applicant will confirm the anticipated amount of water required for construction in the ASC. Additionally, the Applicant will confirm that the identified source can meet the Facility's water requirements during construction. If the water source is not sufficient, an alternative source will be considered, or water will be obtained from a well permitted under a limited water use license.

During Facility operations, water use will be limited to a once- or twice-annual cleaning of the solar modules, which will require approximately 1,650,000 gallons of water per year. A third-party contractor will obtain water for panel cleaning from an offsite source.

Wetlands and Waters of the State/United States

A desktop analysis of the Facility site boundary was performed to identify potential impacts to potentially jurisdictional wetlands and waters of the State/United States. An analysis of *National Wetlands Inventory* (NWI) maps from the U.S. Fish and Wildlife Service (USFWS 2020) and *National Hydrography Dataset* (NHD) maps from the USGS (USGS 2020) suggests that several wetlands and waterbodies exist within the Facility site boundary. According to NWI, wetlands include emergent and shrub-scrub wetlands and ponds. Most of the waterbodies are associated with irrigation practices. The proposed Facility development will be set back as required from the Lost River and direct impacts to the river will be avoided. NWI and NHD locations and feature types are shown on Figure G-5.

A formal delineation of wetlands and waters of the State and United States will be conducted to identify potential impacts from construction of the Facility on jurisdictional wetlands and waters. The delineation will be performed in accordance with the Oregon Removal-Fill Law and Section 404 of the federal Clean Water Act. A wetland delineation report that provides the information and findings of the delineation will be submitted to the Oregon Department of State Lands (DSL) and U.S. Army Corps of Engineers (USACE).

Facility components will be sited to avoid and minimize impacts to jurisdictional waters or wetlands that occur within the site boundary. Any unavoidable impacts to jurisdictional waters and wetlands will be permitted in accordance with the Oregon Removal-Fill Law and Section 404 of the federal Clean Water Act, including any required mitigation. This information will also be provided in the ASC.

Wildlife and Wildlife Habitat

Jacobs conducted a wildlife habitat survey on behalf of the Applicant on June 12 and 13 and July 8, 9, and 10, 2020. The survey included review of wildlife and habitat data (threatened and endangered species, critical habitat, big game range, and Oregon Conservation Strategy [ODFW 2016] opportunities, habitats, and species, important bird areas, and eagle nests) from USFWS, USGS, Oregon Biodiversity Information Center (ORBIC), Oregon Department of Fish and Wildlife (ODFW), Oregon Department of Agriculture (ODA), Audubon Society, and the Oregon Eagle Foundation. A site visit was conducted in June and July 2020, by Forrest Parsons (Professional Wetland Scientist and wildlife biologist) and Samantha Neverick (wildlife biologist) of Jacobs to ground-truth desktop-generated data and evaluate

potential biological concerns as they relate to siting and permitting the Facility. The survey focused on areas accessible by road within the proposed Facility site boundary and areas within 0.5 mile of the site boundary. The purpose of the survey was to preliminarily identify vegetation communities, wildlife habitat types, wetland types, access routes, and any signs of special-status species or unique habitat features.

Common wildlife species in this type of habitat include mammals, ungulates, coyotes, small reptiles, and various birds. Onsite investigations identified pronghorn (*Antilocapra Americana*), black-tailed jackrabbit (*Lepus californicus*), sagebrush lizard (*Sceloporus graciosus*), red-tailed hawk (*Buteo jamaicensis*), bald eagle (*Haliaeetus leucocephalus*), common raven (*Corvus corax*), and common passerines throughout the Facility site. Habitat for small mammal and reptile species in the area supports a prey base for raptors and predatory mammals (for example, coyote and badgers). The Facility site boundary and surrounding area are characterized by juniper woodland, ponderosa pine woodland, wetlands, shrub-steppe, and irrigated pasture and cropland, and provide forage for ungulates, bird, reptile, and small mammal species. ODFW identifies mule deer winter range throughout most of the Energy Facility area. Deer do not currently have any listing status, but this species is protected by land use guidelines and development standards.

Projects with a state nexus such as energy facilities subject to the EFSC process are required to abide by the ODFW Habitat Mitigation Policy. This requires assessing impacts and seeking ODFW approval of a habitat mitigation plan. On the basis of the completed biological reconnaissance survey and additional biological surveys, the Applicant will provide a site-specific habitat analysis in the ASC. The analysis will include a habitat mitigation plan approved by EFSC in consultation with ODFW, with measures to avoid, minimize, and mitigate impacts to wildlife habitats.

Threatened, Endangered, and Sensitive Plant and Animal Species

Methods

Information pertaining to federally listed species was obtained from the USFWS *Information, Planning, and Conservation System* (IPaC) mapping tool (USFWS 2019). In 2019, Jacobs requested records from the ORBIC database of documented occurrences of rare, threatened, endangered, and sensitive plant and wildlife species within approximately 2 miles of the Facility site boundary. ORBIC provided the digital data to Jacobs in July 2019. The records are confidential and not to be distributed. The Applicant will provide the records to ODFW and ODOE upon request, with the permission of ORBIC (ORBIC 2019). Other sources that were queried included the ODA list of plants by county (ODA 2020).

Results

According to the USFWS IPaC mapping tool results, gray wolf (*Canis lupus*), North American wolverine (*Gulo gulo luscus*), yellow-billed cuckoo (*Coccyzus americanus*), shortnose sucker, (*Chasmistes brevirostris*) lost river sucker (*Deltistes luxatus*), Applegate's milk-vetch (*Astragalus applegatei*), slender Orcutt grass (*Orcuttia tenuis*), and whitebark pine (*Pinus albicaulis*) may occur within the Facility site. No critical habitats for federally listed species were identified using the IPaC mapping tool within the site boundary. Review of the USFWS IPaC mapping tool also shows ten migratory birds of conservation concern as potentially occurring within the Facility site boundary.

State-listed plant species, Applegate's milk-vetch, Peck's milkvetch (*Astragalus peckii*), and pumice grape fern (*Botrychium pumicola*) occur in the entirety of Klamath County according to ODA's Plant Conservation Program website (ODA 2020) and therefore have a potential to occur within the Project site. Information from ORBIC and a comprehensive desktop review of existing biological data identified state listed pygmy rabbit (*Brachylagus idahoensis*) near the site boundary, and shortnose sucker and Lost River sucker in the Lost River immediately adjacent to the Facility site boundary (ORBIC 2019). The proposed Facility development will be set back as required from the Lost River and direct impacts to fish species in the Lost River will be avoided.

ORBIC identified records of the following Oregon sensitive species within an approximate 2-mile radius of the Facility site boundary: bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), tricolored blackbird (*Agelaius tricolor*), and Western pond turtle (*Actinemys marmorata*).

Impacts to threatened, endangered, and sensitive plant and animal species will be avoided and minimized to the extent feasible and any unavoidable impacts to these species will be mitigated in coordination with appropriate agencies and documented in the ASC.

Historic, Cultural, and Archaeological Resources

The Applicant plans to comply with OAR 345-022-0090, Historic, Cultural and Archaeological Resources, which regulates potential impacts to historic, cultural, and archaeological resources.

Under OAR 345-022-0090, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to significant sites or objects defined under state law (ORS 358.905-.961), or to NRHP-eligible resources. The Applicant plans to complete a due diligence effort to identify significant archaeological sites or objects and NRHP-eligible resources.

The identification effort will include a cultural resources literature review incorporating the results of a search of the Oregon Archaeological Remote Records Access database, regional archaeological and ethnographic studies, and review of several map series that may provide information about potential resources that may exist within the survey area such as General Land Office maps, Metsker maps, and Historic United States Geodetic Survey topographic maps. In addition, the Applicant will consult with tribes identified by the Legislative Commission on Indian Services to have interest in the proposed Facility as described in Exhibit P below. Letters detailing the proposed Facility along with a map figure will be sent to identified tribes. If resources are identified during the survey, the resources will be avoided. If avoidance is not feasible, the resources will be evaluated against the NRHP evaluation criteria. Evaluations may require an archaeological excavation permit from Oregon SHPO to conduct subsurface evaluative testing within sites. The results of the literature review, consultation with applicable tribes, the field survey, and the results of any evaluative testing will be incorporated into a survey report or reports that will be submitted as part of the ASC.

Scenic, Aesthetic, and Protected Areas

The Applicant will perform a visual impact assessment of the potential effects of the Facility on areas identified and managed as scenic resources or for specific scenic qualities. The study areas for the visual impact assessment are 10 miles for scenic and aesthetic resources (ASC Exhibit R) and 20 miles for protected areas (ASC Exhibit L), in accordance with OAR 345-001-0010(59).

A preliminary review of publicly available maps and information indicates that there are no protected areas located within the Facility site boundary (see Figure G-4). The larger study area encompasses protected areas such as the Goodlow Mountain Research Natural Area, OC&E Woods Line State Trail, Klamath Falls-Lakeview Forest State Scenic Corridor, and Yainax Butte Area of Critical Environmental Concern.

Potential impacts to these areas will likely be negligible to minimal because the Facility does not include tall structures or features, may be screened by vegetation and topography, and may be outside of the viewshed of these areas. The visual assessment included in the ASC will propose mitigation measures for any significant potential impacts identified.

Recreation

The study area for recreational opportunities consists of a 5-mile buffer around the Facility site boundary, in accordance with OAR 345-001-0010(59). Exhibit T of the ASC will include analysis of the potential impacts.

The proposed Facility is in an area consisting predominantly of privately-owned land in agricultural use. In general, recreational activities in the study area consist of boating, camping, hiking, photography, and angling. These activities also occur in numerous locations outside the study area, and therefore provide recreational opportunities that are common and “replaceable” (OAR 345-022-0100).

Land Use

The study area for land use consists of a 0.5-mile buffer around the Facility site boundary, in accordance with OAR 345-001-0010(59). The Facility is proposed on land zoned for agricultural use and forest use. Conversion of land zoned for agricultural use will occur; however, much of this land is currently uncultivated. These impacts will be fully evaluated in the ASC.

References

Oregon Biodiversity Information Center (ORBIC). 2019. *Rare, Threatened, and Endangered Species of Oregon*. Institute for Natural Resources, Portland State University, Portland, Oregon. Oregon Department of Agriculture. July 1.

Oregon Department of Agriculture (ODA) Plant Conservation Program. 2020. *Oregon Listed Plants by County*. Accessed June 2020.

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Exhibit K. Community Service Impacts

OAR 345-020-0011(1)(k)

- (k) **Exhibit K.** Information about significant potential adverse impacts of construction and operation of the proposed facility on the ability of communities in the study area to provide the services listed in OAR 345-022-0110.

Response: This exhibit provides summary-level information about potential significant adverse impacts of construction and operation of the proposed Facility on the ability of communities in the study area [10 miles pursuant to OAR 345-001-0010(59)(b)] to provide sewers and sewage treatment, water, stormwater drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools. Additional analysis of potential impacts to each of these community services resulting from construction and operation of the Facility will be included in the ASC.

Sewers and Sewage Treatment

During construction, sanitary waste will be collected onsite in portable toilets. During operations, the O&M building will discharge domestic wastewater to a licensed onsite septic system. Because there will be an estimated maximum of 10 employees during operations, significant adverse impacts to community sewer systems are not anticipated.

Water

Water will be required during Facility construction for roads, dust control, and other activities. During construction, the contractor will arrange for delivery of water to the site, supplied from an existing source with a valid water right. Potential sources include but are not limited to offsite municipal or commercial sources via bilateral agreements, and participating landowners with adequate existing water rights.

Approximately 11.5 million gallons of water will be needed for dust control and concrete production during construction. Up to 31,500 gallons per day will be used over an approximate 12-month construction period. Daily water use will vary depending on the timing of construction and the weather (e.g., water use for dust control will increase in dry, windy summer conditions).

During Facility operations, minimal water will be used. Water will be required primarily at the O&M building located within the Facility site boundary for uses similar to a standard commercial office (e.g., toilets, sinks, dishwashers). Potential sources include but are not limited to offsite municipal or commercial sources via bilateral agreements, and participating landowners with adequate existing water rights. The Facility will use less than 5,000 gallons per day (estimated water use is 50 gallons per day), which will not require the Applicant to obtain a new water right. The solar panels will require occasional washing. Additional detail about the source for this washwater will be provided in the ASC.

The Applicant will confirm the anticipated amount of water required for construction and operations in the ASC. Additionally, the Applicant will confirm that the identified source is capable of meeting the Facility's water requirements during construction. If the water source is not sufficient, an alternative offsite source will be considered, or water will be obtained from an onsite well to be permitted under a limited water use license and used during operations.

During Facility construction and operation, water will only be obtained from permitted sources with adequate water rights. Therefore, public water systems will not be adversely affected by construction or operation of the Facility.

Stormwater Drainage

At this time, no community in the area provides stormwater drainage service to the property within the Facility site boundary, except for stormwater drainage facilities associated with public roads maintained by Klamath County and the Oregon Department of Transportation. Because the ground under the solar arrays will be pervious, stormwater can infiltrate onsite and erosion will be minimized. Gravel will be placed around the proposed Facility onsite substation, POI, and O&M enclosure to facilitate the stormwater infiltration. Therefore, construction of the Facility will not result in large, new, impervious areas that generate significant stormwater runoff.

The Facility will be constructed and operated with its own stormwater management systems, consistent with a NPDES 1200-C permit issued by DEQ as well as a DEQ-approved ESCP.

Stormwater management infrastructure installed during construction on the solar array sites will be left in place as needed to continue functioning throughout the life of the Facility and support O&M activities. One example is roadside ditches along service roads. These features will be located on private land, and will not affect stormwater management services provided by any public agency.

Solid Waste Management

Solid waste disposal for the Facility during construction and operations will be provided through a private contract with a local commercial hauler (or haulers) and is not anticipated to disrupt services already being provided to local communities. The public landfill closest to the Facility site boundary is the Klamath County Bonanza Transfer Station located off Oregon Route (OR) 140 near the City of Bonanza. The Bonanza Transfer Station is operated by Klamath County.

Housing

Construction

During construction, a peak construction workforce of 300 workers will be employed. Most construction workers will be employees of construction and equipment companies under contract to the Applicant. Workers will include a mix of local and nonlocal personnel, with nonlocal personnel more likely for specialized construction (for example, substation and electrical transmission construction, solar array erection, and solar array testing). Thus, construction workers are expected to come from outside of the study area and will require temporary housing. Construction workers hired from areas outside a commutable distance will likely stay in local motels, trailer parks, or other rental units during their stay. The increased demand created by construction workers could potentially impact temporary housing in the vicinity of the Facility if an adequate supply is unavailable. Local hiring may be greater and will depend on the availability of workers with appropriate skills. Additional workers may commute daily from communities outside the Facility study area (e.g., Klamath Falls and Lakeview), which will lessen the impacts associated with the in-migration of outside workers.

Typical housing options for temporary workers include motels, hotels, apartments, short-term rental homes, and campgrounds or other areas where workers can park trailers or other mobile housing. Klamath Falls and Lakeview have hotels and motels, including several large hotel chains. In addition, there are numerous RV parks and campgrounds in the vicinity. Workers from outside the area will benefit the community and local businesses by renting rooms, eating at local restaurants, and purchasing goods and services.

Operations

An estimated eight to ten full-time equivalents will be employed as operational personnel at the site. Most of the O&M staff will be hired locally, with the exception of positions that may require previous experience at other solar generation facilities. Some specialized outside contractors also may be required for the repair of the equipment. The assumption is that operations will continue for at least 35 to 40 years. No significant adverse impacts are anticipated as a result of housing operational personnel.

Traffic Safety

Klamath Falls is located at the junction of US Highway 97, and OR 140 and 39. The City of Bonanza and the proposed Facility site are located approximately 21 miles east of Klamath Falls on OR 70. The Facility site is accessible from OR 70 on East Langell Valley Road and Teare Lane. These routes will carry most of the construction-related heavy-duty and light-duty delivery vehicles, as well as some workforce traffic.

During construction, trucks will be accessing the Facility using these transportation corridors. Heavy-duty trucks will carry Facility components as well as gravel and other materials required to improve access roads from existing roadways. Lighter-duty trucks will also deliver water, electrical equipment, and other materials. Construction-related vehicles are not expected to cause traffic safety hazards or traffic delays due to the rural nature of the area. Any improvements, if necessary, to County roads will be restricted to areas within the County rights-of-way and subject to approval. If necessary, a traffic management plan will be developed in cooperation with Klamath County and the City of Bonanza to minimize impacts to traffic safety. In addition, if necessary, the Applicant may enter into road use agreements with Klamath County to ensure that public roads impacted by construction will be left in “as good or better” condition than that which existed prior to the start of construction.

During operations, traffic impacts from technician visits are not anticipated because the Applicant intends to hire O&M personnel locally, where feasible. Employees will travel to work in their personal vehicles. Specialized personnel responsible for repairs of select pieces of equipment may be hired from outside the area and may travel in light-duty trucks. Delivery trucks may also access the site during operations on an infrequent basis. An analysis of traffic generated from both construction and operation of the Facility will be included in the ASC.

Police and Fire Protection

Police service is primarily provided by county police departments in the vicinity of the Facility. The Applicant will seek assistance from the Klamath County Sheriff's Office for police services, located in Klamath Falls, Oregon (Klamath County 2020a). Additional law enforcement service is available through the Oregon State Police, which has offices in Klamath Falls and Lakeview (OSP 2020). The number of temporary and permanent employees is not anticipated to place significant demands on law enforcement agencies in the area.

The Facility is located within the service boundary of Klamath County Fire District #12 (District), which is also referred to as the Bonanza Rural Fire Protection District. District 12 is served by the mostly volunteer Bonanza Fire Department. The Applicant will work with the District to obtain documentation that the District will be able to provide fire protection within the Facility site boundary. The Applicant will provide construction plans and phasing information, and identify the location of Facility structures and their points of access.

The Facility will be equipped with fire protection equipment in accordance with the Oregon Fire Code. Given the inherent fire safety features of Facility components and the relatively small number of temporary residents during construction, significant demands on fire protection resources are not anticipated.

Health Care

The nearest hospital to the Facility (Level III Trauma) is Sky Lakes Medical Center in Klamath Falls located approximately 22 miles from the nearest point of the Facility site boundary (Sky Lakes Medical Center 2020). Ambulance service in the area is provided by Basin Ambulance from Merrill, Oregon located approximately 15 miles from the nearest point of the Facility site boundary (Rural Klamath Connects 2020). AirLink Critical Care Transport is the nearest Emergency Airlift providing service from the Crater Lake Klamath Regional Airport (AirLink 2020). The Bonanza Clinic is a primary care clinic located approximately 1.9 miles from the nearest point of the Facility site boundary.

Impacts on health care could occur if Facility construction activities were to result in an increase in the use of emergency health care services exceeding the capacity of local providers. Impacts on local health care services during both construction and operation will be minimized by careful management of site health and safety risks. The estimated number of temporary and permanent employees is not expected to place significant demands on routine health care services.

Schools

Bonanza Elementary and Bonanza Junior and Senior High Schools are the only schools within the 10-mile public service study area. However, most workers are anticipated to live outside the study area.

No significant adverse impacts to schools are anticipated during construction and operation of the Facility. Construction will be temporary and short-term, and much of the peak work period will occur during the summer months when school is not in session. Consequently, students are not expected to relocate to the area as a result of construction.

During Facility operations, any increase in the local population due to hiring of Facility O&M staff would be too small to produce a tangible increase in school enrollment. O&M staff will be hired locally if possible, and will consist of eight to ten full-time equivalents. Given the number of schools in the study area, the dispersed area in which new residents are likely to settle, and the small number of school children expected, it is unlikely that any one school will receive more students than it can accommodate as a result of Facility operations.

References

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Klamath County. 2020b. *Schools*. Accessed July 31, 2020. <http://www.kcsd.k12.or.us/departments.asp>.

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Rural Klamath Connects. 2020. *Basin Ambulance Service*. Accessed July 31, 2020. <https://ruralklamathconnects.org/directory/listing/basin-ambulance-service>.

Sky Lakes Medical Center. 2020. *About us*. Accessed July 31, 2020. <https://www.skylakes.org/about-us/>.

Exhibit L. Water Sources and Use

OAR 345-020-0011(1)(L)

- (L) **Exhibit L.** *Information about anticipated water use during construction and operation of the proposed facility, including:*
- (A) *A description of each source of water and the applicant's estimate of the amount of water the facility will need from each source;*

Response:

Construction

The construction contractor will be responsible for obtaining water for construction including any required permits. Water will be required during Facility construction, primarily for concrete, dust control, and road compaction. During construction, the contractor will arrange for delivery of water to the site, supplied from an existing source with a valid water right. Potential sources include but are not limited to offsite municipal or commercial sources via bilateral agreements, and participating landowners with adequate existing water rights. Approximately 800,000 gallons of water per week will be needed for initial civil and site preparation over the course of approximately 2 months, then approximately 48,700 gallons of water per week will be needed for construction over the course of approximately 10 months. If a concrete batch plant is required, then approximately 3,150,000 additional gallons of water will be used during construction. Daily water use will vary depending on the timing of construction and the weather (e.g., water use for dust control will increase in dry, windy summer conditions).

In the ASC, the Applicant will confirm the anticipated amount of water required for construction. Additionally, the ASC will confirm that the identified source is capable of meeting the Facility's water requirements during construction.

Operations

During Facility operations, if necessary, water use to wash panels will be limited to a once- or twice-annual cleaning of the solar modules requiring up to approximately 1,650,000 gallons of water per year. Potential sources include but are not limited to offsite municipal or commercial sources via bilateral agreements, and participating landowners with adequate existing water rights. Additional detail about the source for this washwater will be provided in the ASC.

- (B) *If a new water right is required, the approximate location of the points of diversion and the estimated quantity of water to be taken at each point; and*

Response: The Applicant does not anticipate needing new water rights for the proposed Facility. Therefore, this rule is not applicable.

- (C) *For operation, the source of cooling water and the estimated consumptive use of cooling water, based on annual average conditions.*

Response: The proposed Facility will not require cooling water. Therefore, this rule is not applicable.

Exhibit M. Carbon Dioxide Emissions

OAR 345-020-0011(1)(m)

(m) **Exhibit M.** *If the proposed facility would emit carbon dioxide, an estimate of the gross rate of carbon dioxide emissions, a table listing all the factors that form the basis for calculating the estimate, and a statement of the means by which the applicant intends to comply with the applicable carbon dioxide emissions standard under OAR 345-024-560, 345-024-600, or 345-024-630.*

Response: The proposed Facility will not emit carbon dioxide. Therefore, this exhibit is not applicable.

Exhibit N. Evaluation of Statutes, Rules, and Ordinances

OAR 345-020-0011(1)(n)

- (n) **Exhibit N.** Identification, by legal citation, of all state statutes and administrative rules and local government ordinances containing standards or criteria that the proposed facility must meet for the Council to issue a site certificate, other than statutes, rules and ordinances identified in Exhibit E, and identification of the agencies administering those statutes, administrative rules and ordinances. The applicant must analyze and describe any problems the applicant foresees in satisfying the requirements of any such statute, rule or ordinance.

Response: Table N-1 identifies state statutes, administrative rules, and local government ordinances not identified in Exhibit E. The statutes, rules, and ordinances identified in Table N-1 specify the standards or criteria that the proposed Facility must meet for the Council to issue a site certificate. The Applicant does not anticipate difficulty in meeting specific requirements.

Table N-1. Statutes, Rules, and Ordinances Containing Relevant Standards or Criteria

Department	Legal Citation	Agency Address
Oregon Department of Agriculture	Plant Conservation Biology Program—ORS 564; OAR Chapter 603, Division 73	Oregon Department of Agriculture 635 Capitol Street, N.E. Salem, OR 97301-2532 503-986-4550
Oregon Biodiversity Information Center	ORS 564.105; OAR 603, Division 73 and OAR 345-022-0070	Oregon Biodiversity Information Center Oregon State University Institute for Natural Resources University Center Building, Suite 335 527 SW Hall Street Portland, OR 97201
Oregon Department of Environmental Quality—Hazardous Waste Management	ORS 465 and 466; OAR Chapter 340, Divisions 100-113	Oregon Department of Environmental Quality 811 SW Sixth Avenue Portland, OR 97204-1390 503-229-5696
Oregon Department of Environmental Quality—Noise	ORS 467; OAR Chapter 340, Division 35	Oregon Department of Environmental Quality 811 SW Sixth Avenue Portland, OR 97204-1390 503-229-5696
Oregon Department of Environmental Quality—Solid Waste	ORS 459; OAR Chapter 340, Division 93	Oregon Department of Environmental Quality 811 SW Sixth Avenue Portland, OR 97204-1390 503-229-5696
Oregon Department of Environmental Quality—Water Quality	ORS 468 and 468B; OAR Chapter 340, Divisions 14, 41, 45, 52, and 55	Oregon Department of Environmental Quality 475 NE Bellevue Dr., Suite 110 Bend, OR 97701 541-388-6146
Oregon Department of Fish and Wildlife—Habitat Conservation Division	ORS 496 and 506; OAR Chapter 635, Divisions 100 and 415	Oregon Department of Fish and Wildlife 3406 Cherry Avenue N.E. Salem, OR 97303-4924 503-947-6000
Oregon Department of Geology and Mineral Industries	OAR Chapter 632	Oregon Department of Geology and Mineral Industries 800 NE Oregon Street, Suite 965 Portland, OR 97232 (971) 673-1555

Table N-1. Statutes, Rules, and Ordinances Containing Relevant Standards or Criteria

Department	Legal Citation	Agency Address
Oregon Department of Land Conservation and Development	ORS Chapter 197, ORS 215.274; OAR Chapter 660	Oregon Department of Land Conservation and Development 635 Capitol Street NE, Suite 150 Salem, OR 97301-2540 503-373-0050
Oregon Division of State Lands	ORS 273 and 274; OAR Chapter 141	Oregon Division of State Lands 775 Summer Street NE, Suite 100 Salem, OR 97301-1279 503-378-3805
Oregon Office of State Fire Marshal	ORS 453; OAR Chapter 837, Divisions 85 and 95	Oregon Office of State Fire Marshal 4760 Portland Road NE Salem, OR 97305-1760 503-378-3473
Oregon Parks and Recreation Department—Archaeological	Native American Graves and Protected Objects—ORS 97.740-97.760 Archaeological Objects and Sites—ORS 358.905-358.961	State Historic Preservation Office 725 Summer St. NE, Suite C Salem, OR 97301 503-986-0671
Oregon Water Resources Department—Water Rights Division	Appropriation of Water Generally—ORS Chapter 537 Distribution of Water; Watermasters; Change in Use; Transfer or Forfeiture of Water Rights—ORS Chapter 540 Water Resources Administrative Rules—OAR Chapter 690	Department of Water Resources Commerce Building 158 12th NE Salem, OR 97301-4172 503-378-8455

Exhibit O. Schedule

OAR 345-020-0011(1)(o)

- (o) **Exhibit O.** A schedule stating when the applicant expects to submit a preliminary application for a site certificate.

Response: Table O-1 provides a schedule of key EFSC milestones, including the expected submittal date for the ASC.

Table O-1. Proposed Schedule for Submittal of Notice of Intent and Application for Site Certificate

Activity	Target Completion Date
Applicant submits NOI to EFSC	August 2020
EFSC reviews NOI, distributes public notice, conducts public information meeting, facilitates comment period, and issues Project Order	August 2020 – November 2020
Applicant submits preliminary ASC to EFSC	February 2021

Exhibit P. Evidence of Consultation with State Commission on Indian Services

OAR 345-020-0011(1)(p)

- (p) ***Exhibit P. Evidence of consultation with the Legislative Commission on Indian Services to identify each appropriate tribe to consult with regarding the proposed facility's possible effects on Indian historic and cultural resources.***

Response: Evidence of consultation with the Legislative Commission on Indian Services is provided in Attachment P.

Attachment A
Articles of Incorporation and Authorization

**AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT
OF
Hecate Energy Bonanza LLC
a Delaware Limited Liability Company**

Dated as of June 30, 2018

**AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT
OF
Hecate Energy Bonanza LLC
A DELAWARE LIMITED LIABILITY COMPANY
(the "Company")**

The Company was formed on September 12, 2014 and Hecate Energy LLC ("Hecate") was admitted on such date as its sole member and was issued all of the Company's limited liability company interests. In accordance with a Contribution Agreement, dated as of June 30, 2018 (the "Contribution Agreement"), Hecate contributed all of its right, title and interest in and to the Company (including the Interest (as defined below)) to Hecate Energy NAF LLC ("NAF") and NAF was admitted as the Company's sole member (the "Member"). The Member amends and restates the existing Limited Liability Company Agreement of the Company as follows (such amended and restated Limited Liability Company Agreement, this "Agreement"):

1. Name. The name of the limited liability company (the "Company") is Hecate Energy Bonanza LLC.

2. Purpose and Powers. The purpose of the Company is to engage in any activity for which limited liability companies may be organized in the State of Delaware. The Company shall possess and may exercise all of the powers and privileges granted by the Act and all of the lawful powers and privileges granted by this Agreement, together with any powers incidental thereto, so far as such powers and privileges are necessary or convenient to the conduct, promotion or attainment of the lawful business purposes or activities of the Company.

3. Formation; Term; Existence. Chris Bullinger, as an authorized person, of executed, delivered and filed the initial Certificate of Formation of the Company with the Secretary of State of the State of Delaware. The Member shall execute, deliver and file any amendments and/or restatements of the Certificate of Formation of the Company and any other certificates or other documents (and any amendments and/or restatements thereof) necessary for the Company to qualify to do business in any other jurisdiction in which the Company may wish to conduct business. The term of the Company commenced on the date hereof, being the date the initial Certificate of Formation of the Company was filed with the Secretary of State of the State of Delaware, and the term of the Company shall continue until the dissolution of the Company pursuant to Section 16 hereof. The existence of the Company as a separate legal entity shall continue until the cancellation of the Certificate of Formation of the Company pursuant to the Act and this Agreement.

4. Registered Office. The LLC shall continuously maintain in the state of Delaware, a known place of business that may be the address of its statutory agent.

5. Registered Agent. The LLC shall continuously maintain in the state of Delaware, a statutory agent who may be:

- a) An individual who resides in Delaware
- b) A domestic LLC formed under Delaware state law
- c) A foreign LLC authorized to transact business in the state of Delaware

- d) A limited liability company formed under Delaware state law, or
- e) A limited liability company authorized to transact business in the state of Delaware.

Registered Agent and office location is listed as:

Corporation Service Company
251 Little Falls Drive
Wilmington DE 19808
New Castle County

6. Admission of Member. As of the date hereof, the Member has been admitted to the Company as the sole member of the Company in respect of the Interest (as hereinafter defined), which Interest has been transferred to the Member by Hecate in accordance with the Contribution Agreement.

7. Interest. The Company shall be authorized to issue a single class of limited liability company interest in the Company (the "Interest") which shall include any and all benefits to which the holder of such Interest may be entitled in this Agreement and under the Act, together with all obligations of such person to comply with the terms and provisions of this Agreement and obligations under the Act.

8. Capital Contributions. The Member may, but shall not be required to, contribute a cash or other property to the Company as it shall decide, from time to time.

9. Tax Characterization and Returns. It is the intention of the Member that the Company be disregarded for federal and all relevant state tax purposes and that the activities of the Company be deemed to be activities of the Member for such purposes. All provisions of the Company's Certificate of Formation and this Agreement are to be construed so as to preserve that tax status. The Member is hereby authorized to file any necessary elections with any tax authorities and shall be required to file any necessary tax returns on behalf of the Company with any such tax authorities.

10. Management. The management of the Company shall be vested solely in the Manager of the Member, who shall have all powers to control and manage the business and affairs of the Company and may exercise all powers of the Company. All instruments, contracts, agreements and documents shall be valid and binding on the Company if executed by the Member on behalf of the Company.

11. Distributions. At such time or times as the Member shall determine, the Member may cause the Company to distribute to the Member any cash held by the Company that is neither reasonably necessary for the operation of the Company nor otherwise in violation of applicable law (including, but not limited to, the Act).

12. Assignments. The Member may assign all or any part of its Interest in the sole discretion of the Member. Any transferee of all or any portion of an Interest shall automatically be deemed admitted to the Company as a substituted Member in respect of the Interest or such portion thereof transferred by the transferring Member and the transferring Member shall be deemed

resigned and withdrawn in respect of such Interest or portion thereof; provided, in any event, that the transferee must agree in a document or instrument to be bound by the terms of this Agreement.

13. Resignation and Withdrawal. The Member may resign or withdraw from the Company at any time. Upon any such permitted resignation or withdrawal, the resigning or withdrawing Member shall receive the fair value of its Interest in accordance with the Act, determined as of the date it ceases to be a member of the Company.

14. Additional Members. No additional persons may be admitted as members of the Company except upon an assignment by the Member of all or any part of its Interest or except upon the consent of the Member.

15. Compensation. The Member shall not receive compensation for services rendered to the Company.

16. Dissolution. The Company shall dissolve, and its affairs shall be wound up, in accordance with the Act. Upon the dissolution of the Company, the Company shall continue solely for the purposes of winding up its affairs in an orderly manner, liquidating its assets, and satisfying the claims of its creditors and the Member, and the Member shall not take any action that is inconsistent with, or not necessary to or appropriate for, the winding up of the Company's business and affairs; provided that all covenants contained in this Agreement and obligations provided for in this Agreement shall continue to be fully binding upon the Member until such time as the property of the Company has been distributed pursuant to Section 17 and the Certificate of Formation of the Company has been cancelled pursuant to the Act and this Agreement. The Member shall be responsible for overseeing the liquidation and winding up of the Company.

17. Distributions upon Dissolution. Upon the dissolution of the Company as provided in Section 16, the assets of the Company shall be distributed in accordance with the Act.

18. Cancellation. Upon completion of the winding up and liquidation of the Company in accordance with Sections 16 and 17 and the Act, the Member shall promptly cause to be executed and filed the necessary documents to terminate, cancel and/or dissolve the Company in accordance with the Act and the laws of any other jurisdictions in which the Member deems such filing necessary or advisable.

19. Limited Liability. The Member shall have no liability for the obligations of the Company except to the extent required by the Act, if any.

20. Amendment. This Agreement may be amended only in a writing signed by the Member.

21. Governing Law. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED UNDER THE LAWS OF THE STATE OF DELAWARE, EXCLUDING ANY CONFLICTS OF LAWS RULE OR PRINCIPLE THAT MIGHT REFER THE GOVERNANCE OR CONSTRUCTION OF THIS AGREEMENT TO THE LAW OF ANOTHER JURISDICTION.

22. Severability. Except as otherwise provided in the succeeding sentence, every term and provision of this Agreement is intended to be severable, and if any term or provision of this Agreement is illegal or invalid for any reason whatsoever, such illegality or invalidity shall not affect the legality or validity of the remainder of this Agreement. The preceding sentence shall be of no force or effect if the consequence of enforcing the remainder of this Agreement without such illegal or invalid term or provision would be to cause any party to lose the benefit of its economic bargain hereunder.

23. Notices. Any notice, payment, demand or communication required or permitted to be given by any provision of this Agreement shall be in writing or by electronic mail or facsimile and shall be deemed to have been delivered, given and received for all purposes (a) when the same is delivered, if delivered personally to the person or to an officer of the person to whom the same is directed, (b) when the same is actually received, if sent either by courier or delivery service or registered or certified mail, postage and charges prepaid, or (c) when the same is sent unless the sender has actual knowledge of non-receipt, if sent by electronic mail or facsimile, if such electronic mail or facsimile is followed by a hard copy of the emailed or facsimiled communication sent either by courier or delivery service or registered or certified mail, postage and charges prepaid, addressed to the recipient party at the address, electronic mail address and/or facsimile number set forth for such party in the books and records of the Company.

24. Relationship between the Agreement and the Act. Regardless of whether any provision of this Agreement specifically refers to particular Default Rules, (a) if any provision of this Agreement conflicts with a Default Rule, the provision of this Agreement shall control and the Default Rule shall be modified or negated accordingly and (b) if it is necessary to construe a Default Rule as modified or negated in order to effectuate any provision of this Agreement, the Default Rule shall be so construed. For purposes of this Section 24, "Default Rule" shall mean a rule stated in the Act that applies except to the extent it is negated or modified through the provisions of a limited liability company's Certificate of Formation or limited liability company or operating agreement.

[signature page follows]

IN WITNESS WHEREOF, the undersigned has caused this Limited Liability Company Agreement to be executed as of the date first above written

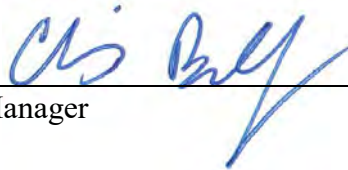
MEMBER:

Hecate Energy NAF LLC

By: Hecate Energy LLC, its sole member

By:

Manager

A handwritten signature in blue ink, appearing to read "Chris Bely", is written over a horizontal line.

CERTIFICATE OF FORMATION

OF

HECATE ENERGY BONANZA LLC

FIRST: The name of the limited liability company is
HECATE ENERGY BONANZA LLC

SECOND: Its registered office in the State of Delaware is to be located at 2711
Centerville Road, Suite 400, in the city of Wilmington, County of New Castle, 19808,
and its registered agent at such address is The Company Corporation.

THIRD: the company will be managed by members, the names and street addresses of
those who are to serve until their first meeting of members or until their successors are
elected :

Hccate Energy LLC
115 Rosa Parks Blvd Nashville TN 37203

IN WITNESS WHEREOF, the undersigned, being the individual forming the Company,
has executed, signed and acknowledged this Certificate of Formation this 12th day of
September, 2014.

The Company Corporation, Organizer

By: /s/ Margaret Rosado
Margaret Rosado
Assistant Secretary

**FIRST RESOLUTION AND
WRITTEN CONSENT OF HECATE ENERGY BONANZA LLC**

The undersigned, President of Hecate Energy NAF LLC, a Delaware corporation, which is the sole member and manager of Hecate Energy Bonanza LLC, a Delaware limited liability company (the “Company”), adopts the following resolutions effective July 20, 2020:

WHEREAS, the Company desires to file a Notice of Intent with the Oregon Energy Facility Siting Council;

WHEREAS, Hecate Energy NAF LLC is authorized to grant signing authority and authority to conduct business to certain persons on behalf of the Company.

NOW THEREFORE, BE IT RESOLVED, that the Company is hereby authorized and directed to file a Notice of Intent with the Oregon Energy Facility Siting Council;

RESOLVED FURTHER, that Chris Bullinger, Manager of Hecate Energy NAF LLC, and Paul Turner, Vice President, Business Development, are each authorized to execute, deliver and cause the Company to perform all tasks necessary to file the Notice of Intent with the Oregon Energy Facility Siting Council, in accordance with this Consent, and such actions hereby in all respects are ratified, approved and confirmed; and

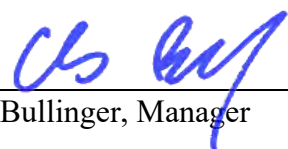
RESOLVED FURTHER, that the authority given hereunder shall be deemed retroactive for such purpose and any and all acts authorized hereunder performed prior to the passage of this resolution are hereby ratified and affirmed.

IN WITNESS WHEREOF, the undersigned has executed this Consent effective as of the date written above.

HECATE ENERGY BONANZA LLC

**By HECATE ENERGY NAF LLC: its
SOLE MEMBER AND MANAGER**

By: _____


Chris Bullinger, Manager



**MULTNOMAH
COUNTY**

CERTIFICATE OF COMPLIANCE

REVENUE DIVISION - TAX DIVISION, 111 SW COLUMBIA ST., SUITE 600, PORTLAND, OR 97201-5814
PHONE: (503) 823-5157, FAX: (503) 823-5192, TDD: (503) 823-6868



DATE ISSUED: July 23, 2020

Verify compliance at www.pdxbl.org

ACCOUNT: 181592

**TAXFILER: STOEL RIVES LLP
STOEL RIVES LLP
760 SW 9TH AVE STE 3000
PORTLAND OR 97205-2586**

**LOCATION: 760 SW 9TH AVE STE 3000
PORTLAND OR 97205**

**Is in compliance with the City of Portland Business License Tax Law and Multnomah County
Business Income Tax Law as of July 23, 2020.**

A Certificate of Compliance indicates that on the date of issuance the business was in compliance with applicable tax laws. It does not exempt the holder from annual filing requirements, nor does it entitle the holder to engage in any business activity not otherwise allowed by federal, state, and/or local laws.

Attachment F
Klamath County Landowners
(Lists and Map)

Klamath County Property Owners within 500 feet of the Property on which the Site Boundary is Located

Notice of Intent for the Bonanza Energy Facility

Parcel data and owner addresses provided by Klamath County on 7/27/2020.

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O-Attn.	Address	City	State	Zip Code
R-3911-00000-02500-000	JARED JAMES	KERR	ANNA SUSAN			PO BOX 1151	RED BLUFF	CA	96080
R-3911-00000-04300-000				UNITED STATES*					0
R-3911-00000-04500-000	KENNETH DALE SR	LEPPERT	KATHY R			12305 66 HWY	KLAMATH FALLS	OR	97601
R-3911-00000-04600-000				LOST RIVER FARMS LLC		4721 HARPOLD RD	BONANZA	OR	97623
R-3911-00000-04701-000	WILLIAM JAY	WATSON	KAREN LOUISE			6165 W LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-00000-04900-000	PHILLIP L	EKSTROM	RHONDA R			5880 WEST LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-00000-05000-000				UNITED STATES*					0
R-3911-00000-05100-000				GEORGE RAINUS LLC		25081 SCHAUPP RD	KLAMATH FALLS	OR	97603
R-3911-00000-05200-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623
R-3911-00000-05300-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623
R-3911-00000-05400-000				GEORGE RAINUS LLC		25081 SCHAUPP RD	KLAMATH FALLS	OR	97603
R-3911-00000-05500-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-00000-05700-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-00000-05800-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-00000-05900-000				GEORGE RAINUS LLC		25081 SCHAUPP RD	KLAMATH FALLS	OR	97603
R-3911-00000-06000-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-00000-06100-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-00000-06200-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-00000-06300-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-00000-06701-000				MOSS RANCH LLC		C/O RANDA 8555 W LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-00000-06800-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-00000-06900-000	STEVEN E	JOHNSON	JOHNSON STEVEN E			6583 W LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-00000-06901-000	PAMELA A	BERG				PO BOX 2101	GLEN ELLEN	CA	95442
R-3911-00000-06902-000	PAMELA A	BERG				PO BOX 2101	GLEN ELLEN	CA	95442
R-3911-00000-07200-000				UNITED STATES*					0
R-3911-00000-07300-000	MELVIN E	FOLTZ	SAENGER CHARLES			1823 LOGAN ST	KLAMATH FALLS	OR	97603
R-3911-00000-07400-000				WEST VIKING LLC		PO BOX 1592	PRINEVILLE	OR	97754
R-3911-00000-07500-000	DAVID R	NOBLE	CHERI L	NOBLE REVOCABLE LIVING TRUST		26161 70 HWY	BONANZA	OR	97623
R-3911-00000-07600-000				UNITED STATES*					0
R-3911-00000-07700-000	MELVIN E	FOLTZ	SAENGER CHARLES			1823 LOGAN ST	KLAMATH FALLS	OR	97603
R-3911-00000-09100-000				UNITED STATES*					0
R-3911-00000-09200-000	BRIAN P	FARBER	MARLENE J			9025 PHILPOTT LN	BONANZA	OR	97623
R-3911-00000-09203-000	MATTHEW P	ANDREWS	MORAWIEC JOHN S		C/O GREG I	3632 SEUTTER PL	KLAMATH FALLS	OR	97603
R-3911-00000-09204-000	MATTHEW T	MARTIN	JOANN L			PO BOX 468	MERLIN	OR	97532
R-3911-00000-09300-000	DOUGLAS E	NEIL	BEVERLY G			PO BOX 278	BONANZA	OR	97623
R-3911-00000-09400-000	MELVIN E	FOLTZ	SAENGER CHARLES			1823 LOGAN ST	KLAMATH FALLS	OR	97603
R-3911-00000-09500-000				UNITED STATES*					0
R-3911-00000-09800-000	DOUGLAS E	NEIL	BEVERLY G			PO BOX 278	BONANZA	OR	97623
R-3911-00000-09900-000				UNITED STATES*					0
R-3911-00000-10000-000				UNITED STATES*					0
R-3911-00000-10300-000	EDWARD W	MALONEY	BOONE ROBERT D	BOONE ROBERT & CHARLOTTE REVOCABLE TRUST		2324 HALL RD	NICHOLASVILLE	KY	40356
R-3911-01000-03300-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623
R-3911-01000-03400-000				KLAMATH LODGE #137 IOOF		PO BOX 54	BONANZA	OR	97623
R-3911-01100-00900-000	ERIC L	MOCKRIDGE	BARBARA ANN	MOCKRIDGE FAMILY TRUST		34106 MCCARTIE LN	BONANZA	OR	97623
R-3911-01100-01100-000	THOMAS REES	THOMAS REES	THOMAS REES			3249 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-01100-01101-000	RICHARD D	NEWSOME	SHAWNA L			3262 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-01100-01200-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623
R-3911-01100-01300-000	MARGARET C	CHARTRAND	RALPH BETTY M & FLORA J			3411 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-01100-01400-000				HORSEFLY IRRIGATION DIST		PO BOX 188	BONANZA	OR	97623
R-3911-01300-00100-000	JOHN E	HAURY	LORI M			PO BOX 518	BONANZA	OR	97623
R-3911-01300-00101-000	TURI	GONZALEZ-FAWCETT	APRIL			4414 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-01300-00200-000				HORSEFLY IRRIGATION DIST		PO BOX 188	BONANZA	OR	97623
R-3911-01300-00300-000	JARED JAMES	KERR	ANNA SUSAN			PO BOX 1151	RED BLUFF	CA	96080
R-3911-01300-00500-000	ERIC L	MOCKRIDGE	BARBARA ANN	MOCKRIDGE FAMILY TRUST		34106 MCCARTIE LN	BONANZA	OR	97623
R-3911-01300-00600-000	ERIC L	MOCKRIDGE	BARBARA ANN	MOCKRIDGE FAMILY TRUST		34106 MCCARTIE LN	BONANZA	OR	97623
R-3911-01300-00700-000	ERIC L	MOCKRIDGE	BARBARA ANN	MOCKRIDGE FAMILY TRUST		34106 MCCARTIE LN	BONANZA	OR	97623
R-3911-01300-00800-000	GEORGE	CURRY				4107 TEARE LN	BONANZA	OR	97623
R-3911-01300-00900-000	GEORGE W	CURRY				4107 TEARE LN	BONANZA	OR	97623
R-3911-01300-01000-000				REED MARYANN REV LIVING TRUST		REED MARYANN 4096 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-01300-01100-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-01300-01200-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-01300-01300-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3911-01400-00100-000	ERIC L	MOCKRIDGE	BARBARA ANN	MOCKRIDGE FAMILY TRUST		34106 MCCARTIE LN	BONANZA	OR	97623
R-3911-01400-00200-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623
R-3911-01400-00300-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623
R-3911-01400-00400-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623
R-3911-01400-00500-000				GEORGE RAINUS LLC		25081 SCHAUPP RD	KLAMATH FALLS	OR	97603
R-3911-01400-00600-000				GEORGE RAINUS LLC		25081 SCHAUPP RD	KLAMATH FALLS	OR	97603
R-3911-01500-00200-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623

Klamath County Property Owners within 500 feet of the Property on which the Site Boundary is Located

Notice of Intent for the Bonanza Energy Facility

Parcel data and owner addresses provided by Klamath County on 7/27/2020.

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O-Attn.	Address	City	State	Zip Code
R-3911-01500-00800-000	EARL	WIERSMA	PAMELA	WIERSMA EARL & PAMELA REVOCABLE LIVING T		PO BOX 177	BONANZA	OR	97623
R-3912-00000-01300-000	NELSON E S	SOMERS	BARBARA A	BONANZA PARTNERSHIP		1875 AUSTIN ST	KLAMATH FALLS	OR	97603
R-3912-00000-03200-000	NELSON E S	SOMERS	BARBARA A	BONANZA PARTNERSHIP		1875 AUSTIN ST	KLAMATH FALLS	OR	97603
R-3912-00000-03500-000	CAROLYN A	NORTHCUTT				6521 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-00000-03600-000	NELSON E S	SOMERS	BARBARA A	BONANZA PARTNERSHIP		1875 AUSTIN ST	KLAMATH FALLS	OR	97603
R-3912-00000-03700-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3912-00000-03800-000	JOSHUA WILLIAM	BLOOM	AMANDA MARIE			5235 TEARE LN	BONANZA	OR	97623
R-3912-00000-03900-000	ALISON	PARSONS	ASHBACH GREGORY PETER			6201 TEARE LN	BONANZA	OR	97623
R-3912-00000-03901-000	GREGORY A	THOMAS	MAUREEN G			6516 TEARE LN	BONANZA	OR	97623
R-3912-00000-03902-000	ROBERT D	HOPPER	KIMBERLY L			PO BOX 455	BONANZA	OR	97623
R-3912-00000-03903-000	BREANNE L	PEARCE				6105 TEARE LN	BONANZA	OR	97623
R-3912-00000-04000-000	MICHAEL M	HUBBARD	MARY E			37820 JONES RD	BONANZA	OR	97623
R-3912-00000-05500-000	MICHAEL M	HUBBARD	MARY E			37820 JONES RD	BONANZA	OR	97623
R-3912-00000-05600-000	TONYA L	PINCKNEY				37150 JONES RD	BONANZA	OR	97623
R-3912-00000-05601-000	CLAYTON	CONNER	CONVERSE AMBER			6919 TEARE LN	BONANZA	OR	97623
R-3912-00000-05900-000	CARSON	MERKLEY				7070 TEARE LN	BONANZA	OR	97623
R-3912-00000-06000-000				MOSS RANCH LLC	C/O RANDA	8555 W LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-00000-06100-000	CAROLYN A	NORTHCUTT		CAMOZZI FAMILY LIV TRUST LIFE ESTATE		6521 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-00000-06101-000	JOHN B	NORTHCUTT	ERIN M			7818 TEARE LN	BONANZA	OR	97623
R-3912-00000-06400-000				MOSS RANCH LLC	C/O RANDA	8555 W LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-00000-06500-000	CAROLYN A	NORTHCUTT		CAMOZZI FAMILY LIV TRUST LIFE ESTATE		6521 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-00000-06700-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-3912-00000-06800-000	CAROLYN A	NORTHCUTT		CAMOZZI FAMILY LIV TRUST LIFE ESTATE		6521 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-00700-00200-000	NELSON E S	SOMERS	BARBARA A	BONANZA PARTNERSHIP		1875 AUSTIN ST	KLAMATH FALLS	OR	97603
R-3912-02000-00401-000	RAYMOND M	MOLLETT	LINDSAY R			PO BOX 105	BONANZA	OR	97623
R-3912-02000-00500-000	CAROLYN A	NORTHCUTT		CAMOZZI FAMILY LIV TRUST LIFE ESTATE		6521 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-02000-00600-000	CAROLYN A	NORTHCUTT		CAMOZZI FAMILY LIV TRUST LIFE ESTATE		6521 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-02000-01100-000	LANEY	BOERSMA		CAMOZZI FAMILY LIV TRUST LIFE ESTATE		39355 BUNN WAY	BONANZA	OR	97623
R-3912-02000-01200-000	MICHAEL M	HUBBARD	MARY E			37820 JONES RD	BONANZA	OR	97623
R-3912-02900-00300-000	KEITH	MARTIN	REBECCA			7122 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-02900-00400-000	RONALD	RYAN	LINDA K			PO BOX 554	BONANZA	OR	97623
R-3912-02900-00500-000	KEITH	MARTIN	REBECCA			7122 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-02900-00600-000	KEITH	MARTIN	REBECCA			7122 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3912-02900-00700-000	MICHAEL M	HUBBARD	MARY E			37820 JONES RD	BONANZA	OR	97623
R-4012-00000-00100-000				MOSS RANCH LLC	C/O RANDA	8555 W LANGELL VALLEY RD	BONANZA	OR	97623
R-4012-00000-00200-000				UNITED STATES*				OR	0
R-4012-00000-00300-000	DOUGLAS E	NEIL	BEVERLY G			PO BOX 278	BONANZA	OR	97623
R-4012-00000-00400-000	DAVID L	BROWN	SUSANNA A			5407 39 HWY	KLAMATH FALLS	OR	97603
R-4012-00000-00500-000	JAMES R	KORDAHL	ANN			1000 NORTH POINT APT #506	SAN FRANCISCO	CA	94109
R-4012-00000-00600-000	VERNON JAMES	KORDAHL	ANN			1000 NORTH POINT APT #506	SAN FRANCISCO	CA	94109
R-4012-00000-00700-000	VERNON JAMES	KORDAHL	ANN			1000 NORTH POINT APT #506	SAN FRANCISCO	CA	94109
R-4012-00000-00800-000	VERNON JAMES	KORDAHL	ANN			1000 NORTH POINT APT #506	SAN FRANCISCO	CA	94109
R-4012-00000-00900-000	MICHAEL JOHN	SIGNES	LAURA NOEL			8716 PHILLPOTT LN	BONANZA	OR	97623
R-4012-00000-00901-000	MATTHEW T	MARTIN	JOANN L			PO BOX 468	MERLIN	OR	97532
R-4012-00000-00902-000	MATTHEW P	ANDREWS	MORAWIEC JOHN S		C/O GREG I	3632 SEUTTER PL	KLAMATH FALLS	OR	97603
R-4012-00000-01000-000				UNITED STATES*				OR	0
R-4012-00000-02700-000	VERNON JAMES	KORDAHL	ANN			1000 NORTH POINT APT #506	SAN FRANCISCO	CA	94109
R-4012-00000-02800-000	JAMES R	KORDAHL	ANN			1000 NORTH POINT APT #506	SAN FRANCISCO	CA	94109
R-4012-00000-02900-000	JAMES R	KORDAHL	ANN			1000 NORTH POINT APT #506	SAN FRANCISCO	CA	94109
R-4012-00000-03000-000	VERNON JAMES	KORDAHL	ANN			1000 NORTH POINT APT #506	SAN FRANCISCO	CA	94109
R-4012-00000-03100-000				UNITED STATES*				OR	0
R-4012-00000-03200-000	RICHARD	SACCHI				PO BOX 313	MALIN	OR	97632
R-4012-00000-03300-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-00000-03400-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-00000-03700-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-00000-03800-000	RICHARD	SACCHI				PO BOX 313	MALIN	OR	97632
R-4012-00000-03900-000				UNITED STATES*				OR	0
R-4012-00000-04000-000	RICHARD	SACCHI				PO BOX 313	MALIN	OR	97632
R-4012-00000-04100-000	RICHARD	SACCHI				PO BOX 313	MALIN	OR	97632
R-4012-00000-04200-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-00000-04300-000	RICHARD	SACCHI				PO BOX 313	MALIN	OR	97632
R-4012-00000-04400-000				UNITED STATES*				OR	0
R-4012-00000-04600-000				STATE OF OREGON DEPT.OF.STATE LANDS	ASSET MAN	775 SUMMER ST NE STE 100	SALEM	OR	97301
R-4012-00000-04700-000				BUCK BUTTE LLC		304 S JONES BLVD 1066	LAS VEGAS	NV	89107
R-4012-00000-05300-000	RICHARD	SACCHI				PO BOX 313	MALIN	OR	97632
R-4012-00000-05400-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-00000-05500-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-00000-05600-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-00000-05700-000				UNITED STATES*				WA	0

Klamath County Property Owners within 500 feet of the Property on which the Site Boundary is Located

Notice of Intent for the Bonanza Energy Facility

Parcel data and owner addresses provided by Klamath County on 7/27/2020.

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O-Attn.	Address	City	State	Zip Code
R-4012-00000-06000-000	RICHARD	SACCHI				PO BOX 313	MALIN	OR	97632
R-4012-00000-06100-000				UNITED STATES*					0
R-4012-02200-00100-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-02200-00200-000				BUCK BUTTE LLC		304 S JONES BLVD 1066	LAS VEGAS	NV	89107
R-4012-02200-00300-000				UNITED STATES*					0
R-4012-02200-00400-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-02200-00500-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-02200-00700-000				UNITED STATES*					0
R-4012-02200-00800-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4012-02200-00900-000				UNITED STATES*					0
R-4012-02700-00100-000				UNITED STATES*					0
R-4012-02700-00200-000				UNITED STATES*					0
R-4013-00600-00600-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101
R-4013-00600-00700-000				GREEN DIAMOND RESOURCE COMPANY		1301 FIFTH AVE STE 2700	SEATTLE	WA	98101

* United States properties are tax exempt. Klamath County verified in an email communication with Jacobs Engineering Group Inc. on August 26, 2020, that the County Assessor data set does not specify which branch of government owns the "United States" properties. Klamath County indicated that notification to United States properties typically is directed to the following four branches:

Bureau of Land Management
Klamath Falls Resource Area
2795 Anderson Avenue, Bldg 25
Klamath Falls, OR 97603

US Forest Service
Winema National Forest
2819 Dahlia Street
Klamath Falls, OR 97601

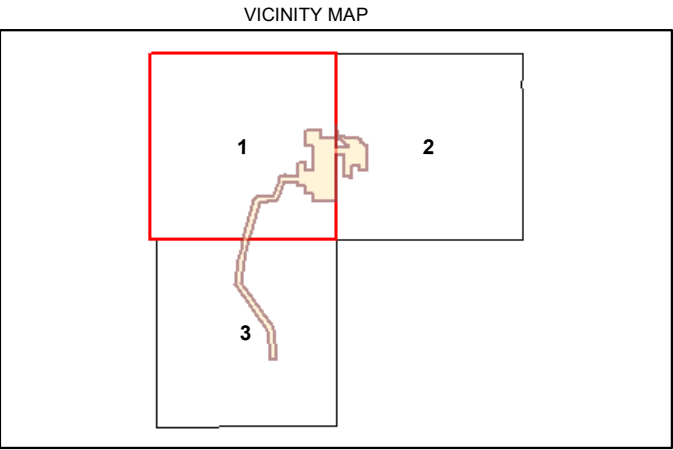
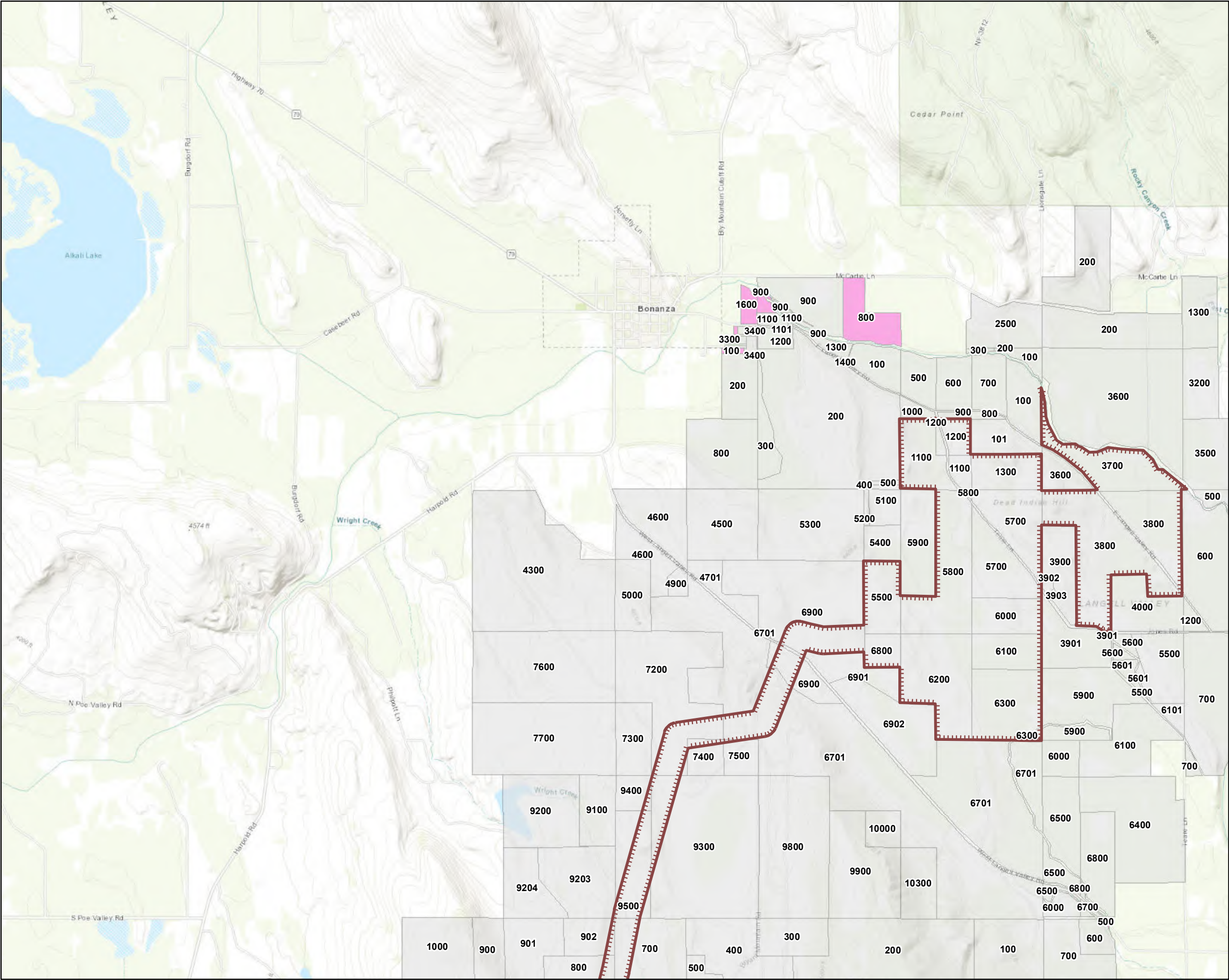
Bureau of Reclamation
6600 Washburn Way
Klamath Falls, OR 97603

US Army Corps of Engineers
1600 Executive Parkway, Ste 210
Eugene, OR 97401

Klamath County Property Owners Between 500 and 1,000 feet of the Property on which the Site Boundary is Located*Notice of Intent for the Bonanza Energy Facility*

Parcel data and owner addresses provided by Klamath County on 7/27/2020.

Map Tax Lot	First Name	Last Name	Name 2	Company/Organization	C/O-Attn.	Address	City	State	Zip Code
R-3911-010D0-01600-000	BRUCE MICHAEL	BROADDUS				PO BOX 263	HARBESON	DE	19951
R-3911-010D0-03200-000	THOMAS K	CORNELL	VICKIE L			3178 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-01100-00800-000	ERIC L	MOCKRIDGE	BARBARA ANN	MOCKRIDGE FAMILY TRUST		34106 MCCARTIE LN	BONANZA	OR	97623
R-3911-01100-01000-000	REES	THOMAS				3249 E LANGELL VALLEY RD	BONANZA	OR	97623
R-3911-01500-00100-000				NOBLE LIVESTOCK LLC		26161 HWY 70	BONANZA	OR	97623
R-3912-02000-00100-000	SIDNEY R	DYER	RITA E			39755 BUNN RD	BONANZA	OR	97623
R-4012-00000-06001-000				DEPT OF ENERGY BONNEVILLE POWER	ATTN: NEV/	PO BOX 65	MALIN	OR	97632
R-4013-00600-00500-000	STEVEN	CARR	FOERTCH STEPHANIE			PO BOX 547	BONANZA	OR	97623



LEGEND

- Bonanza Energy Facility Site Boundary
- Tax Lot within 500 feet of the Property on which the Site Boundary is Located
- Tax Lot between 500 and 1,000 feet of the Property on which the Site Boundary is Located

Basemap Features

- Road
- Waterbody
- Watercourse

Coordinate System: NAD 1983 UTM Zone 10N

Data Sources:
-Basemap: ESRI World Topographic Map.
-Tax lot GIS data for Klamath County downloaded from Klamath County FTP on 07/27/2020.

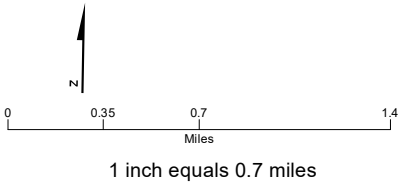
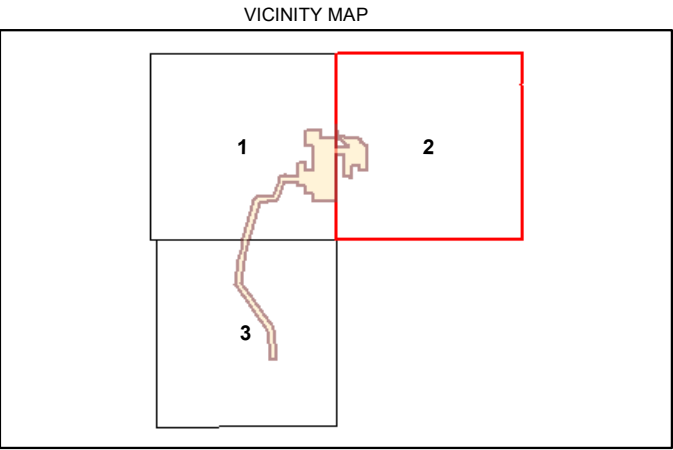
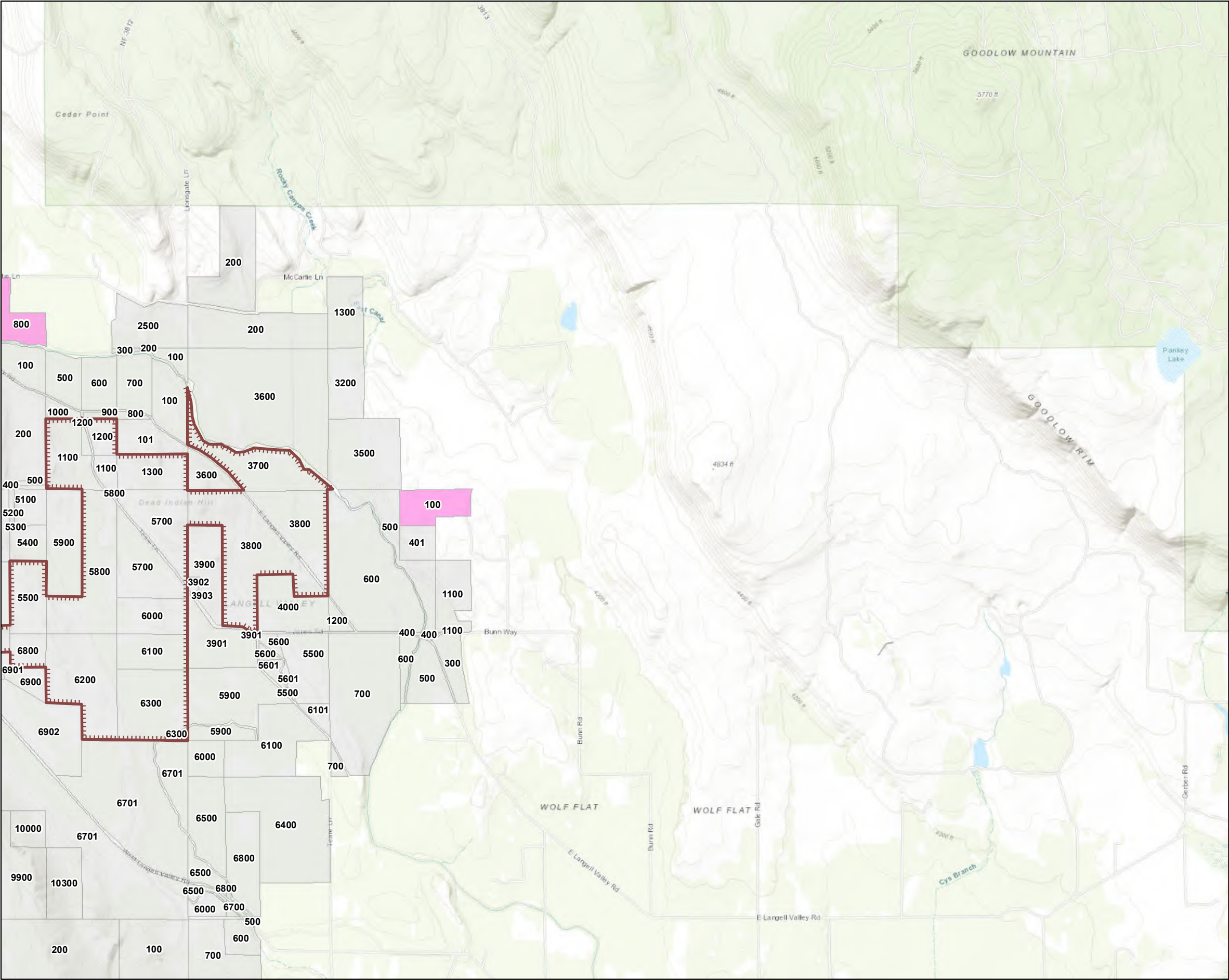


Figure F-1
Property Owner Notification Map
Sheet 1 of 3
Bonanza Energy Facility
Klamath County, OR



LEGEND

- Bonanza Energy Facility Site Boundary
- Tax Lot within 500 feet of the Property on which the Site Boundary is Located
- Tax Lot between 500 and 1,000 feet of the Property on which the Site Boundary is Located

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Coordinate System: NAD 1983 UTM Zone 10N

Data Sources:
-Basemap: ESRI World Topographic Map.
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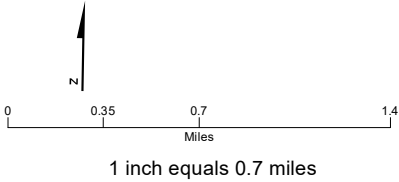
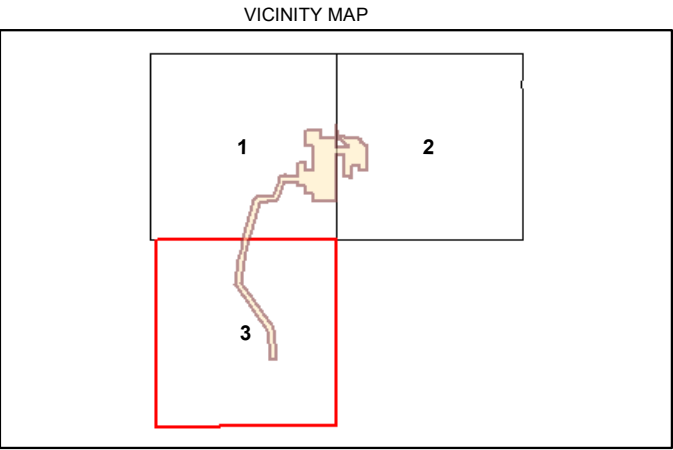
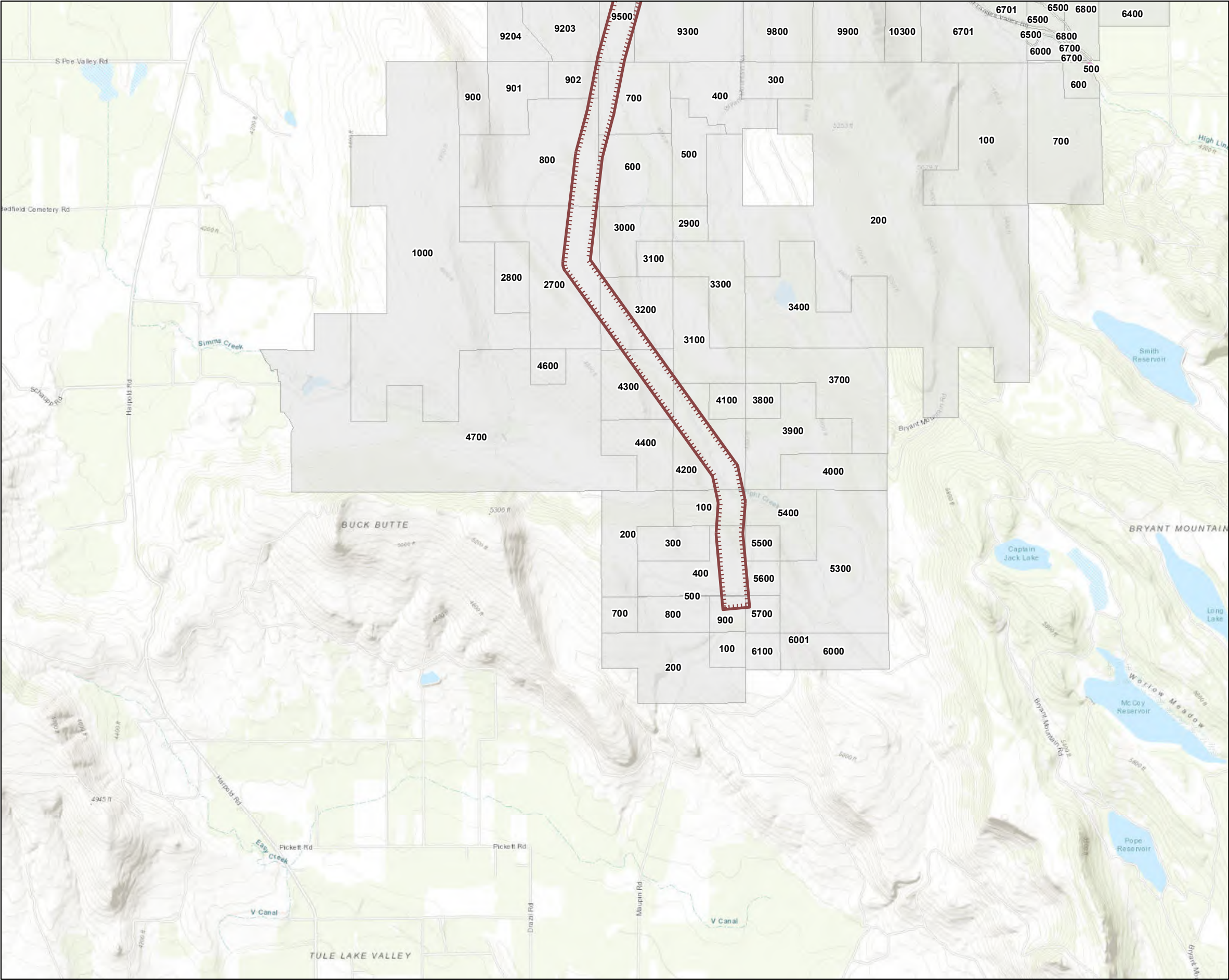


Figure F-1
Property Owner Notification Map
Sheet 2 of 3
Bonanza Energy Facility
Klamath County, OR



LEGEND

- Bonanza Energy Facility Site Boundary
- Tax Lot within 500 feet of the Property on which the Site Boundary is Located
- Tax Lot between 500 and 1,000 feet of the Property on which the Site Boundary is Located

Basemap Features

- Road
- Waterbody
- Watercourse

Coordinate System: NAD 1983 UTM Zone 10N

Data Sources:
-Basemap: ESRI World Topographic Map.
-Tax lot GIS data for Klamath County downloaded from Klamath County FTP on 07/27/2020.

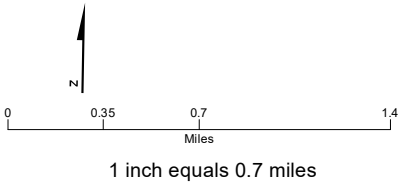
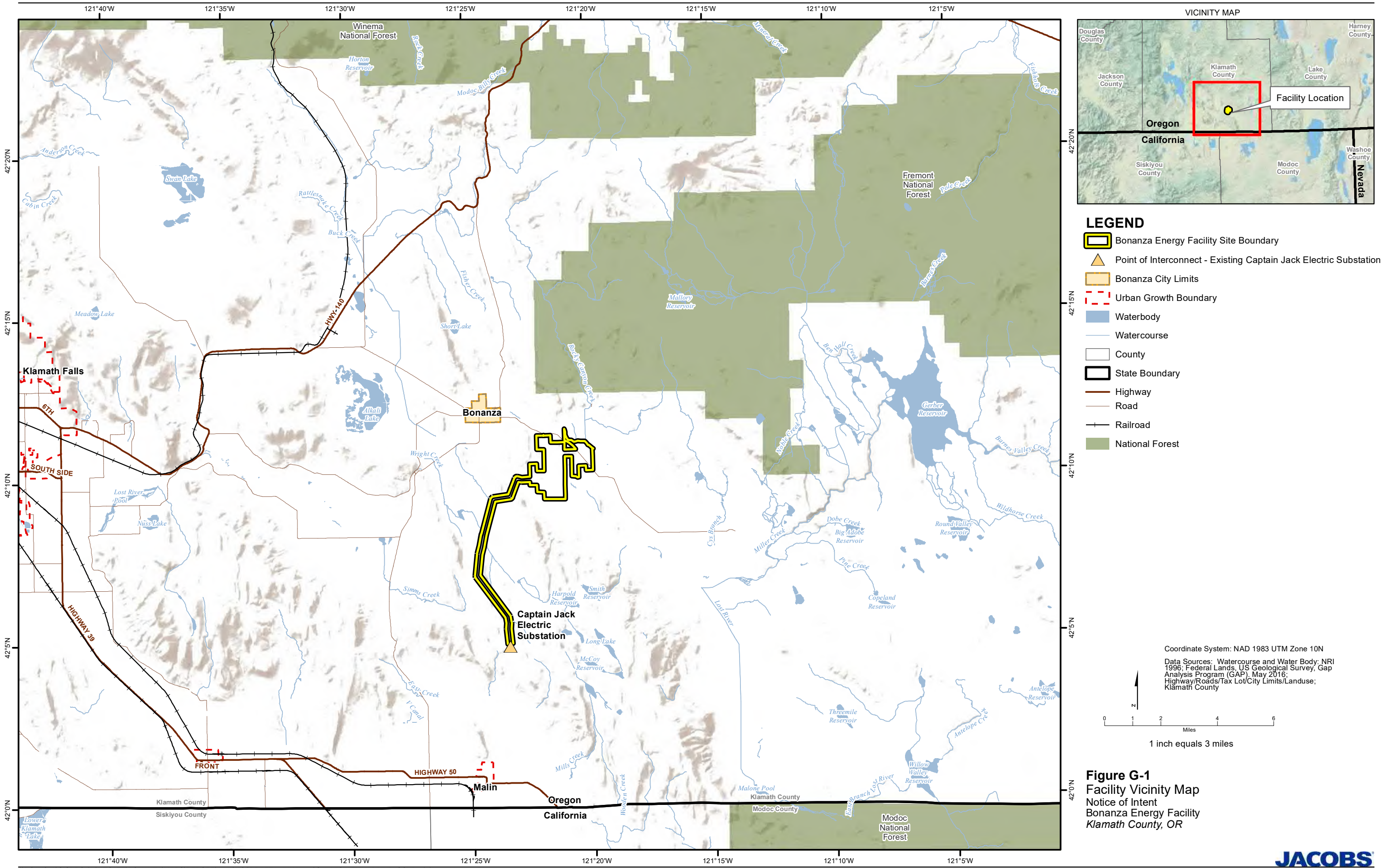
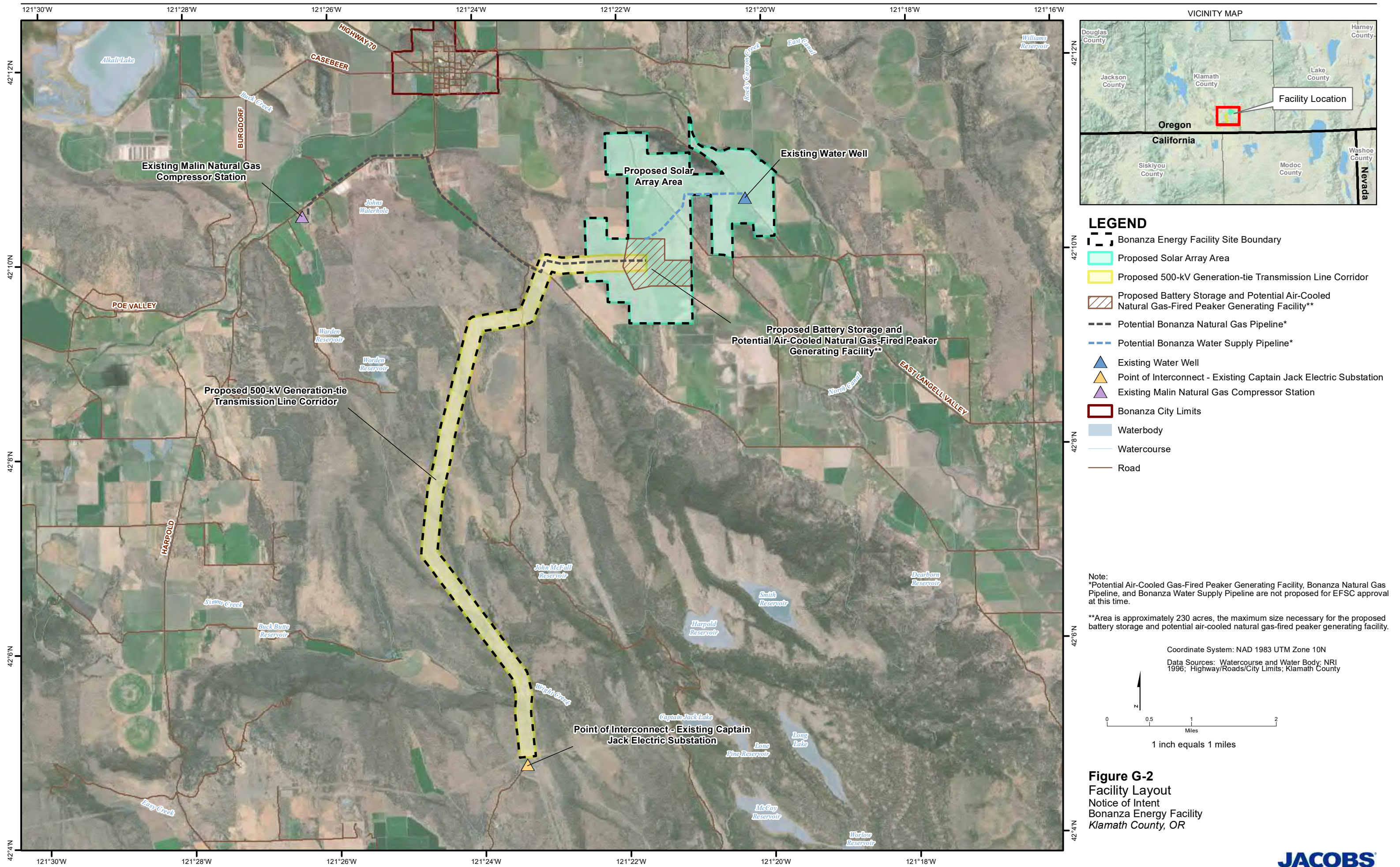
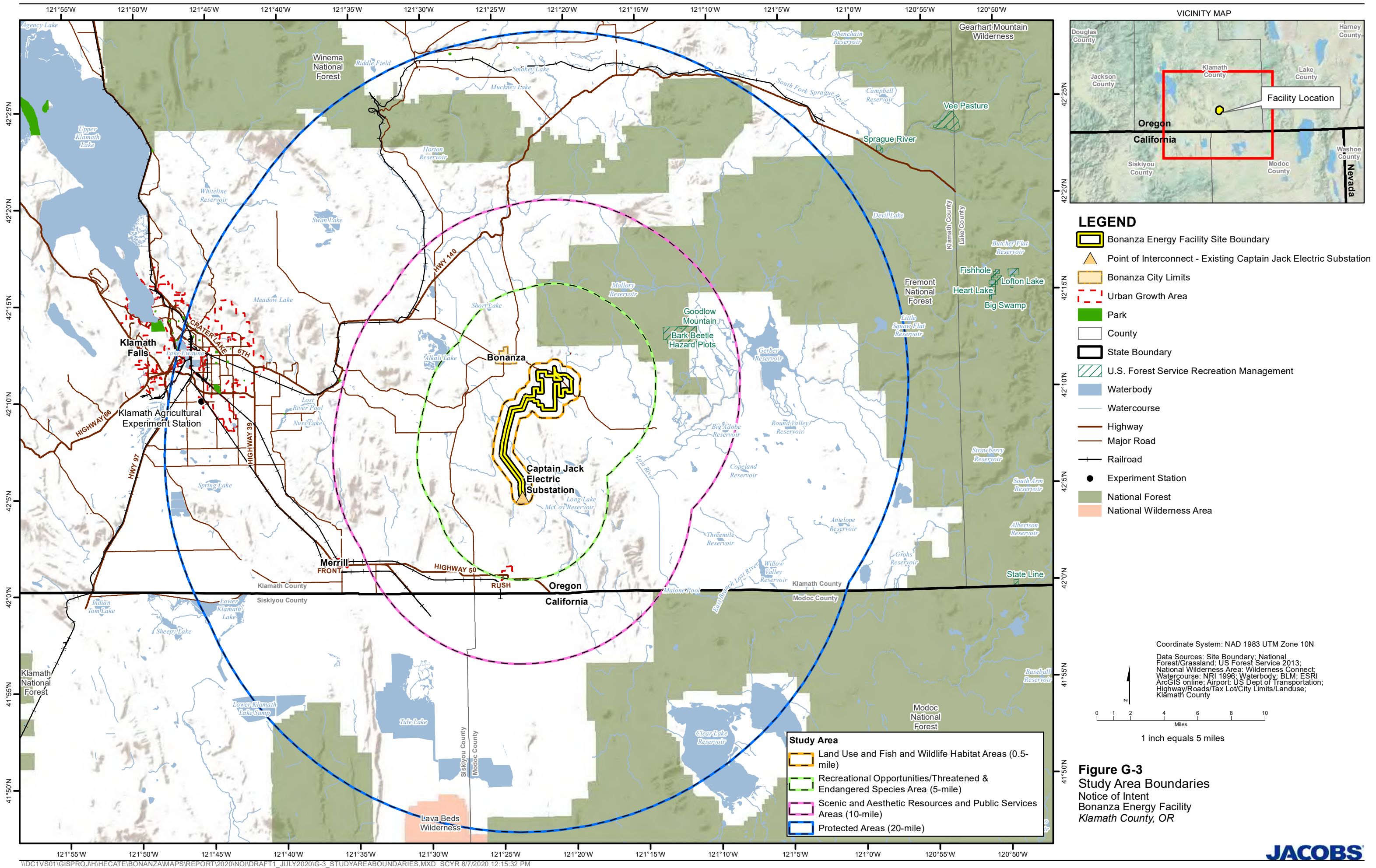


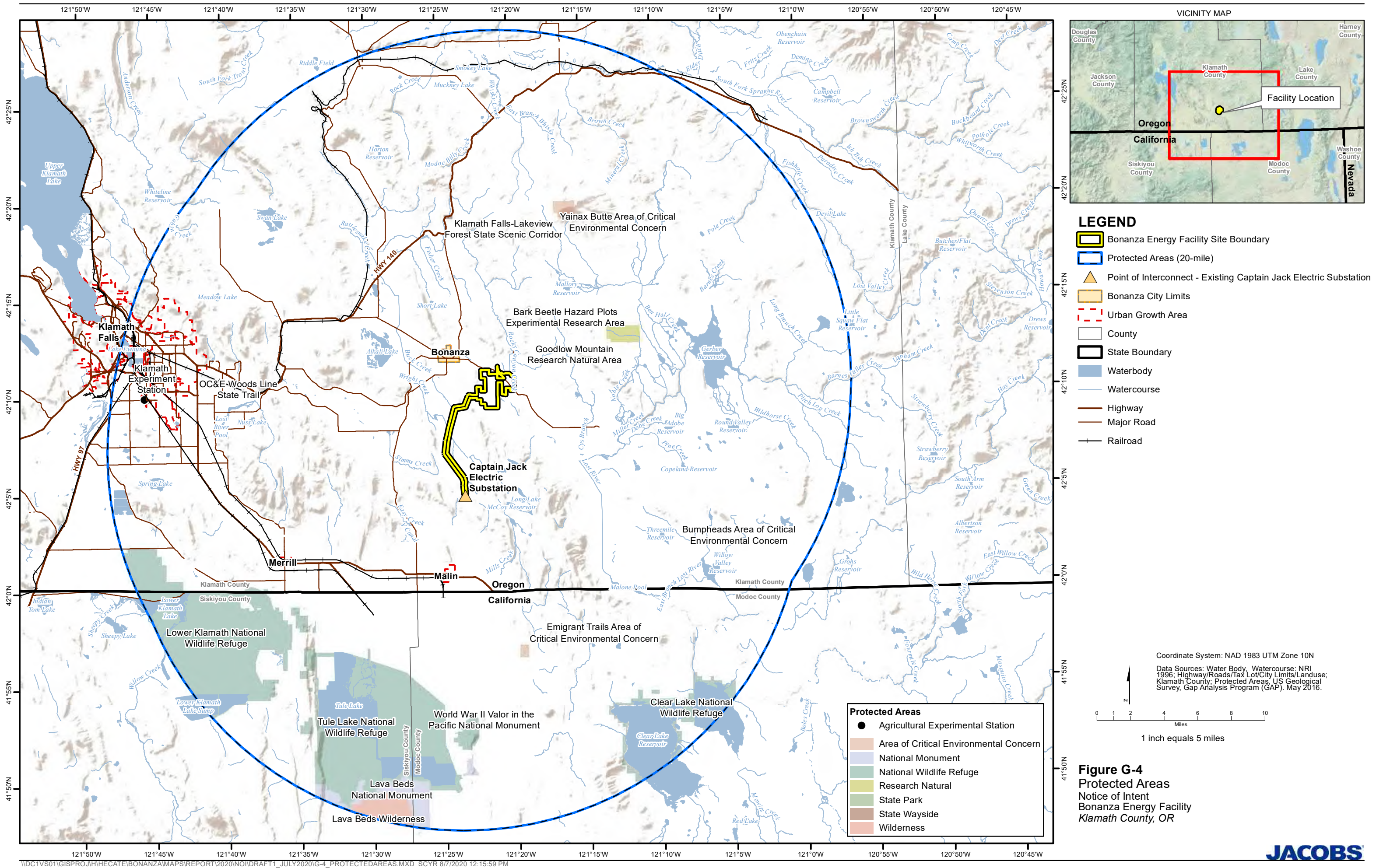
Figure F-1
Property Owner Notification Map
Sheet 3 of 3
Bonanza Energy Facility
Klamath County, OR

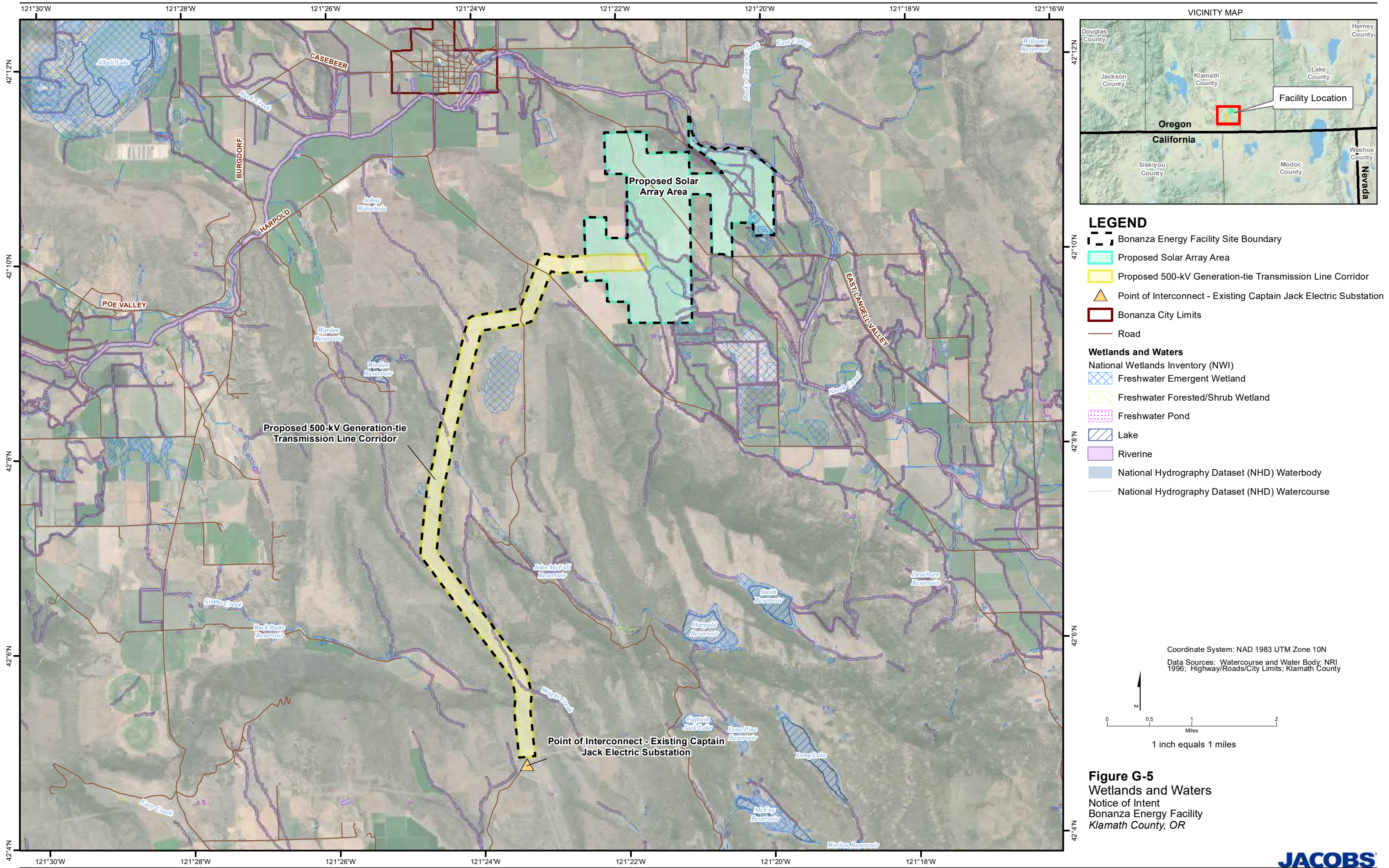
Attachment G
Figures Referenced in Text

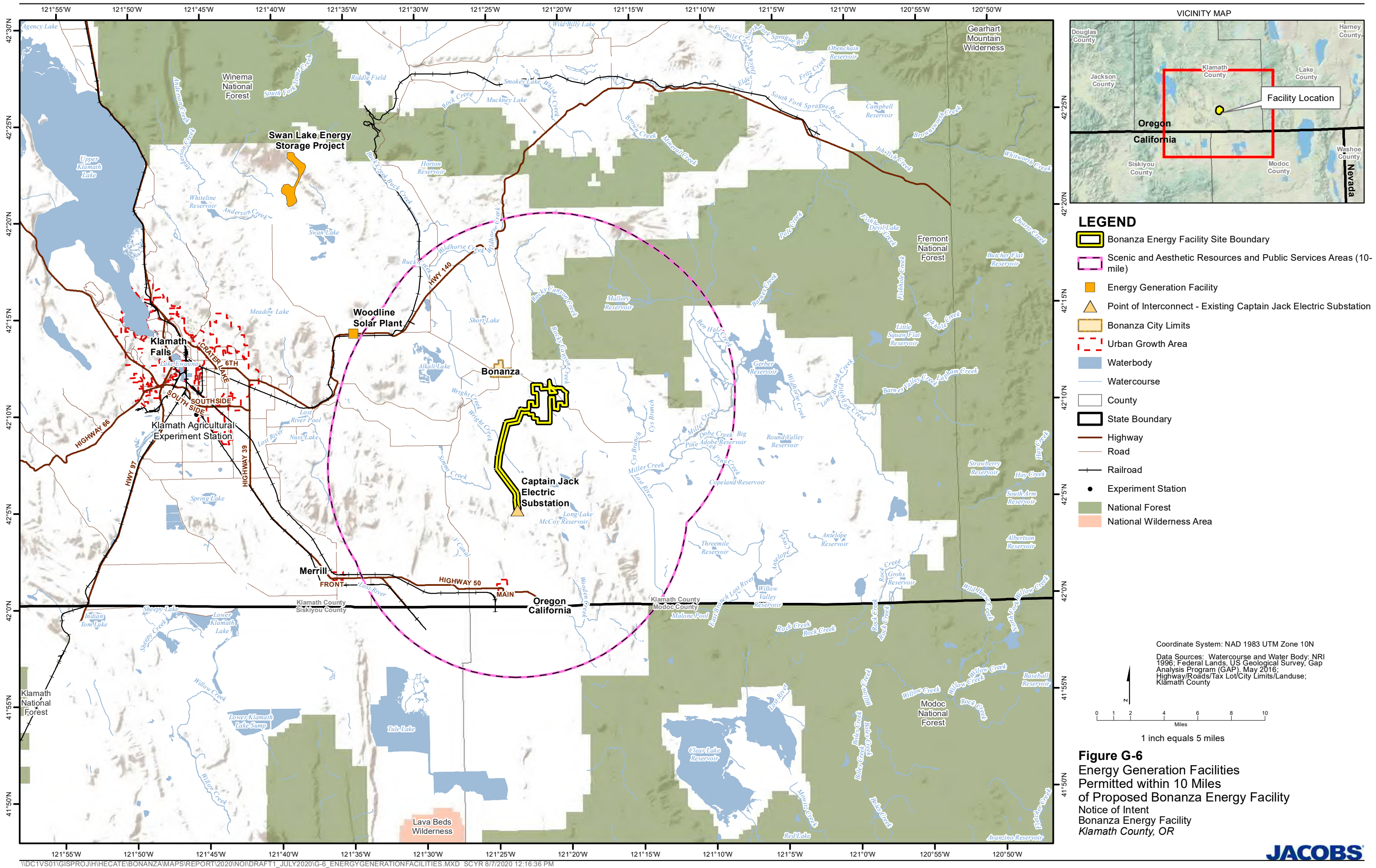












Attachment P
Evidence of Consultation with Legislative
Commission on Indian Services

From: Hicks, Paul/PDX
Sent: Friday, July 31, 2020 3:05 PM
To: LCIS@oregonlegislature.gov
Cc: Sheldon, David/PDX; Seilo, Paul/PDX
Subject: Potential Bonanza Solar Energy Project - Klamath County, Oregon
Attachments: Fig1_Bonanza_StudyArea.pdf

Mr. Sparks,

I am working for a client that is exploring development of a photovoltaic (PV) solar power generation project in Klamath County, Oregon, just southeast of Bonanza. I have attached a preliminary map for your review which shows the general evaluation area under consideration.

The project proponent will conduct cultural resource file searches at the State Historic Preservation Office (SHPO) and field surveys within the proposed project area. I respectfully request your assistance in identifying appropriate tribes to consult with regarding tribal historic and cultural resources in the vicinity of this proposed project.

Thank you very much for your assistance.

Regards,

-Paul

Paul Hicks | Jacobs | Project Manager | Global Environmental Solutions | 503.872.4421 | 916.764.8382 mobile | paul.hicks@jacobs.com | www.jacobs.com

