

**BEFORE THE
ENERGY FACILITY SITING COUNCIL
OF THE STATE OF OREGON**

In the Matter of the Application for Site Certificate for the Buckley Solar Facility)))	PROJECT ORDER
--	-------------	----------------------

Issued
December 13, 2024

TABLE OF CONTENTS

I. INTRODUCTION 1

 I.A. Facility Description 1

 I.A.1 Facility Components/Structures 3

 I.A.2 Site and Location..... 8

 I.B. Applicant Information 9

 I.C. Procedural History 10

 I.D. Comments Received on the Notice of Intent 12

 I.D.1 Public Comments on NOI 12

 I.D.2 Special Advisory Group Comments on NOI 15

 I.D.3 Reviewing Agency Comments on NOI 16

II. ANALYSIS AREAS FOR THE PROPOSED FACILITY 17

III. EFSC REGULATORY FRAMEWORK 20

IV. APPLICATION REQUIREMENTS..... 21

 IV.A. Exhibit A – General Information about the Applicant and Participating Persons..... 21

 IV.B. Exhibit B – General Information about the Proposed Facility..... 22

 IV.C. Exhibit C – Location 26

 IV.D. Exhibit D – Organizational Expertise 27

 IV.E. Exhibit E – Permits 28

 IV.E.2 State Permits..... 33

 IV.E.3 Local Permits..... 35

 IV.E.4 Third-Party Permits..... 36

 IV.F. Exhibit F – Property Owners 36

 IV.G. Exhibit G – Materials Analysis..... 37

 IV.H. Exhibit H – Geologic and Soil Stability 38

 IV.I. Exhibit I – Soils 38

 IV.J. Exhibit J – Waters of the State and Removal-Fill..... 40

 IV.K. Exhibit K – Land Use..... 41

 IV.L. Exhibit L – Protected Areas..... 44

 IV.M. Exhibit M – Financial Capability..... 46

 IV.N. Exhibit N – Need for Nongenerating Facility 46

 IV.O. Exhibit O – Water Use..... 46

 IV.P. Exhibit P – Fish and Wildlife Habitat..... 47

 IV.P.1 Required Surveys 48

 IV.P.2 Assessment of Impacts to Habitat, Sensitive Species, and Wildlife Movement .. 50

 IV.P.3 Proposed Monitoring and Mitigation 51

 IV.Q. Exhibit Q – Threatened and Endangered Species 52

 IV.R. Exhibit R – Scenic Resources..... 53

 IV.S. Exhibit S – Historic, Cultural and Archaeological Resources 54

 IV.T. Exhibit T – Recreation..... 55

 IV.U. Exhibit U – Public Services 56

 IV.V. Exhibit V – Wildfire Prevention and Risk Mitigation 58

 IV.W. Exhibit W – Solid Waste and Wastewater 60

 IV.X. Exhibit X – Facility Retirement..... 61

IV.Y.	Exhibit Y – Noise	61
IV.Z.	Exhibit Z – Cooling Tower Impacts	63
IV.AA.	Exhibit AA – Electric and Magnetic Fields	63
IV.BB.	Exhibit BB – Other Information	63
IV.CC.	Exhibit CC – Other Law	63
IV.DD.	Exhibit DD – Specific Standards	64
V.	EXPIRATION DATE OF THE NOTICE OF INTENT	64
VI.	PROJECT ORDER AMENDMENT AND APPLICATION COMPLETENESS.....	64
VII.	APPLICABILITY AND DUTY TO COMPLY.....	64

TABLES

Table 1:	Facility Component Summary	3
Table 2:	Taxlots within the Site Boundary by Township, Range, and Section	9
Table 3:	Reviewing Agencies.....	11
Table 4:	Summary of Issues Raised in Public Comments.....	13
Table 5:	Analysis Areas.....	18
Table 6:	Example Energy Facility Specifications and Details	24
Table 7:	Example Related or Supporting Facilities Specifications and Details	24
Table 8:	Potentially Required Permits	29
Table 9:	Protected Areas Inventory within 20 Miles of Facility Site Boundary	44
Table 10:	Habitat Categories Under OAR 635-415-0025.....	49
Table 11:	Seasonal and Spatial Activity Restrictions for Raptor Species.....	50
Table 12:	New Industrial and Commercial Noise Source Standards Allowable Statistical Noise Levels in Any One Hour (OAR 340-035-0035, Table 8)	62

FIGURES

Figure 1.	Proposed Facility Location	2
-----------	----------------------------------	---

ATTACHMENTS

- Attachment 1: Public Comments
- Attachment 2: Special Advisory Group Comments
- Attachment 3: Reviewing Agency Comments
- Attachment 4: Retirement Estimate Table

ACRONYMS AND ABBREVIATIONS

AC	Alternating Current
Applicant	Buckley Solar, LLC
ASC	Application for Site Certificate
BESS	Battery Energy Storage System
BLM	Bureau of Land Management
BPA	Bonneville Power Administration
CFR	Code of Federal Regulations
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CTWSRO	Confederated Tribes of the Warm Springs Reservation of Oregon
CWA	Clean Water Act
DC	Direct Current
DEQ	Oregon Department of Environmental Quality
DLCD	Oregon Department of Land Conservation and Development
DOGAMI	Department of Oregon Geology and Mineral Industries
DSL	Oregon Department of State Lands
EFSC or Council	Energy Facility Siting Council
EFU Zone	Exclusive Farm Use Zone
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
facility	Buckly Solar Facility
kV	Kilovolt
MW	Megawatt
LCDC	Oregon Land Conservation and Development Commission
LLC	Limited Liability Company
NOI	Notice of Intent to File an Application for Site Certificate
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O&M	Operations and Maintenance
OAR	Oregon Administrative Rule
ODAg	Oregon Department of Agriculture
ODAv	Oregon Department of Aviation
ODF	Oregon Department of Forestry
ODOE or Department	Oregon Department of Energy
ODOT	Oregon Department of Transportation
ODFW	Oregon Department of Fish and Wildlife
OPRD	Oregon Parks and Recreation Department
ORS	Oregon Revised Statute
Parent Company	Clenara, LLC
pASC	Preliminary Application for Site Certificate
POI	Point of Interconnection
PV	Photovoltaic
PWCA	Priority Wildlife Connectivity Area

SAG	Special Advisory Group - Sherman County Court
SCZO	Sherman County Zoning Ordinance
SHPO	Oregon State Historic Preservation Office
SWCD	Soil and Water Conservation District
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
WPCF	Water Pollution Control Facilities

1 **I. INTRODUCTION**

2
3 On August 16, 2024, the Oregon Department of Energy (ODOE or Department) received a
4 Notice of Intent (NOI) to File an Application for a Site Certificate (ASC) for the Buckley Solar
5 Facility (proposed facility). The NOI was submitted by Buckley Solar, LLC (applicant), a subsidiary
6 of Clenara, LLC (parent company).

7
8 This Project Order establishes the statutes, administrative rules, Energy Facility Siting Council
9 (EFSC or Council) standards, local ordinances, ASC requirements and study requirements in
10 accordance with ORS 469.330 and OAR 345-015-0160. As provided in ORS 469.330(4), this
11 Project Order is not a final order. The Department or the Council may amend this Project Order
12 at any time.

13
14 **I.A. Facility Description**

15
16 The Buckley Solar Facility (proposed facility) would be a 1,200-megawatt (MW) solar
17 photovoltaic (PV) power generation facility with related or supporting facilities, including:

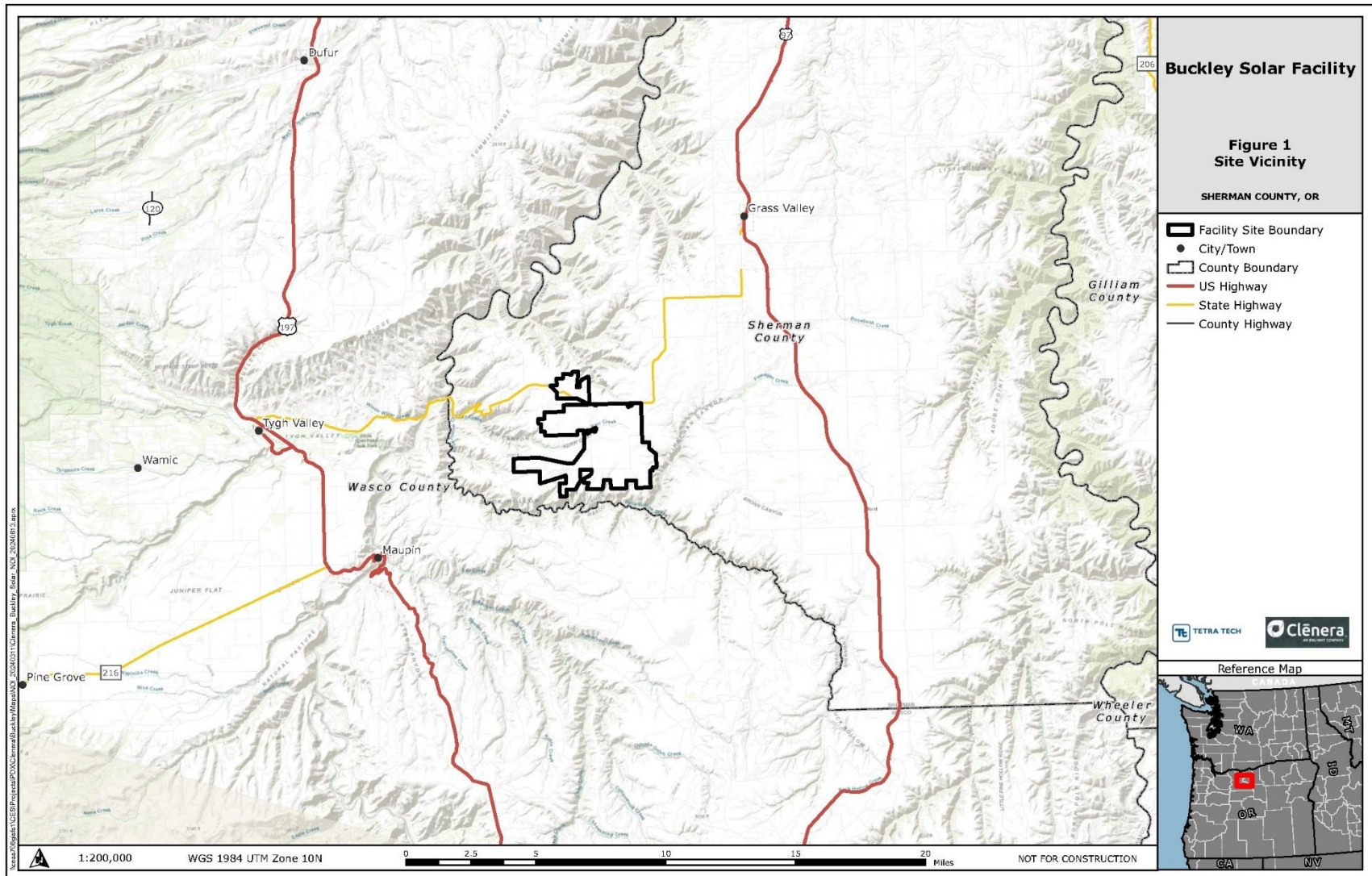
- 18
19 • A 1,200 MW Battery Energy Storage System (BESS) with 4 hours of discharge capacity
20 • Up to 3 collector substations
21 • Up to 3 500 kilovolt (kV) overhead transmission lines connecting collector substations to
22 the Bonneville Power Administration’s existing Buckley Substation.
23 • Electrical collection system, including underground and overhead 34.5 kV collector lines.
24 • Operations and Maintenance (O&M) building with storage
25 • Access and Service Roads
26 • Perimeter fencing and gates
27 • Temporary construction areas
28 • Temporary workforce housing (potential)

29
30 The proposed facility would be located within an approximately 7,852-acre (12.3 sq. mile) site
31 in Sherman County, Oregon. The site consists of private land in the county’s F-1 Exclusive Farm
32 Use Zone.

33
34 Under OAR 469.300(11)(a)(D), a solar PV facility using more than: (i) 240 acres of high-value
35 farmland; (ii) 2,560 acres of land that is predominantly cultivated or predominantly composed
36 of Classes I to IV soils, as specified by the National Cooperative Soil Survey; or (iii) 3,840 acres of
37 any other land is an energy facility subject to the Council’s jurisdiction. Because the proposed
38 facility would use more than 3,840 acres it is considered to be an energy facility regardless of
39 the underlying land classification. Under ORS 469.320, no “facility,” – i.e., an energy facility with
40 related or supporting facilities,¹ may be constructed or operated in Oregon without a site
41 certificate from the Council.
42

¹ ORS 469.300(15)

Figure 1. Proposed Facility Location



1 **I.A.1 Facility Components/Structures**

2

3 The number and dimension of facility components are presented in Table 1 below. The
 4 applicant notes that information in the NOI is subject to change and that an updated facility
 5 description based on the highest-impact design scenario for the proposed facility will be
 6 included in the preliminary ASC.²

7

Table 1: Facility Component Summary

Component and Design Standard	No.	Unit
Site Boundary		
Site Boundary	7,852	acres
Maximum Facility Footprint	7,852	acres
Solar Arrays		
PV Solar Modules		
Approx. total number	2,016,807	modules
Average Height at full-tilt	10.6	feet
Max. Height at full-tilt	17.6	feet
Battery Energy Storage System (BESS)		
Site size	95	acres
Total number of Containers	TBD	Containers
Approx. container dimensions	29x9x9.5	H x W x L; feet
Med. Voltage Skid Dimensions	20x9x9	H x W x L; feet
Related or Supporting Facilities		
34.5 kV Collection System		
Collector line length, belowground	TBD	miles
Collector line length, overhead (OH)	TBD	miles
Support Structures	TBD	each
Collector line, temporary disturbance corridor (limit)	TBD	Width, feet
Collector Substations		
Substations	3	each
Site size	5 to 15	acres
Height of structures	35 to 75	feet
500 kV Transmission Line		
Length	TBD	miles
Structures: Type (Wood or Galvanized Steel); quantity	TBD	each

² BSFNOIDoc01-01 NOI 2024-08-09, pg. 6-7.

Table 1: Facility Component Summary

Component and Design Standard	No.	Unit
Height of structures	75 to 200	feet
Transmission line, temporary disturbance corridor (limit)	TBD	Width, feet
O&M Building		
Quantity	1	each
Site size	5	acres
Height	TBD	feet
Appurtenances	On-site well, septic system, SCADA System	
Facility Roads		
Length	TBD	miles
Width	TBD	feet
Temporary disturbance corridor	TBD	Width, feet
Perimeter Fence		
Length	TBD	miles
Height	TBD	feet
Access/gates	TBD	each
Temporary Construction Areas		
Quantity	TBD	each
Site size	TBD	acres
Description	Gravel base; diesel/gas storage; within fence line	

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

I.A.1.1 Solar Arrays

The primary energy facility is a solar PV facility, which will generate electric power using solar panels, or modules, and other components including tracker systems, posts, and related electrical equipment.

Solar Modules

Solar modules are made up of PV cells that absorb photons from sunlight and convert their energy into direct current electric power. Most cells use mono- or poly-crystalline silicon semiconductor material. The cells are encased in glass with an antireflective coating and installed in a metal frame. Most modules are equipped with factory-installed “quick connect” wire connectors. The applicant has indicated that the facility will likely use a bifacial mono-crystalline silicon module design. The solar modules used in the preliminary site design that

1 informed the facility description in the NOI have a nameplate generating capacity of 595 watts
2 and measure 3.6 wide by 7.5 feet long.³

3
4 *Tracker Systems, Piles & Posts*

5
6 Strings of solar modules will be mounted on ground fixed-tilt or single-axis tracker systems that
7 optimize electricity production by rotating the solar modules to follow the path of the sun
8 throughout the day. The length of each tracker string may vary by topography and the number
9 of modules that the tracker can hold. As the solar modules tilt throughout the day, the height of
10 their top edges will shift accordingly. The applicant estimates that the top edge of the modules
11 will typically be up to 10.6 feet high, but in potential rare instances it could be up to 17.6 feet
12 off the ground where it spans dips in topography. The applicant represents that the tracker
13 system, and associated posts, will be specifically designed to withstand wind, snow, and seismic
14 loads anticipated at the site.⁴

15
16 Each tracker string will be supported by multiple driven hollow or pile-type steel posts. Post
17 depth may vary depending on soil conditions, but posts are typically installed 6 to 8 feet below
18 the surface and protrude approximately 5 feet above grade. Posts at the end of tracker strings
19 are usually installed to greater depth to withstand wind uplift. In some soil conditions, concrete
20 backfill is required for each post. The applicant indicates that post locations will be determined
21 by the final layout of the tracker system and geotechnical investigations of the solar array area
22 within the Facility site boundary prior to final design.⁵

23
24 Corridors between tracking strings would be approximately 10 feet wide, and racking will be
25 placed approximately 20 to 50 feet from perimeter fencing.⁶ Multiple tracker strings will be
26 arranged into blocks. The applicant estimates that each block will be approximately 11,00 feet
27 wide by 900 feet long.⁷

28
29 *Cabling*

30
31 Individual solar modules are connected to each other in series to form strings. The output of
32 multiple strings is collected using low-voltage cabling and aggregated using combiner boxes.
33 Cabling from multiple combiner boxes will connect to an inverter. Cabling may be mounted to
34 the tracker system, placed in cable trays, or buried.⁸

35
36
37

³ BSFN01Doc01-01 NOI 2024-08-09, pg. 7.

⁴ *Id.*

⁵ *Id.*

⁶ BSFN01Doc01-01 NOI 2024-08-09, pg. 11.

⁷ BSFN01Doc01-01 NOI 2024-08-09, pg. 12.

⁸ BSFN01Doc01-01 NOI 2024-08-09, pg. 8.

1 *Inverters and Transformers*

2
3 The DC output produced by solar modules would be converted to alternating current (AC)
4 power by inverters and then routed to transformers to be stepped up to the collector
5 substation feed voltage of 34.5 kV. The number of inverters and transformers will depend on
6 the final facility design. Inverters and transformers may be collocated and may be dispersed
7 throughout the solar arrays or sited at a central location within the site boundary.⁹ The inverter
8 and transformer specifications must comply with applicable requirements of the National
9 Electrical Safety Code and Institute of Electrical and Electronics Engineers standards.

10
11 *Collection System*

12
13 The 34.5 kV AC output of the inverters and transformers would be transmitted to one or more
14 collector substations using 34.5 kV collector lines. The NOI indicates that the majority of
15 collector lines would be installed underground, but that some overhead segments may be
16 required. Underground segments would be installed at a minimum depth of 3 feet. Overhead
17 segments would be supported by 35-to-75-foot tall wooden or steel support structures.¹⁰

18
19 I.A.1.2 Battery Energy Storage System

20
21 The applicant proposes to construct a 1200 MW Battery Energy Storage System (BESS) with up
22 to four hours of discharge capacity. The NOI does not identify a specific battery chemistry or
23 design for the BESS, but states that the system is expected to be composed of a series of self-
24 contained enclosures measuring approximately 29 feet long, 9 feet wide, and 9.5 feet tall
25 installed on an appropriate foundation. Each container would hold batteries, a supervisory
26 control and data acquisition system, a power management system, and a fire prevention
27 system. Cooling units would be placed on or along the side of containers depending on the
28 design selected.¹¹

29
30 Depending on the final facility configuration, the BESS may utilize Medium Voltage Skids to
31 convert output from proposed inverters to 34.5 kV output of the collection system. A Medium
32 Voltage skid is typically composed of a medium voltage transformer, switchgear, and possibly
33 inverters. Typically, there would be one skid for every four BESS containers.¹²

34
35 The BESS would be located in an approximately 95-acre area near one of the proposed collector
36 substations.¹³

37

⁹ BSFNOIDoc01-01 NOI 2024-08-09, pg. 8.

¹⁰ BSFNOIDoc01-01 NOI 2024-08-09, pg. 8, 12.

¹¹ BSFNOIDoc01-01 NOI 2024-08-09, pg. 10, 12.

¹² BSFNOIDoc01-01 NOI 2024-08-09, pg. 12.

¹³ *id.*

1 I.A.1.3 Collector Substation
2

3 The applicant proposes to construct up to three collector substations to convert the 34.5 kV
4 output transmitted by the collection system to the 500 kV output required for interconnection
5 with the existing Buckley Substation. Each collector substation is expected to include
6 transformers, transmission line termination structures, a bus bar, circuit breakers and fuses,
7 control systems, meters, and other equipment. Each collector substation will be located in an
8 approximately 5-to-15-acre area within the site boundary. Each substation site will be cleared,
9 graded, and surfaced with a bed of crushed rock prior to construction.¹⁴
10

11 I.A.1.4 500 kV Transmission Line and Point of Interconnect Options
12

13 The proposed facility’s point of interconnect (POI) to the regional electrical grid is the
14 Bonneville Power Administration’s (BPA) existing Buckley Substation, located in the center of
15 the site boundary.¹⁵
16

17 The proposed collector substations would be connected to the existing BPA Buckley Substation
18 by 500 kV overhead transmission lines located within the site boundary. The transmission lines
19 would be supported by 75-to-200-foot wood or steel structures using an H-frame or monopole
20 design. The applicant did not identify specific locations or lengths of the proposed transmission
21 lines.¹⁶
22

23 I.A.1.5 Operations and Maintenance Building
24

25 The applicant proposes to construct one operations and maintenance (O&M) building to
26 support the proposed facility. The O&M building would be a one-story, approximately 4,500
27 square foot structure equipped with facilities such as a utility room, kitchen, restrooms, storage
28 for maintenance supplies and equipment, and a Supervisory Control and Data Acquisition
29 system. The building may have an on-site well and septic system. Power would be supplied by a
30 local service provider using overhead or underground lines. The O&M building would be
31 surrounded by a gravel area for parking and storage. The building and gravel area would occupy
32 approximately 5 acres.¹⁷
33

34 I.A.1.6 Service Roads
35

36 The applicant proposes to construct new access points and service roads within the site
37 boundary to provide access to facility infrastructure. Roads will be compacted gravel and
38 typically 20 feet in width, with some exceptions, including main travel corridors where two-way
39 traffic is required. In these cases, roads will be approximately 24 feet wide. Vegetation

¹⁴ BSFN01Doc01-01 NOI 2024-08-09, pg. 10, 12.

¹⁵ BSFN01Doc01-01 NOI 2024-08-09, pg. 6.

¹⁶ BSFN01Doc01-01 NOI 2024-08-09, pg. 9, 11, 12.

¹⁷ BSFN01Doc01-01 NOI 2024-08-09, pg. 10, 12.

1 maintenance along proposed solar array interior roads will include mowing to a height of no
2 more than approximately 24 inches.¹⁸

3
4 I.A.1.7 Perimeter Fencing, and Gates

5
6 The applicant proposes to install chain-link or fixed-knot (wildlife friendly) perimeter fencing, up
7 to 6 feet in height and topped with 1-foot of barbed or razor wire, around the solar array and
8 other infrastructure. The perimeter fencing would have lockable vehicle and pedestrian access
9 gates.¹⁹

10
11 I.A.1.8 Temporary Construction Staging Areas

12
13 The applicant proposed to construct an unspecified number of temporary construction areas
14 within the site boundary to facilitate the delivery and assembly of materials and equipment
15 during construction of the proposed facility. The areas may be used for the temporary storage
16 of diesel and gasoline fuels located in aboveground tanks and within designated secondary
17 containment areas. If a temporary concrete batch plant is needed, it would also be located
18 within the temporary construction staging areas.²⁰

19
20 I.A.1.9 Temporary Workforce Housing

21
22 The applicant states that it may include options for incorporating temporary workforce housing
23 in the ASC, if it finds that providing temporary housing at the site is potentially necessary and
24 feasible.²¹

25
26 **I.A.2 Site and Location**

27
28 The proposed site includes approximately 7,852 acres of privately owned land in Sherman
29 County, Oregon. The site is zoned F-1 (Exclusive Farm Use). The majority of the site consists of
30 herbaceous and shrub/scrub land with smaller areas of cultivated dryland wheat fields and a
31 small amount of developed land.²²

32
33 The site is located off OR-216, approximately 9 miles east of Tygh Valley and 8 miles southwest
34 of Grass Valley. Primary transportation corridors to the facility site include I-84, US-197, US-97,
35 and OR-216.²³

36
37

¹⁸ BSFNOIDoc01-01 NOI 2024-08-09, pg. 11

¹⁹ *id.*

²⁰ *id.*

²¹ *id.*

²² BSFNOIDoc01-01 NOI 2024-08-09, pg. 30; Table J-1.

²³ BSFNOIDoc01-01 NOI 2024-08-09, pg. 11.

1 The site includes all or part of the taxlots listed in Table 2, below.
2

Table 2: Taxlots within the Site Boundary by Township, Range, and Section

Township & Range	Section	Taxlots
3S 15E	26, 27, 33, 34, 35, 36	2900, 3000
4S 15E	1, 2, 3, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24	100, 300, 301, 400, 500, 1700, 1900, 2000, 2100, 2200, 2300, 3300
4S 16E	7, 18, 19	1700, 3800
BSFN0IDOC01-01 NOI 2024-08-09, Table C-1.		

3
4 **I.B. Applicant Information**

5
6 The applicant is Buckley Solar, LLC, a subsidiary of Clenera, LLC (parent company) through an
7 intermediary entity, Clenera DevCo LLC. Clenera, LLC is a subsidiary of Enlight Renewable
8 Energy.

9
10 Buckley Solar, LLC was formed with the Secretary of State of the State of Delaware on
11 December 8, 2023, and was acknowledged and registered to do business in Oregon by the
12 Oregon Secretary of State on December 27, 2023, in Salem, Oregon.²⁴

13
14 The officer responsible for submitting the NOI is:

15
16 Adam Pishl
17 Chief Operating Officer
18 PO Box 2576
19 Boise, ID 83701
20 (208) 639-3232
21 adam@clenera.com

22
23 The applicant's primary contact person for the NOI is:

24
25 Eric Desmarais
26 Director of Development, Clenera LLC
27 PO Box 2576
28 Boise, ID 83701
29 (503) 901-7853
30 eric.desmarais@clenera.com

31
32 Contact persons other than the applicant are:
33

²⁴ BSFN0IDoc01-01 NOI 2024-08-09, Attachment 1.

1 Paul Seilo
2 Tetra Tech, Inc.
3 1750 S Harbor Way, Suite 400
4 Portland, OR 97201
5 (503) 221-8636
6 paul.seilo@tetrattech.com
7

8 Timothy McMahan
9 Stoel Rives LLP
10 760 SW Ninth Avenue, Suite 3000
11 Portland, OR 97204
12 (503) 294-9517
13 tim.mcmahan@stoel.com
14

15 **I.C. Procedural History**

16
17 On September 28, 2023, the applicant submitted a NOI with the fee required under OAR 345-
18 020-0006.

19
20 *Public Notice on NOI*
21

22 On September 10, 2024, the Department sent notice of the NOI to persons on the Council’s
23 general mailing list, special mailing list, and to the owners of property located within the
24 distances specified in OAR 345-020-0010(1)(f)(A).²⁵
25

26 Public notice appeared in The Times-Journal, a newspaper of general circulation for Gilliam,
27 Sherman and Wheeler Counties, on September 19, 2024. Public notice also appeared in The
28 Columbia Gorge News, a newspaper of general circulation for Wasco and Hood River Counties,
29 as well as Klickitat County in Washington, on September 18, 2024. The public notice provided
30 information regarding the proposed facility and the EFSC review process and announced that a
31 public informational meeting on the NOI would be held in Grass Valley, Oregon on October 1,
32 2024. The public notice requested public comment on the NOI and established October 10,
33 2024, as the public comment deadline.
34

35 *Public Information Meeting and Public Comment Period*
36

37 The Department held a public informational meeting on the NOI for the proposed facility on
38 October 1, 2024. The meeting was held at the Grass Valley Pavillion in Grass Valley, Oregon and
39 was available online for remote participation. The Department and the applicant appeared at
40 the informational meeting and provided information about the EFSC siting process and the
41 proposed facility and responded to questions from the public. The public meeting was
42 recorded, and meeting materials and a recording were made available to the public on the

²⁵ Noticing conducted in accordance with OAR 345-015-0110, effective September 24, 2020.

1 project webpage. Comments provided during the informational meeting are summarized in
2 Section I.D.1 below and included in full in Attachment 1 of this order.

3
4 *Special Advisory Group Coordination*

5
6 ORS 469.480(1) requires the Council to designate the governing body of any local government
7 within whose jurisdiction a facility is proposed to be located as a Special Advisory Group (SAG).
8 On September 9, 2024, the Department sent letters notifying the Sherman County Court that
9 through delegation by Council, the Department had designated it as SAGs for all EFSC
10 proceedings associated with this proposed facility and requesting comments and
11 recommendations on applicable local substantive criteria. At the request of the County Court,
12 the Department also presented information about the siting process and the proposed facility
13 at the Court’s regular meeting on October 2, 2024.

14
15 The County Court provided comments recommending applicable substantive criteria and other
16 requirements for the ASC on October 9, 2024. The comments are summarized in Section I.D.2
17 below and included in Attachment 2 of this order.

18
19 *Reviewing Agency Coordination*

20
21 In accordance with ORS 469.350 and OAR 345-020-0040(1), the Department prepared a
22 distribution list of state agencies with regulatory or advisory responsibility related to the siting
23 of the proposed facility and other local governments that could be potentially affected by the
24 proposed facility. In accordance with OAR 345-015-0120, the Department prepared a
25 memorandum requesting comments from the reviewing agencies identified under OAR 345-
26 001-0010. The Department electronically distributed the memorandum to reviewing agencies
27 on September 9, 2024, in accordance with 345-020-0040. The input from reviewing agencies is
28 summarized in Section I.D.3 below and included in Attachment 3 of this order.

29

Table 3: Reviewing Agencies

State Agencies	
• Oregon Department of Agriculture	• Oregon Department of Land Conservation and Development
• Oregon Department of Aviation	• Oregon Department of State Lands
• Oregon Department of Environmental Quality	• Oregon State Fire Marshal
• Oregon Department of Fish and Wildlife	• Oregon Public Utility Commission
• Oregon Department of Forestry	• Oregon State Historic Preservation Office
• Oregon Department of Geology and Mineral Industries	• Oregon Water Resources Department
Tribal Governments	
• Burns Paiute Tribe	
• Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO)	
• Confederated Tribes of the Umatilla Indian Reservation (CTUIR)	

Table 3: Reviewing Agencies

State Agencies	
Special Advisory Groups (SAGs)	
• Sherman County Court	
Local Jurisdictions for Public Services	
• City of Grass Valley	• City of Moro
Other Reviewing Agencies	
• Northwest Power and Conservation Council	

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31

Tribal Government Coordination

On September 11, 2023, the applicant consulted with the Legislative Commission on Indian Services to identify tribes that may be potentially affected by the proposed facility. The Commission recommended the applicant consult with the following tribes:

- Burns Paiute Tribe
- Confederated Tribes of the Warm Springs Reservation of Oregon (CTWSRO)
- Confederated Tribes of the Umatilla Indian Reservation (CTUIR)

On October 9, 2024, the Department sent letters to the Tribal Council Chairs of each of the identified tribes requesting comments regarding historic, cultural, or archaeological resources, and other resources that may have cultural or economic significance to the Tribe. At the time of this Order no comments had been received from any tribal government.

I.D. Comments Received on the Notice of Intent

All comments received on the NOI during the comment period are summarized in the following sections. In accordance with OAR 345-015-0140, the Department provided the applicant with a copy of each comment received for their review and consideration in preparing the ASC.

I.D.1 Public Comments on NOI

The Department received 11 written public comments on the NOI. All written public comments received during the comment period are included in Attachment 1 and are available for review through the ODOE Siting Docket.²⁶ In addition, ten persons provided oral comments at the October 1, 2024, public information meeting. The audio recording of the meeting is available on the ODOE project webpage.²⁷ Table 4, below, presents a summary of issues raised in public comments received on the NOI.

²⁶ Oregon Department of Energy Siting Docket Available at: <https://odoe.powerappsportals.us/en-US/sitingdocket/>
²⁷ Oregon Department of Energy State of Oregon: Facilities – Buckley Solar Facility Available At: <https://www.oregon.gov/energy/facilities-safety/facilities/Pages/BSF.aspx>

Table 4: Summary of Issues Raised in Public Comments

Comment Summary	# Of Commenters	Relevant Council Standards
Request for specifications of solar arrays, post installation, battery components	2	General Standard of Review
Request for evaluation of impacts to Military Training Routes	1	General Standard of Review
Support for Project - Participating Landowner	1	General Standard of Review
Support for Project - Job Creation	1	General Standard of Review
Request for information about parent company	1	Organizational Expertise
Concern about financial viability of solar developers in general	1	Organizational Expertise
Concerns about impacts to conservation practices, including water and soil erosion control structures, on site.	2	Soil Protection
Concerns about potential water quality impacts to Buck Hollow Creek	1	Soil Protection
Recommendation to consult with Soil and Water Conservation District regarding potential impacts to soils	2	Soil Protection
Requests for information about vegetation management practices that will be used on site	2	Soil Protection
Requests for information about studies used to evaluate potential impacts to soil and mitigation plans	2	Soil Protection
Concerns about impacts to local agricultural economy/Recommendation to require mitigation of impacts of lost agricultural production on local agricultural services.	3	Land Use
Concerns about compatibility with adjacent farm uses/indemnification of damages from farm practices	2	Land Use
Request for evaluation of impacts of access changes and traffic on agricultural practices	1	Land Use
Concerns about compatibility with EFU Zoning	2	Land Use
Concerns about increased property values and stability of overall land use pattern of the area	1	Land Use

Table 4: Summary of Issues Raised in Public Comments

Comment Summary	# Of Commenters	Relevant Council Standards
Concerns about impacts to aesthetics and general quality of life	3	Land Use
Concern about impacts to pre-existing rights-of-way and property access	1	Land Use
Recommendation that weed control plan be developed in consultation with County Weed Department	1	Land Use
Recommendation that agrivoltaics design is incompatible with local agricultural practices.	1	Land Use
Recommendation to increase analysis area for land use	1	Land Use
Request for lack of need for off-site transmission be verified	1	Land Use
Concern about impacts to Protected Areas, Scenic Resources, and Recreational Opportunities	1	Protected Areas/Scenic Resources/Recreation
Recommendation to increase analysis area size for impacts to recreation	1	Protected Areas/Scenic Resources/Recreation
Concerns about potential impacts to fish and wildlife habitat in Buck Hollow Canyon, Jones Canyon, and other adjacent areas	3	Fish and Wildlife Habitat
Concerns about potential impacts to historic, cultural, and archaeological sites, specifically the historic Barlow Road Cutoff segment of the Oregon Trail	3	Historic, Cultural, and Archaeological Resources
Concerns about capacity of local fire responders to respond to fire at site, specifically fires involving BESS components.	4	Public Services
Concerns about potential public safety concerns and impacts on local police.	1	Public Services
Concerns about liability for damages caused by wildfire at site/ability of applicant to compensate for damages if facility causes wildfire	6	Wildfire
General concerns about wildfire hazard from facility components, including solar arrays and battery components	5	Wildfire
Concerns about potential for toxic smoke or other hazardous releases during fire	2	Wildfire

Table 4: Summary of Issues Raised in Public Comments

Comment Summary	# Of Commenters	Relevant Council Standards
involving solar panels or battery components		
Request for information about fire suppression system that will be utilized in BESS	1	Wildfire
Recommendation to increase analysis area for wildfire	1	Wildfire
Recommendation that applicant be required to prepare a fire safety plan in coordination with local fire district.	1	Wildfire
Concerns about ability to dispose of damaged panels, given possibility of damage from fire/hail	1	Waste Management
Concerns about adequacy of bonding requirements and ability to restore site to agricultural use	3	Retirement and Financial Assurance

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

I.D.2 Special Advisory Group Comments on NOI

The Sherman County Court provided written Comments on October 9, 2024. These comments are provided in Attachment 2 of this order.

The Court noted concerns of citizens regarding visual impacts to those living near the potential site, wildfire, soil impacts, and loss of farm ground and grazing pasture. The Court also emphasized that fire concerns are of high significance to the County and recommended that the applicant meet with the South Sherman Fire Department and create a fire plan that satisfies the department and community.

The Court recommended local applicable substantive criteria for the review of the proposed facility and commented that the County would like to see setbacks from neighboring residences, while there is not a setback ordinance in place at this time, the County may seek setbacks as a condition of approval. The applicable substantive criteria recommended by the SAGs and affected local government agencies are discussed further in Section IV.K.

The County recommended that the following local permits may be required for the proposed facility:

- Sanitation - North Central Public Health District
- Road Approach Permit and Road Use Agreement - Sherman County Road Department
- Building permits- Oregon Building Codes Division, Pendleton Regional Office

- Conditional Use Permit - Sherman County Planning.

Local permitting requirements are discussed in Section IV.E.3 below.

The Court recommended the applicant consult with the following agencies to identify potential impacts of the proposed facility and mitigation measures:

- Sherman County Emergency Services for impacts on ambulance services
- South Sherman Rural Fire Protection District for wildfire concerns and wildfire plan.
- Sherman County Weed Department for weed control on the site.
- Sherman County Natural Resources Conservation Service and Soil and Water Conservation district for soils impact analysis and watershed impacts
- ODOT for impacts to OR-216.

These recommendations are discussed further in Sections IV.I, IV.U and IV.V. below.

I.D.3 Reviewing Agency Comments on NOI

Four state agencies provided comments on the NOI. Copies of these comments are included in Attachment 3 of this Order.

Oregon Department of Forestry

On September 13, 2024, the Oregon Department of Forestry (ODF) provided a letter confirming that it did not have specific comments or recommendations on the project because the facility would not be sited on or in proximity to forest lands. ODF also confirmed that the applicant is expected to be familiar with and fulfill all applicable obligations related to fire prevention under ORS chapter 477.

Oregon Department of State Lands

On September 23, 2024, the Oregon Department of State Lands provided comments describing the requirements for Wetlands Delineations and jurisdictional thresholds for when a Removal-Fill Permit is required.

Oregon Department of Aviation

On October 10, 2024, the Oregon Department of Aviation confirmed that it did not have any concerns with the NOI.

Oregon Department of Fish and Wildlife

On October 10, 2024, the Oregon Department of Fish and Wildlife (ODFW) provided a letter making several recommendations with regards to the potential impacts of the proposed facility on fish and wildlife habitat and species, and the applicable requirements of ORS chapter 496, 498, 506, and 509, and OAR chapter 635.

1 ODFW also advocated for the applicant to site the facility in a manner consistent with the
2 provisions of the Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting
3 Guidelines that are applicable to solar facilities.
4

5 ODFW provided specific recommendations regarding the habitat types and species likely to be
6 present at the site, habitat categorization, required surveys, and measures to avoid, minimize,
7 and mitigate impacts on fish and wildlife habitat. These recommendations are discussed in
8 more detail in Section IV.P.
9

10 **II. ANALYSIS AREAS FOR THE PROPOSED FACILITY**
11

12 The analysis areas are the areas that the applicant must study for potential impacts from the
13 construction and operation of the proposed facility. **Please Note:** If significant impacts
14 associated with the applicable Council standards could occur beyond the analysis areas
15 described here, then the applicant must assess those impacts in the ASC and show how the
16 facility would comply with the applicable standard with regard to the larger area where impacts
17 could occur.
18

19 For all potential impacts, the analysis area includes all the area within the site boundary. Most
20 analysis areas also include an area extending a specified distance from the site boundary. The
21 minimum required analysis areas are presented in Table 5 below.
22

Table 5: Analysis Areas

Affected Standard or Resource	Exhibit	Analysis Area	ODOE's Basis for Analysis Area
Structural Standard	H	The area within the site boundary, notwithstanding the distances related to an assessment of seismic hazards required by OAR 345-021-0010(1)(h).	Default minimum of 50 miles for seismic risks.
Soil Protection	I	The area within the site boundary.	Consistent with established study area distance.
Land Use	K	The area within and extending 0.5 mile from the site boundary.	Consistent with established study area distance.
Wetlands	J	The area within the site boundary.	Consistent with applicability of removal-fill permit
Protected Areas	L	The area within and extending 20 miles from the site boundary.	Consistent with established study area distance.
Fish and Wildlife Habitat	P	<p>For the identification of fish and wildlife habitat/habitat categorization and baseline surveys, with the exception of raptor nest surveys, the area within the site boundary.</p> <p>For raptor nests, the area within and extending 0.5-miles from the site boundary.</p> <p>For the literature review of identified species, the area within and extending 5-miles from the site boundary.</p>	<p>Habitat categorization and baseline surveys within the site boundary are adequate to inform the evaluation of the site and mitigation goals.</p> <p>Raptor nest survey distance is recommended by ODFW.</p> <p>Literature review is consistent with the evaluation of T&E species.</p>
Threatened and Endangered Species	Q	For the literature review, the area within and extending 5 miles from the site boundary; for any necessary species specific surveys, the area within the site boundary.	Consistent with established study area distance (OAR 345-001-0010(35)(a))
Scenic Resources	R	The area within and extending 10 miles from the site boundary.	Consistent with established study area distance.

Table 5: Analysis Areas

Affected Standard or Resource	Exhibit	Analysis Area	ODOE's Basis for Analysis Area
Historic, Cultural and Archaeological Resources	S	<p>For direct impacts to archeologic sites and objects, the area within the site boundary.</p> <p>For indirect impacts to aboveground resources, including Traditional Cultural Properties or Historic Properties of Religions and Cultural Significance to Indian Tribes, identified within 1-mile of the site boundary during the desktop review, the analysis area shall include the area within and extending 1-mile from the site boundary.</p>	Consistent with SHPO guidance
Recreation	T	The area within and extending 5 miles from the site boundary.	Consistent with established study area distance.
Public Services	U	<p>For public services that could be impacted by traffic or population change, Sherman and Wasco County. For all other public services, services available in the area within the site boundary.</p>	Larger analysis area needed due to rural nature of the site.
Wildfire Risk	V	<p>For wildfire mapping, the area within and extending 5 miles from the site boundary.</p> <p>For wildfire risk assessment, based on county risk assessment.</p>	Larger analysis area needed due to high likelihood of fast-moving fires in vicinity of site.
Noise Control Regulation	Y	The area within and extending 1-mile from the site boundary.	Consistent with distance identified in OAR 345-021-0010(1)(y)(E)
<p>Notes: The applicant should note that analysis areas defined in this Project Order are to be used for the assessment of impacts to the associated resource. The applicant is not required to perform comprehensive field surveys of the entire analysis area if another method of impact assessment is suitable. However, the Department reserves the right to require field surveys if it is determined that a different method of analysis is insufficient to provide the level of information necessary to find the application complete. It is recommended that the Department be consulted if the applicant wishes to propose alternative methods of analysis than field surveys.</p>			

1 **III. EFSC REGULATORY FRAMEWORK**

2
3 Under ORS 469.300(12)(a)(D)(i)-(iii), a solar PV power generation facility using more than 240
4 acres located on high-value farmland; 2,560 acres of predominantly cultivated or
5 predominantly arable land; or 3,840 acres of any other land is an “energy facility” subject to the
6 jurisdiction of the Council. Under ORS 469.320, no facility may be constructed or operated in
7 Oregon without a Site Certificate from the Council. Issuance of a site certificate is governed by
8 ORS 469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992 and OAR chapter 345.
9

10 The following divisions of OAR chapter 345 include rules related to ASC requirements, EFSC
11 review of an ASC, and construction and operation of an approved facility:
12

13 **OAR Chapter 345, Division 21** (Site Certificate Application Requirements) includes the primary
14 ASC requirements. See Section IV of this Project Order for specific information related to ASC
15 requirements for the proposed facility.
16

17 **OAR Chapter 345, Division 22** (Council Standards for Siting Facilities) establishes the General
18 Standards which apply to all proposed energy facilities. The applicant must ensure that
19 information provided to satisfy the ASC requirements in Division 21 demonstrates compliance
20 with the associated standard in Division 22.
21

22 **OAR Chapter 345, Division 24** (Specific Standards for Siting Facilities) includes additional
23 standards for specific categories of energy facilities. The applicant must ensure that the
24 information provided to satisfy the application requirements in Division 21 demonstrates
25 compliance with any associated Division 24 standards that are applicable to the proposed
26 facility. The Division 24 standard that applies to the proposed facility is OAR 345-024-0090,
27 Siting Standards for Transmission Lines.
28

29 **OAR Chapter 345, Division 25** (Site Certificate Conditions) includes site certificate conditions
30 that EFSC must include in all site certificates, as well as applicable site-specific and monitoring
31 conditions. As provided in OAR 345-025-0006(10), the Council will include all representations
32 made in the ASC and supporting record that are necessary to either comply with and/or
33 adequately mitigate a potentially significant impact to a resource protected by a Council
34 standard as conditions of approval if the application is approved.
35

36 **OAR Chapter 345, Division 26** (Construction and Operation Rules for Facilities) includes the
37 compliance plan requirements that will apply if the Council issues a site certificate for the
38 proposed facility. Note that, if a site certificate is issued, the certificate holder must also comply
39 with additional construction- and operation-related regulations that may apply to the proposed
40 facility but that may not be covered by the site certificate, per ORS 469.401(4).
41
42
43

1 **IV. APPLICATION REQUIREMENTS**
2

3 The applicant has indicated that it expects to submit its preliminary ASC in May 2025.²⁸ The
4 applicant must include all information required under OAR 345-021-0010 in the ASC, including
5 all information that would otherwise be required by any state agency or local government to
6 issue a permit, license, or certificate that the applicant proposes to be included in and governed
7 by the site certificate.²⁹ The applicant must also submit copies of the applications for federally
8 delegated permits that are needed for construction or operation of the proposed facility.³⁰
9

10 OAR 345-021-0010(1) identifies the exhibits that must be included in the ASC. The specific
11 subsections and paragraphs of OAR 345-021-0010(1) that apply to the proposed facility are
12 indicated in the sections below. Each exhibit must include a table of contents.³¹
13

14 **IV.A. Exhibit A – General Information about the Applicant and Participating Persons**
15

16 **Applicable Paragraphs:** OAR 345-021-0010(1)(a)(A), (B), (D) and (H)

17 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]

18 **Discussion:** Under OAR 345-021-0010(1)(a)(A), Exhibit A must identify the legal name and
19 address of the applicant and any co-owners of the proposed facility. The ASC must provide the
20 name, mailing address, email address and telephone number of at least one contact person for
21 the applicant, and if there is a contact person other than the applicant, the name, title, mailing
22 address, email address and telephone number of that person.
23

24 As described above, the NOI identifies Buckley Solar, LLC as the applicant. The applicant must
25 notify the Department of any change in its legal name or business entity. The Department may
26 request that Exhibit A be amended or may accept an alternate form of documentation to
27 document the change on the record of the ASC.
28

29 Under OAR 345-021-0010(1)(a)(B), Exhibit A must identify any participating entities other than
30 the applicant, including but not limited to, the parent company of the applicant and any
31 persons upon whom the applicant will rely for third-party permits or approvals related to the
32 facility, and, if known, other persons upon whom the applicant will rely in meeting any facility
33 standard adopted by the Council.
34

35 Under OAR 345-021-0010(1)(a)(D), Exhibit A must identify the legal name and business address
36 of each of the applicant’s full or partial owners. The NOI identifies Clenara DevCo, LLC as the
37 parent company for the applicant. Exhibit A must either verify that Clenara DevCo, LLC
38 continues to be the sole member of Buckley Solar, LLC or provide an updated list identifying all
39 LLC members.

²⁸ BSFNOIDoc01-01 NOI 2024-08-09, Table P-1.

²⁹ OAR 345-021-0000(5)

³⁰ OAR 345-021-0000(6)

³¹ OAR 345-021-0010(3)

1 The applicant must notify the Department of any change in the identity or ownership of the
2 applicant prior to the change. This notification requirement continues to apply until the Council
3 issues its Final Order on the ASC.

4
5 Clenara DevCo, LLC is a wholly-owned subsidiary of Clenara Holdings, LLC, which in turn, is a
6 subsidiary of Enlight Renewable Energy, Ltd. (Enlight).³² Exhibit A must disclose any changes to
7 the ownership or management of the applicant or its parent company.

8
9 The NOI also identifies personnel from an affiliated Enlight subsidiary, Clenara, LLC, as primary
10 contacts for the project. The ASC should clearly explain the relationship between the applicant,
11 Enlight, and Clenara, LLC in both Exhibit A and D.

12
13 Because the applicant is a limited liability company, OAR 345-021-0010(1)(a)(H) applies. Under
14 this paragraph, Exhibit A must include:

- 15 • The full name, official designation, mailing address, email address and telephone
16 number of the officer responsible for submitting the application.
- 17 • The date and place of the LLC's formation.
- 18 • A copy of the LLCs articles of organization and its authorization for submitting the
19 application.
- 20 • Proof of registration to do business in Oregon.

21
22 Buckley Solar, LLC is not required to identify a resident attorney-in-fact because it is registered
23 to do business in Oregon, however, it must still identify and maintain a registered agent that
24 can accept legal service in this state.

25 26 IV.B. Exhibit B – General Information about the Proposed Facility

27
28 **Applicable Paragraphs:** OAR 345-021-0010(1)(b)(A)(ii) through (v), (B), (C), (E) and (F).

29 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]

30 **Discussion:** Exhibit B must provide information about the proposed facility, construction
31 schedule and activities, operations and maintenance activities and inspections, and temporary
32 disturbances of the site.

33
34 Under OAR 345-021-0010(1)(b)(A) through (C), Exhibit B must include a description of the
35 facility that includes, at a minimum:

- 36 • The nominal electric generating capacity and the average electrical generating capacity
37 of the proposed solar PV facility.
- 38 • A detailed description of all major components, structures and systems that will be part
39 of the proposed facility, including:
 - 40 ○ The capacity, dimensions, type, and configuration of equipment used to
41 generate, store, transmit, or transport electricity, and the dimensions and

³² BSFN01Doc01-01 NOI 2024-08-09, Attachment 1

1 configurations of any other related or supporting facilities, including but not
2 limited to roads, storage facilities, fences, or other structures.

- 3 • A site plan showing the general arrangement of buildings, equipment, and structures,
4 including any proposed temporary laydown or staging areas and any proposed
5 micrositing corridors. Note that if the applicant seeks flexibility to site proposed facility
6 components anywhere within the site boundary, or seeks approval of micrositing areas,
7 the applicant must evaluate impacts to resources within the entire site boundary or
8 micrositing areas based on the maximum impact facility layout option within the site
9 boundary or micrositing areas, if different.
- 10 • The capacity, dimensions, type, and configuration of related or supporting facilities,
11 including but not limited to the BESS, collector substation, transmission line,
12 POI/interconnection facilities, roads, and fences.
- 13 • Identification and description of any fuel and chemical storage facilities, including oil-
14 containing capacity and structures and systems for spill containment.
- 15 • Equipment and systems for fire prevention and control in any system components,
16 including water tanks, internal fire suppression systems, and access and egress points
17 for fire responders.

18
19 Under OAR 345-021-0010(1)(b)(E), Exhibit B must include information about the proposed 34.5
20 and 500 kV transmission lines that would be constructed as part of the project including:

- 21
22 • The rated voltage, load carrying capacity, and type of current of each category of
23 transmission line and a description of transmission line structures and their dimensions.
- 24 • The length and location of each 500 kV transmission line route. The length of individual
25 34.5 kV transmission line segments does not need to be identified however, the
26 applicant should identify overall length and location based on the most-impact design
27 scenario.
- 28 • The proposed right-of-way width for each category of transmission line, including to
29 what extent new right-of-way will be required or existing right-of-way will be widened;
- 30 • If the proposed transmission line will follow or include any public right-of-way, a
31 description of where the transmission line or pipeline would be located within the public
32 right-of-way, to the extent known. If the applicant proposes to locate all or part of a
33 transmission line or pipeline adjacent to but not within a public right-of-way, the Exhibit
34 must describe the reasons for locating the transmission line or pipeline outside the
35 public right-of-way. The applicant must include a set of clear and objective criteria and a
36 description of the type of evidence that would support locating the transmission line
37 outside the public right-of-way, based on those criteria.

38
39 The description must be in both narrative and tabular format, like the examples provided in
40 Tables 6 and 7 below.

Table 6: Example Energy Facility Specifications and Details

Component	PV Only	PV plus Storage (Dispersed)
3 MW AC Block	160	
Modules	1,326,858	1,742,572
Module Rows (on trackers)	16,587 x 78 module rows	21,644 x 78 module rows
Posts	187,545	246,444
Inverters	160	
Transformers	160	

Table 7: Example Related or Supporting Facilities Specifications and Details

Component	PV plus Storage (Dispersed)
Direct current electrical system, above and belowground	Up to 2 million miles of cable; combiner boxes
34.5 kV AC electrical system	Inverters, step-up transformers and 160 home-run cables
Collector Substations, 1 acre each	4, with oil-containing step-up transformers; equipment height = 10'
115 kV generation-tie transmission line	2 miles, double circuit consisting of: <ul style="list-style-type: none"> 37 single steel monopole structures up to 6 feet in diameter, spaced approximately 300 feet apart, and approximately 70 feet in height. Concrete foundations up to 20 feet deep, which may have directional anchoring system structures.
115/500 kV step-up substation, 3 acres	1 substation consisting of: <ul style="list-style-type: none"> up to 2 115 to 500 kV transformers, each containing 50,000 gallons of transformer oil one 115 kV input structure two 115 kV circuit breakers two 500 kV circuit breakers 500 kV output structures a control building for housing control and communication equipment. 65–100-foot interconnection structures
Operations and Maintenance Building, 0.5 acre	2 O&M buildings, 50 x 50 x 14', consisting of: <ul style="list-style-type: none"> warehouse-like storage area human machine interface system restrooms and employee work areas an exempt groundwater well septic system
Perimeter Fence	Approx. 18 miles, chain link
Battery Storage Enclosures	134 steel framed structures: <ul style="list-style-type: none"> approximately 50 feet wide, 67 feet long and up to 30 feet tall

Table 7: Example Related or Supporting Facilities Specifications and Details

Component	PV plus Storage (Dispersed)
	Balance of Plant (BOP) consisting of: <ul style="list-style-type: none"> • large polymer tanks on each side of the cell stack, pumps, piping (polyvinyl chloride), thermal controls, and power conversion hardware (single stage, bidirectional inverters). • Storage tanks with non-hazardous, water-based electrolyte/polymer. • Primary and secondary spill containment devices • Thermal system control of a heating, ventilation, air conditioning (HVAC) air-to-air and glycol-to-air (non-toxic) heat exchanger
Batteries	<ul style="list-style-type: none"> • outdoor rated • negatively grounded, ground fault detection and interruption capable of detecting ground faults in the dc current carrying conductors and components • intentionally grounded conductors, insulation monitoring, • DC and AC overvoltage protection and lightning protection, • humidity control • data acquisition and communication monitoring interface.
Inverters	160
Redox Electrolyte Fluid	14,000 gallons per MW
Supervisory Control and Data Acquisition System	Fiber optic cables installed above- and below ground with collection system
Perimeter roads	50 miles <ul style="list-style-type: none"> • Built with materials designed to act as fire breaks, sized for emergency vehicle access in accordance with Oregon Fire Code. • Internal roads of 12 x 20' with at least a 30-foot noncombustible, defensible space clearance for fire prevention

1
 2 The information in Exhibit B must be as complete and accurate as possible. If the ASC is
 3 approved, the information will form the basis for the description of the facility in the site
 4 certificate. As provided under OAR 345-025-0006(3)(a), the site certificate will contain
 5 conditions requiring the certificate holder to design, construct, operate and retire the facility
 6 substantially as described in the site certificate.
 7

1 Under OAR 345-021-0010(1)(b)(F), Exhibit B must include a construction schedule including a
2 description of all primary construction activities that will be performed at the site and the
3 estimated timing of those activities. “Construction activities” include all work performed at the
4 site, excluding surveying, exploration, or other activities to define or characterize the site. The
5 construction schedule must be provided in sufficient detail to ensure construction activities will
6 be completed within any required work-windows required to avoid or minimize impacts on
7 sensitive resources.

8
9 The construction schedule must specify the date by which the applicant proposes to begin
10 construction of the facility and the date by which the applicant proposes to complete
11 construction activities. The proposal should reflect the time needed to obtain any outstanding
12 contracts, permits, or approvals needed to begin construction of the proposed facility, including
13 those described in Section IV.E. If the applicant proposes to construct the facility in phases, the
14 construction schedule must describe the timing of construction activities for each phase.

15
16 Exhibit B must also describe routine operations and maintenance activities, including tasks and
17 actions associated with panel, battery, or part replacement, vegetation management, and
18 inspections.

19
20 IV.C. Exhibit C – Location

21
22 **Applicable Paragraphs:** All paragraphs apply.

23 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]

24 **Discussion:** Exhibit C must include information about the proposed facility site.

25 Under OAR 345-021-0010(1)(c)(A), Exhibit C must include maps showing the proposed locations
26 of the energy facility site, all related or supporting facility sites, and all areas that might be
27 temporarily disturbed during construction of the facility in relation to major roads, water
28 bodies, cities and towns, important landmarks and topographic features.

29
30 Maps included in the ASC must provide enough information for property owners potentially
31 affected by the proposed facility to determine whether their property is within or adjacent to
32 property on which the site boundary is located. Major roads must be accurately named. Maps
33 included in the ASC must use a scale of 1 inch = 2000 feet, or smaller when necessary to show
34 detail.

35
36 The maps must identify all proposed transmission line routes and corridors for which the
37 applicant seeks Council approval.

38
39 If the applicant seeks flexibility to site facility components anywhere within the site boundary
40 or within an established micrositing area, please identify in maps and include an evaluation to
41 support the facility “micrositing area,” to be consistent with the intent of a “micrositing
42 corridor” (OAR 345-001-0010(32)).

43

1 Under OAR 345-021-0010(1)(c)(B), Exhibit C must also include a narrative description of the
2 proposed energy facility site, the proposed site of each related or supporting facility and areas
3 of temporary disturbance, including the total land area (in acres) within the proposed site
4 boundary, the total area of permanent disturbance, and the total area of temporary
5 disturbance. While all areas within the proposed energy facility footprint will be considered
6 permanent disturbance for the purposes of the Fish and Wildlife Habitat Standard, Exhibit C
7 should identify the estimated areas that will be affected by temporary (e.g. grading, temporary
8 vegetation clearing) and permanent (i.e. graveling, foundation installation) disturbance
9 activities separately.

10
11 IV.D. Exhibit D – Organizational Expertise

12
13 **Applicable Paragraphs:** All paragraphs apply.

14 **Related Council and Other Standards:** Organizational Expertise [OAR 345-022-0010]

15 **Discussion:** Exhibit D must include information about the organizational expertise of the
16 applicant to construct and operate the proposed facility, providing evidence to support a
17 finding that the applicant has the ability to construct, operate, and retire the proposed facility
18 in compliance with Council standards and conditions of the site certificate; and, in a manner
19 that protects public health and safety. The applicant may rely on its parent company to fulfill
20 the requirements of OAR 345-021-0010(1)(d)(A) through (D), and (G), as further explained
21 below.

22
23 Under OAR 345-021-0010(1)(d)(A), Exhibit D must describe the applicant's previous experience,
24 if any, in constructing and operating facilities like the proposed facility. The description must
25 include, at a minimum, the size, location, and date of commercial operation for any facilities
26 upon which the applicant wishes to rely as evidence of organizational expertise. The description
27 should also provide an analysis of similarities and differences between the sites of the facilities
28 on which the applicant is relying to demonstrate organizational expertise and the proposed
29 facility site, including engineering and environmental constraints at each.

30
31 Under OAR 345-021-0010(1)(d)(B) and (C), Exhibit D must describe the qualifications of the
32 applicant's personnel who will be responsible for constructing and operating the facility, and
33 the qualifications of any architect, engineer, major component vendor, or prime contractor
34 upon whom the applicant will rely in constructing and operating the facility, to the extent that
35 the identities of such persons are known when the application is submitted.

36
37 Under OAR 345-021-0010(1)(d)(D), Exhibit D must describe the compliance history of the
38 applicant, its co-owners and their subsidiaries, and other participating entities, including
39 disclosure of any regulatory citations in any jurisdiction received by the applicant (parent or any
40 other party on which the applicant is relying to demonstrate organizational expertise) in the
41 past 10 years in constructing or operating a facility similar to the proposed facility and a
42 description of the status or resolution of those citations.

1 Under OAR 345-021-0010(1)(d)(G), Exhibit D must include evidence that the applicant can
2 successfully complete any mitigation proposed to demonstrate compliance with any applicable
3 Council standards, including reports documenting experience with other projects and the
4 qualifications, experience, and contact information of personnel upon whom the applicant will
5 rely, to the extent that the identities of such persons are known at the date of submittal. The
6 applicant must provide evidence that past mitigation projects were completed successfully,
7 such as final reports submitted to the permitting agency.
8

9 IV.E. Exhibit E – Permits

10
11 **Applicable Paragraphs:** All paragraphs apply.

12 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]

13 **Discussion:** Under OAR 345-021-0010(1)(e)(A) and (B), Exhibit E must identify all federal, state,
14 and local government permits related to the siting of the proposed facility. ORS 469.310
15 establishes the Council’s comprehensive licensing authority, which is referred to as a “one-
16 stop” consolidated permitting process. Permits related to the siting of the proposed facility
17 should be included in and governed by the site certificate to consolidate permitting processes,
18 consistent with ORS 469.310; however, it is the applicant that must identify whether permits
19 should be governed by the site certificate. For each permit, Exhibit E must include:
20

- 21 • A description of the permit and the reasons the permit is needed.
- 22 • A legal citation of the statute, rule or ordinance governing the permit.
- 23 • The name, mailing address, email address and telephone number of the agency or office
24 responsible for the permit.
- 25 • The applicant’s analysis of whether the permit should be included in and governed by
26 the site certificate.
27

28 Under OAR 345-021-0010(1)(e)(C) for any state or local government agency permits, licenses or
29 certificates that are proposed to be included in and governed by the site certificate, Exhibit E
30 must also provide evidence to support findings by the Council that construction and operation
31 of the proposed facility will comply with the statutes, rules, and standards applicable to the
32 permit. Information about removal-fill permits must be provided in Exhibits J and information
33 about any necessary water rights or permits in Exhibit O.
34

35 Under OAR 345-021-0010(1)(e)(E), if the applicant will rely on a contractor or third party to
36 obtain a required state or local permit, license or certificate that would otherwise be governed
37 by the site certificate, Exhibit E must also include evidence that the applicant has, or has a
38 reasonable likelihood of entering into, a contract or other agreement with the third party for
39 access to the resource or service to be secured by that permit and evidence that the third party
40 has, or has a reasonable likelihood of obtaining, the necessary permit.
41

42 Although the Council does not have jurisdiction over federally delegated permits, the Council
43 may rely on the determinations of compliance and the conditions in federally delegated permits

1 in evaluating the application for compliance with Council standards. Under OAR 345-021-
 2 0010(1)(e)(D), Exhibit E must include evidence that the responsible agency for any federally
 3 delegated permitted program has received a permit application. The applicant must provide the
 4 estimated date when the responsible agency will complete its review and issue a permit
 5 decision. If the applicant relies on a contractor or third party to obtain a required state or local
 6 permit, license or certificate that will be governed by the site certificate, Exhibit E must also
 7 include the information required by OAR 345-021-0010(1)(e)(F).

8
 9 Table 8, below, lists permits that may be required for the proposed facility. Additional
 10 information is provided in the discussion that follows.
 11

Table 8: Potentially Required Permits

Permitting Authority	Permit	EFSC Jurisdiction
Federal and Federally Delegated Permits		
Bonneville Power Administration	Interconnection Agreement	Not Jurisdictional
U.S. Army Corps of Engineers	Section 404 Permit	Not Jurisdictional, but information required for completeness ¹
Federal Aviation Administration	Determination of No Hazard to Air Navigation	Not Jurisdictional
U.S. Fish and Wildlife Service	Incidental Take Permit or Eagle Take Permit	Not Jurisdictional
Oregon Department of Environmental Quality	NPDES Construction Stormwater 1200-C Permit	Not Jurisdictional, but information required for completeness ¹
	NPDES Construction Stormwater 1200-A Permit	Not Jurisdictional, but information required for completeness ¹
	Basic Air Contaminant Discharge Permit	Not Jurisdictional, but information required for completeness ¹
State		
Oregon Department of State Lands	Removal-Fill Permit & Wetland Delineation Concurrence	Jurisdictional if proposed by applicant
Oregon Department of Environmental Quality	Water Pollution Control Facilities Permit 1000, Gravel mining and Batch Plant	Not Jurisdictional
	Water Pollution Control Facilities Permit 1700-B	Not Jurisdictional
Oregon Department of Transportation	Oversize Load Movement Permit	Not Jurisdictional
	Access Management Permit	Not Jurisdictional
	Utility Encroachment Permit	Not Jurisdictional

Table 8: Potentially Required Permits

Permitting Authority	Permit	EFSC Jurisdiction
Oregon Water Resources Department	Water Right Permit or Limited Water Use License	Jurisdictional if proposed by applicant
State Historic Preservation Office	Archeological Excavation Permit	Jurisdictional if proposed by applicant
Oregon Department of Aviation	Letter of Determination of	Jurisdictional
Local		
Sherman County Planning Department	Conditional Use Permit/Zoning Permits	Jurisdictional
Oregon Building Codes Division, Pendleton Field Office	Building & Electric Permits	Not Jurisdictional
Site Evaluation Application & New Construction Permit (Septic)	North Central Public Health District	Not Jurisdictional
Sherman County Roads Department	Road Approach Permit	Not Jurisdictional
<p>Notes:</p> <p>¹ Under OAR 345-021-0010(1)(e) the application must identify all federal, state and local government permits related to the siting of the proposed facility. For federally delegated permits, the application must include evidence that the responsible agency has received a permit application and the estimated date when the responsible agency will complete its review and issue a permit decision. The department requests this evidence be provided for all federal permits.</p> <p>² Under ORS 469.401(4), matters including but not limited to employee health and safety, building code compliance, wage and hour or other labor regulations, local government fees and charges or other design or operational issues that do not relate to siting the facility are not included in or governed by the site certificate.</p>		

1
2
3
4
5
6
7
8
9
10
11
12
13

IV.E.1.1 Bonneville Power Administration

Interconnection Agreement: **(Not Jurisdictional)**

Statute and Rule References: National Environmental Policy Act, 42 USC 4332; 40 CFR 1500.

Discussion: As proposed, the facility would interconnect with the existing Buckley Substation, which is owned and operated by the Bonneville Power Administration (BPA). To issue an Interconnection Agreement BPA must comply with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and the Endangered Species Act (ESA). This federal process is outside of the Council’s jurisdiction and will not be included in or governed by the site certificate; however, the applicant is encouraged to use relevant information generated and documents prepared for the federal review to support its ASC.

1
2 IV.E.1.2 U.S. Army Corps of Engineers

3
4 *Section 404 Permit: (Not Jurisdictional, but information required for completeness)*

5
6 **Statute and Rule References:** Clean Water Act, Section 404; 33 CFR 1344.

7 **Discussion:** Section 404 of the Clean Water Act requires authorization from the Secretary of the
8 Army, acting through the Corps of Engineers (Corps), for the discharge of dredged or fill
9 material into all waters of the United States, including wetlands. Note that a Section 401 Water
10 Quality Certification from the State of Oregon is generally required before a Section 404 permit
11 may be granted. The Section 404 permit and the 401 Water Quality Certification are separate
12 from the Removal-Fill permit required under Oregon State Law, however, there is a Joint Permit
13 Application that satisfies the information requirements for all three. The applicant must provide
14 a letter or other indication from the Corps stating that it has received a Joint Permit Application
15 for the project, identifying any additional information it is likely to need from the applicant
16 based on the agency’s review of the application, and providing an estimated date for when it
17 will complete its review and issue a permit decision.

18
19 IV.E.1.1 Federal Aviation Administration

20
21 *Determination of No Hazard to Air Navigation: (Not Jurisdictional)*

22
23 **Statute and Rule References:** Federal Aviation Act, 49 USC 44718; 14 CFR 77.

24 **Discussion:** Federal Aviation Administration (FAA) regulations require a person proposing to
25 construct or alter structures that may affect navigable airspace or navigation facilities to submit
26 a Notice of Proposed Construction or Alteration (FAA form 7460-1). Filing requirements are
27 based on factors including but not limited to height, proximity to an airport, location, and
28 frequencies emitted from the structure. If Form 7460-1 is required, the applicant may also be
29 required to submit a Supplemental Notice of Actual Construction or Alteration (Form 7460-2)
30 prior to beginning construction. FAA will determine whether a hazard to air navigation exists
31 based on the information in the notice and may impose conditions to ensure the safe and
32 efficient use of navigable airspace, air navigation facilities or equipment. The applicant may be
33 required to address impacts to military operations or readiness under 10 USC 183a as part of,
34 or in addition to the FAA process.

35
36 This federal process is outside of the Council’s jurisdiction and will not be included in or
37 governed by the site certificate; however, information may be required to demonstrate
38 compliance with the requirements of the Oregon Department of Aviation (see below).

39
40 IV.E.1.2 Oregon Department of Environmental Quality

41
42 *National Pollution Discharge Elimination System (NPDES) Construction Stormwater 1200-C*
43 *permit: (Federally delegated. Not Jurisdictional, but information required for completeness)*

1 **Statute and Rule References:** Clean Water Act, Section 402; 40 CFR § 122; ORS 468 and 468B;
2 OAR Chapter 340, Division 45

3 **Discussion:** A NPDES 1200-C permit is required for construction activities that will disturb one
4 or more acres of land. Based upon the information in the NOI, a NPDES 1200-C permit would
5 likely be required for facility construction. The EPA has delegated authority to the Oregon
6 Department of Environmental Quality (DEQ) to issue NPDES Stormwater Discharge permits and
7 the applicant has represented it will obtain this permit directly from DEQ.
8

9 In accordance with OAR 345-021-0000(6), the applicant must submit to the Department one
10 copy of all applications for federally delegated permits (including the NPDES permit) or provide
11 a schedule of the date by which the applicant intends to submit the application. Unless this
12 permit will be obtained by a third-party (see Section IV.E.4), the Department will not be able to
13 find the application for site certificate complete before receiving a copy of the NPDES permit
14 application and a letter or other indication from DEQ. The DEQ response must state that the
15 agency has received a permit application from the applicant and provide an estimated date
16 when the agency will complete its review and issue a permit decision. The applicant may
17 incorporate this information into Exhibit I (Soils) or Exhibit BB (Other Information) of the ASC.
18

19 *NPDES Stormwater and Mine Dewatering Discharge 1200-A permit: (Federally delegated Not*
20 *Jurisdictional, but information required for completeness)*

21
22 **Statute and Rule References:** Clean Water Act, Section 402 (33 USC § 1342); 40
23 CFR § 122; ORS 468 and 468B; OAR Chapter 340, Division 45

24 **Discussion:** Disposal of concrete batch plant wash water (if a temporary batch plant is
25 necessary) would require either an NPDES 1200-A permit or a WPCF General Permit 1000. If the
26 batch plant was to discharge stormwater from a point source to surface water or to a
27 conveyance system that discharges to surface water, the plant would require an NPDES 1200-A
28 permit. The requirements of OAR 345-021-0000(6) (described in the preceding section) would
29 apply to the NPDES 1200-A permit. If the applicant's third-party contractor would instead
30 obtain the NPDES 1200-A permit, the requirements described in the Third-Party Permits section
31 below would apply. Alternatively, if the batch plant would be located within a construction
32 staging yard for which the applicant would seek coverage under an NPDES 1200-C permit
33 described above, the applicant may seek coverage for the batch plant under the same NPDES
34 1200-C permit.
35

36 If the batch plant would not discharge to surface waters, a WPCF-1000 General Permit would
37 instead be required to dispose of process wastewater and stormwater by recirculation,
38 evaporation, and/or controlled seepage (see the State Permits discussion below).
39

40 *Basic Air Contaminant Discharge Permit: (Federally delegated. Not EFSC-jurisdictional, but*
41 *information required for completeness)*

42
43 **Statute and Rule References:** OAR Chapter 340, Division 216

1 **Discussion:** If the applicant or its contractor utilizes a stationary or portable concrete batch
2 plant during construction or operation of the proposed facility, it may be required to obtain a
3 Air Contaminant Discharge Permit or ACDP under the Clean Air Act. The EPA has delegated the
4 authority to issue permits under the Clean Air Act to DEQ.
5

6 A Basic Air Contaminant Discharge Permit authorizes operation of a concrete manufacturing
7 plant that produces more than 5,000 but less than 25,000 cubic yards per year output. Permits
8 for mobile, temporary concrete batch plants are associated with the equipment itself. The
9 requirements of OAR 345-021-0000(6) would apply to this federally delegated permit. If the
10 applicant’s third-party contractor would instead obtain the permit, the requirements described
11 in the Third-Party Permits section below would apply.
12

13 **IV.E.2 State Permits**

14 IV.E.2.1 Oregon Department of State Lands

15 *Wetland Delineation and Removal Fill Permit: (EFSC-jurisdictional)*

16
17
18 **Statute and Rule References:** ORS 196.795-990; OAR chapter 141, division 85, 90

19 **Discussion:** A removal-fill permit is required if any removal or fill activities occur in streams
20 designated as Essential Indigenous Anadromous Salmonid Habitat, or if 50 cubic yards or more
21 of material is removed, filled, or altered within any jurisdictional water of the state [OAR 141-
22 085-0520(2) and (5)].
23

24
25 The applicant must conduct a wetland delineation, to be sent to Department of State Lands
26 (DSL) for concurrence, according to OAR chapter 141, division 90. The wetland delineation
27 determines the location of “waters of this state,” as defined in OAR 141-085-0510(91), within
28 the analysis area. A detailed discussion of the requirements for the wetland delineation report
29 is included Section IV.J and the comments provided by DSL in Attachment 3: Reviewing Agency
30 Comments on NOI.
31

32 Depending upon facility impacts to “waters of this state” a removal-fill permit may be
33 necessary, and the application for site certificate must include information establishing whether
34 a removal-fill permit is required. The information in the NOI indicates that a removal-fill permit
35 is not likely to be required. If a removal-fill permit is required, the ASC must include a concurred
36 delineation from DSL and a complete application for an individual permit which demonstrates
37 consistency with ORS 196.825(1) and provides enough information for determinations and
38 considerations under ORS 196.825(3) and OAR 141-085-0565.
39

40 A Compensatory Wetland Mitigation Plan which meets the requirements of OAR 141-085-0680
41 through OAR 141-085-0715 must be provided to replace all lost functions and values previously
42 provided by the impacted wetlands and waterways.
43

1 IV.E.2.2 Oregon Department of Environmental Quality

2
3 *Water Pollution Control Facilities (WPCF) 1000 General Permit, Gravel mining and Batch Plant:*
4 ***(EFSC-jurisdictional unless obtained by third-party; see Third-Party Permits discussion)***
5 *WPCF General Permit 1700-B: (EFSC-jurisdictional)*
6

7 **Statute and Rule References:** ORS Chapter 468B; OAR Chapter 340, Division 45

8 **Discussion:** If a temporary batch plant is necessary, disposal of concrete batch plant wash water
9 would require either a Water Pollution Control Facilities (WPCF) 1000 General Permit or a
10 NPDES permit. Concrete batch plants that dispose of process wastewater and stormwater by
11 recirculation, evaporation, and/or controlled seepage with no discharge to surface waters
12 require a WPCF-1000 General Permit. A WPCF-1000 General Permit is a state permit under
13 Council jurisdiction. If the applicant’s third-party contractor would obtain the necessary WPCF-
14 1000 General Permit directly from DEQ, this permit would be related to the siting and operation
15 of the proposed facility but would not be included in and governed by the site certificate (see
16 the Third-Party Permits discussion below). If the batch plant was to instead discharge
17 stormwater from a point source to surface water or to a conveyance system that discharges to
18 surface water, the plant would require an NPDES 1200-A permit or coverage under the NPDES
19 1200-C permit for the construction yard in which it would be located (as discussed under the
20 federally delegated permits discussion of this Project Order).

21
22 Disposal of solar panel wash water would require a WPCF 1700-B permit. The NOI indicates that
23 either the applicant or a third-party contractor who will conduct the solar panel washing
24 activities may seek coverage under the WPCF-1700-B permit from DEQ following completion of
25 construction and before initiating any washing activities. DEQ has indicated to the Department
26 that a WPCF General Permit 1700-B is not required for solar array washing activities that would
27 not result in discharge to surface waters, storm sewers, or dry wells, and that would not use
28 acids, bases, metal brighteners, steam, or heated water. The use of biodegradable, phosphate-
29 free cleaners with cold water is allowed. However, cleaning only with cold water is
30 recommended. Chemicals, soaps, or detergents must be used sparingly. The applicant or its
31 third-party contractor should seek guidance from DEQ prior to conducting solar module
32 washing activities.

33
34 IV.E.2.3 Oregon Water Resources Department

35
36 *Water Right Permit or Water Use Authorization: (EFSC-jurisdictional)*
37

38 **Statute and Rule References:** ORS chapter 537; OAR chapter 690 division 310, 340, and 410

39 **Discussion:** As represented in NOI Exhibit J, the applicant proposes to obtain water from existing
40 municipal water sources with valid water rights and truck it to the site. Additionally, the
41 applicant states that if water is not available from nearby municipalities, they could apply for a
42 limited water use license to allow either a new well or use of an existing well for facility
43 construction water. Water right permits, limited water use licenses, and other water
44 authorizations for energy facilities are subject to review and authorization by the Council, and

1 any permit would be included in and governed by the site certificate.

2
3 IV.E.2.4 State Historic Preservation Office

4
5 *Archaeological Excavation Permit: (Not EFSC-jurisdictional, unless proposed by the applicant)*

6
7 **Statute and Rule References:** ORS Chapter 97, 358, and 390; OAR Chapter 736, Division 51
8 **Discussion:** Per ORS 390.235 and 358.920 a person may not excavate, injure, destroy, or alter
9 an archaeological site or object or remove an archaeological object located on public or private
10 lands in Oregon unless that activity is authorized by an Archaeological Permit issued by the
11 State Historic Preservation Office (SHPO). The applicant has not proposed to have this permit
12 be included and governed by the site certificate, and as such the applicant will be required to
13 obtain this permit from the State Historic Preservation Office prior to ground disturbing
14 activities at the site if it is required. The applicant must provide a letter or other indication from
15 SHPO stating that it has received an application for an excavation permit for the project,
16 identifying any additional information it is likely to need from the applicant based on the
17 agency’s review of the application, and providing an estimated date for when it will complete
18 its review and issue a permit decision. The applicant must attach a copy of any archaeological
19 report and inadvertent discovery plan prepared in support of the application to Exhibit S.
20

21 IV.E.2.5 Oregon Department of Aviation

22
23 **Statute and Rule References:** ORS 836.530 and OAR 738-070-0060 – 0100.

24 *Determination of No Hazard*

25
26 **EFSC Jurisdiction:** Jurisdictional.

27 **Discussion:** OAR 738-070-0100 establishes the State’s standards and notification requirements
28 for objects affecting navigable airspace. In its comments on the NOI, Oregon Department of
29 Aviation indicated that it did not have any concerns with the proposed facility; however, if the
30 applicant is required to submit FAA Form 7460-1 under 14 CFR 77, the information required in
31 the notice must be included in the pASC to aid in ODAV’s determination of potential impacts to
32 air navigation. This review and determination will be incorporated and governed by the site
33 certificate.
34

35 **IV.E.3 Local Permits**

36
37 IV.E.3.1 Sherman County

38
39 *Conditional Use Permit (EFSC-jurisdictional)*

40
41 **Statute and Rule References:** ORS Chapter 469.504; Sherman County Zoning Ordinance

42 **Discussion:** As stated in the NOI, the applicant requests that the Council determine compliance
43 with the statewide planning goals under ORS 469.504(1)(b). Accordingly, the conditional use

1 permit will be included in and governed by the site certificate. The substantive criteria
2 applicable to this determination are discussed under Section IV.K., Land Use.

3
4 The other Sherman County permitting requirements listed in Table 8 are not related to facility
5 siting and as such will not be included in or governed by the site certificate. Building permits are
6 specifically excluded from EFSC jurisdiction by statute, ORS 469.401(4).
7

8 **IV.E.4 Third-Party Permits**

9

10 **Discussion:** As noted in the NOI, the applicant may rely upon third-party permits for access to
11 resources necessary for facility construction and operation. If the applicant relies upon a state
12 or local government permit issued to a third party that is related to the siting of the proposed
13 facility, the applicant must identify each third-party permit, and, for each, include evidence that
14 the applicant has, or has a reasonable likelihood of entering into, a contract or other agreement
15 with the third party for access to the resource or service to be secured by that permit; evidence
16 that the third party has or, has a reasonable likelihood of obtaining, the necessary permit; and,
17 an assessment of the impact of the proposed facility on any permits that a third party has
18 obtained and on which the applicant relies to comply with any applicable Council standard
19 (OAR 345-021-0010(1)(e)(E)).
20

21 If the applicant relies on a federally delegated permit issued to a third party that is related to
22 the siting of the proposed facility, the applicant must identify the third-party permit and include
23 evidence that the applicant has, or has a reasonable likelihood of entering into, a contract or
24 other agreement with the third party for access to the resource or service to be secured by that
25 permit. The applicant must provide evidence that the responsible agency has received the
26 permit application and provide the estimated date when the responsible agency will complete
27 its review and issue a permit decision (OAR 345-021-0010(1)(e)(F)).
28

29 In accordance with OAR 345-022-0010(4), if the applicant relies on a permit or approval issued
30 to a third party and the third party does not have the necessary permit or approval at the time
31 the Council issues the site certificate, the Council may issue the site certificate subject to the
32 condition that the certificate holder shall not commence construction or operation as
33 appropriate until the third party has obtained the necessary permit or approval and the
34 applicant has a contract or other arrangement for access to the resource or service secured by
35 that permit or approval.
36

37 **IV.F. Exhibit F – Property Owners**

38

39 **Applicable Paragraphs:** All paragraphs apply.

40 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]

41 **Discussion:**
42

1 The facility is located within Sherman County’s Exclusive Farm Use (F-1) Zone. Accordingly,
2 under OAR 345-020-0011(1)(f)(A)(iii), Exhibit F must identify all tax lots or parcels located
3 wholly or partially within the site boundary, and within 500 feet of those tax lots or parcels.
4

5 All tax lots must be identified in a consistent format that provides the Township, Range, Section
6 and Tax lot number of each tax lot. If the local government uses a different tax lot identification
7 system, please include the local tax lot identification number in a separate column.
8

9 The preliminary ASC Exhibit F must identify all tax lots in the notification area described above,
10 but may omit mailing address information because the Department is not required to issue a
11 public notice reliant on the mailing address information until the ASC is deemed complete. The
12 list must be accompanied by legible maps that clearly identify the site boundary, the
13 notification buffer distances as described above, tax lot identification numbers as well as
14 adjacent road names.
15

16 Once the ASC is deemed complete by the Department, Exhibit F must include the mailing
17 address information for the owner of record of each identified tax lot based on the tax
18 assessment roll for the jurisdiction in which the tax lot is located. In addition to incorporating
19 the list in the application, the applicant must submit the list to the Department in Excel
20 Workbook (.xlsx) or comma-separated values (.csv) format. Property owner data should be
21 provided in the following format:
22

Map Tax Lot	Name 1	Name 2	Company/Organization	C/O- Attn.	Address	City	State	Zip Code
----------------	-----------	-----------	----------------------	---------------	---------	------	-------	-------------

23
24 Following the submission of the complete application, the applicant must submit an updated
25 property owner list as requested by the Department to ensure that all public notices issued use
26 the most recent tax assessment roll.
27

28 **IV.G. Exhibit G – Materials Analysis**
29

30 **Applicable Paragraphs:** All paragraphs apply.

31 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]; Soil
32 Protection [OAR 345-022-0022]

33 **Discussion:** Exhibit G must include an inventory of substantial quantities of industrial materials
34 flowing into and out of the proposed facility site during construction and operation of the
35 proposed facility, including but not limited to, metals, oils and fuels. Quantities of waste
36 materials must be inventoried, and methods of disposal should be described in Exhibits G and
37 W. The applicant must identify any hazardous materials that will be used or stored at the site
38 and describe plans to manage those materials during construction and operation of the
39 proposed facility, including measures to prevent and contain spills.
40

1 The applicant must also describe plans to manage non-hazardous waste materials during
2 construction and operation. Exhibit G must identify any proposed fuel storage areas, vehicle
3 maintenance areas, or other areas that could be used to store hazardous materials.
4

5 IV.H. Exhibit H – Geologic and Soil Stability 6

7 **Applicable Paragraphs:** All paragraphs apply.

8 **Related Council and Other Standards:** Structural Standard [OAR 345-022-0020]

9 **Discussion:** Exhibit H must include Information regarding the geological and soil stability within
10 the analysis area. The contents of Exhibit H must be based on a consultation with the Oregon
11 Department of Geology and Mineral Industries regarding the appropriate methodology and
12 scope of the seismic hazards and geology and soil-related hazards assessments, the appropriate
13 geotechnical work that must be performed at the site, and the guidelines for preparing the
14 geologic report for the application required under OAR 345-021-0010(1)(h)(A). Under OAR 345-
15 021-0010(1)(h)(B), Exhibit H must include a summary of this consultation.
16

17 Under OAR 345-021-0010(1)(h)(A), (E), and (F), Exhibit H must include a geologic report meeting
18 the Oregon State Board of Geologist Examiners geologic report guidelines and an assessment of
19 seismic hazards and appropriate mitigation consistent with the recommendations made by
20 DOGAMI during the consultation and the requirements of the rule. The assessment must
21 explain how the applicant will design, engineer, construct and operate the facility to integrate
22 disaster resilience design to ensure recovery of operations after major disasters and how future
23 climate conditions, including changes in precipitation and stream flow, for the expected life
24 span of the proposed facility will impact the proposed facility.
25

26 Under OAR 345-021-0010(1)(h)(C) and (D), Exhibit H must provide a description and schedule of
27 site-specific geotechnical work that will be performed before construction activities begin at
28 the site, and a description of any locations where the applicant proposes to perform site
29 specific geotechnical work.
30

31 IV.I. Exhibit I – Soils 32

33 **Applicable Paragraphs:** All paragraphs apply.

34 **Related Council and Other Standards:** Soil Protection [OAR 345-022-0022]

35 **Discussion:** Exhibit I must include information from reasonably available sources regarding soil
36 conditions and uses in the analysis area. Reasonably available sources include the Natural
37 Resource Conservation Service’s Web-Soil Survey data, the United States Geological Service’s
38 National Land Cover Database, the Sherman County Soil and Water Conservation District
39 (Sherman SWCD) and adjacent landowners. Exhibit I shall include accurate references and
40 hyperlinks to source data.
41

42 Under OAR 345-021-0010(1)(i)(A), Exhibit I must identify and describe major soil types in the
43 analysis area. Data should be presented in maps and tabular format and should identify general

1 soil characteristics, farmland and capability classification, erosion factors, and any relevant data
2 regarding suitability or limitations for the proposed use.

3
4 Under OAR 345-021-0010(1)(i)(B), Exhibit I must identify and describe current land uses in the
5 analysis area, such as growing crops, that require or depend on productive soils. The Exhibit
6 must include the results of consultation with the Sherman SWCD and adjacent landowners, as
7 feasible, to inform the description of existing agricultural and conservation practices, including
8 existing soil conservation and erosion control features, harvest and rotation schedules, and
9 grazing practices, on lands within and adjacent to the site boundary.

10 This information shall be applied to the impact assessment, as discussed below.

11
12 Under OAR 345-021-0010(1)(i)(C) through (E), Exhibit I must identify and assess potential
13 adverse impacts of construction and operation of the proposed facility, including impacts such
14 as erosion, and soil compaction.

15
16 Exhibit I must also include a site reclamation plan that describes any measures the applicant
17 proposes to avoid or mitigate adverse impacts to soils during construction and operation of the
18 proposed facility and any proposed monitoring program. The site restoration plan should
19 clearly describe all actions that will be taken to conserve, stabilize, and revegetate disturbed
20 soils within the energy facility site.

21
22 Exhibit I should also explain how vegetation, graveled surfaces, and erosion and sediment
23 control Best Management Practices will be managed during operation of the facility. Minimum
24 measures shall include a phased grading plan, dust abatement plan, and coordinated
25 construction and restoration schedule to minimize excessive bare ground impacts; a
26 revegetation plan and plans for ongoing vegetation management and noxious weed control
27 during operation of the facility. Note that the use of domestic sheep for vegetation control will
28 not be permitted at the site due to the risk of disease transmission to nearby bighorn sheep
29 herds.

30
31 The plan or plans must be included as attachments to Exhibit I. The applicant is strongly
32 encouraged to consult with the Sherman SWCD and the Sherman County Weed Department in
33 the development of these plans. Please contact the Department for templates that are
34 consistent with current requirements and guidance.

35
36 For cultivated or arable lands, Exhibit I must contain sufficient evidence to demonstrate that
37 construction and operation of the facility will not result in long-term losses of soil productivity.
38 The Department will recommend that vegetation be required to be maintained to the
39 maximum extent practicable. Any restoration activities for permanent disturbance areas that
40 will occur during decommissioning of the facility must also be described in Exhibits I and X, and
41 the soil reclamation plan. If the applicant relies upon an erosion and sediment control plan to
42 meet the Soil Protection Standard a draft of that plan must be included in the application.

1 The applicant can cross-reference any applicable information related to the federally delegated
2 NPDES 1200-C permit application. Please note that an erosion and sediment control plan that
3 meets the NPDES 1200-C requirements may not necessarily be sufficient to meet the EFSC Soil
4 Protection standard. See Section IV.E for additional discussion of federally-delegated permits.
5

6 IV.J. Exhibit J – Waters of the State and Removal-Fill
7

8 **Applicable Paragraphs:** All paragraphs apply.

9 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000];
10 Removal of Material, Filling [ORS 196.795-.990]; Administrative Rules Governing the Issuance
11 and Enforcement of Removal-Fill Authorizations Within Waters of Oregon Including Wetlands
12 [OAR chapter 141, division 085]

13 **Discussion:** Exhibit J must include information based on literature and field study, as
14 appropriate, about waters of this state, as defined under ORS 196.800, including, but not
15 limited to all natural waterways, intermittent and perennial streams, lakes, and wetlands.
16

17 As noted in the NOI, several intermittent and perennial streams cross through and around the
18 proposed site boundary in addition to small freshwater ponds and emergent wetlands.³³ Under
19 OAR 345-021-0010(1)(j)(A), Exhibit J must include a description of all areas within the site
20 boundary that might be waters of the state and maps showing the location of these features.
21

22 A wetland delineation report that complies with OAR chapter 141, division 90 must be provided
23 to the Department and DSL before the ASC is determined to be complete. The wetland
24 delineation must be conducted using the standard wetland delineation methodology as
25 outlined in the 1987 Army Corps manual and relevant supplements. The applicant must also
26 provide GIS data including the study area boundary and the boundaries of all delineated
27 wetlands and waters to both ODOE and DSL.
28

29 Under OAR 345-021-0010(1)(j)(B), (C), and (F), Exhibit J must describe whether construction or
30 operation of the proposed facility could result in potential adverse impacts to any waters of the
31 state, assess the significance of those impacts, and describe proposed actions to avoid or
32 mitigate adverse impacts and the applicant’s proposed monitoring program, if any, for such
33 impacts.
34

35 If impacts to waters of the state cannot be avoided, Exhibit J must describe the amount and
36 type of material that could be deposited or removed from any waters of the state, consistent
37 with the requirements of OAR 141-085-0525, and any other information needed to determine
38 whether a removal-fill permit is required under OAR chapter 141, division 085.
39

40 Under OAR 345-021-0010(1)(j)(D) and (E), Exhibit J must include an analysis of whether a
41 removal-fill permit is required. If a removal-fill permit is necessary for the proposed facility,
42 Exhibit J must include all information required for the Council to decide on the removal-fill

³³ BSNFNOIDoc01-01 NOI 2024-08-09, 24, 29-30.

1 permit application, including all information required under OAR chapter 141 division 85. This
2 must include a completed and signed Joint Permit Application on the current form, including:

- 3
- 4 • A complete project description.
- 5 • An alternatives analysis including an analysis of alternative sites with lesser impacts to
6 waters of this State and an analysis of alternative designs with lesser impacts to waters
7 of this State.
- 8 • An explanation of how the proposed project minimizes adverse effects to waters of this
9 State, including avoiding and minimizing activities outside of the ODFW-designated in-
10 water-work window; avoiding and minimizing interference with fishing, navigation, and
11 recreation; erosion control; avoiding and minimizing sediment suspension and
12 dispersion; spill response measures; avoiding or minimizing impacts to shallow water
13 habitats; avoiding and minimizing adverse effects to aquatic biota and habitats; avoiding
14 or minimizing disturbance or destruction of native riparian vegetation;
- 15 • Figures depicting wetlands in the Statewide Wetlands Inventory and DSL compensatory
16 mitigation sites.
- 17 • Functions and values assessments of permanently impacted sites, using the Stream
18 Function Assessment Method for wadable streams, Oregon Rapid Wetland Assessment
19 Protocol for wetlands, and Best Professional Judgement for any other non-wadable
20 streams.
- 21 • A rectification plan for restoring disturbed sites within 24-months of disturbance.
- 22 • A compensatory mitigation plan to mitigate for any unavoidable impacts to waters of
23 this State; and
- 24 • A monitoring plan with performance standards for restoration of disturbed areas and
25 performance of compensatory mitigation.
- 26

27 If a removal-fill permit is necessary for the proposed facility, a draft removal-fill permit with
28 draft conditions, must be submitted to the Department by DSL to be included as an attachment
29 to the draft proposed order.

30

31 Wetland delineation reports and removal-fill permit application materials can be sent directly
32 by the applicant to DSL; however, all materials as well as DSL’s concurrence with the wetland
33 delineation must also be submitted to the Department as part of Exhibit J. The Department will
34 work closely with DSL in review of the removal-fill permit application, if applicable.

35

36 If a removal-fill permit is required for the facility and the applicant requests that the permit be
37 governed by the site certificate, the Department and DSL would maintain dual responsibility for
38 compliance with any associated permit conditions. See Section IV.E for additional discussion of
39 state permits.

40

41 **IV.K. Exhibit K – Land Use**

42

43 **Applicable Paragraphs:** (A) and (C).

1 **Related Council and Other Standards:** Land Use [OAR 345-022-0030]

2 **Discussion:** Exhibit K must include information about the proposed facility’s compliance with
3 the statewide planning goals adopted by the Land Conservation and Development Commission,
4 providing evidence to support a finding by the Council as required by OAR 345-022-0030.
5

6 Under ORS 469.504(1), the applicant may establish compliance with the applicable statewide
7 planning goals either by obtaining local land use approval under ORS 469.504(1)(a) or by
8 obtaining Council approval under ORS 469.504(1)(b). Exhibit K must state the applicant’s final
9 election under this section. The applicant indicated in the NOI that it has elected to seek a
10 Council determination of compliance under ORS 469.504(1)(b). Based on this election OAR 345-
11 021-0010(1)(k)(A) and (C) apply to the review of the proposed facility; paragraph (B) does not.
12

13 Under OAR 345-021-0010(1)(k)(A), Exhibit K must include a map showing the comprehensive
14 plan designations and land use zones in the analysis area. Based on information provided in the
15 NOI, the proposed facility is entirely within Sherman County’s Exclusive Farm Use (F-1) Zone
16 and is either in or adjacent to portions of the County’s Natural Hazard Combining Zone.
17

18 Under OAR 345-021-0010(1)(k)(C)(ii), Exhibit K must identify and discuss each applicable
19 substantive criteria from the Sherman County Comprehensive Plan and Sherman County Zoning
20 Ordinance that are required by the statewide planning goals and in effect on the date the
21 preliminary application is submitted and must demonstrate that the proposed facility complies
22 with those criteria. If the proposed facility will not comply with one or more of the applicable
23 substantive criteria, the applicant must demonstrate that the proposed facility nevertheless
24 complies with the applicable statewide planning goals or that an exception to a goal is justified
25 under ORS 469.504(2) and OAR 345-022-0030(4).
26

27 In its comments on the NOI, the Sherman County Court identifies the following sections of the
28 Sherman County Zoning Ordinance as applicable to the review of the proposed facility:
29

- 30 • Section 3.1, Exclusive Farm Use Zone 1. Conditional Uses Permitted
- 31 • Section 3.7, Natural Hazards Combining Zone
- 32 • Section 5.1, Authorization to Grant or Deny Conditional Uses
- 33 • Section 5.2, Conditional Uses, General Criteria
- 34 • Section 5.3, Conditional Uses, General Conditions
- 35 • Section 5.8, Standards Governing Specific Conditional Uses
36

37 The applicant is encouraged to consult with the Sherman County Planning Director to develop
38 the list of applicable substantive criteria to ensure that they are applying the current (at date of
39 submittal of application) applicable substantive criteria. Please note that the County has
40 indicated that it may adopt additional ordinances applicable to energy facilities in the near
41 future. If additional ordinances are adopt prior to submission of the pASC, they must be
42 evaluated in Exhibit K.
43

1 Under OAR 345-021-0010(1)(k)(C)(iii), Exhibit K shall also provide evidence that the proposed
2 facility would comply with any Land Conservation and Development Commission (LCDC)
3 administrative rules and statutory requirements that are directly applicable to the proposed
4 facility under ORS 197.646, including ORS 215.243, 215.274, 215.283, 215.296, and specifically
5 including all requirements regarding the location of the proposed facility within the EFU zone.
6 Exhibit K shall provide evidence that the proposed facility would comply with the applicable
7 administrative rules related to development of solar power generation facilities in OAR chapter
8 660, division 33, as well as rules related to associated transmission lines to energy generating
9 facilities.

10
11 As part of the evaluation of compliance with SCZO Section 5.8 and OAR 660-033-0130(38),
12 Exhibit K must include evidence that demonstrates that the proposed facility will not interfere
13 with accepted farming practices on adjacent lands, and will not make it more difficult for
14 existing farms and ranches in the area to continue operation due to diminished opportunities to
15 expand, purchase or lease farmland, acquire water rights, or diminish the number of tracts or
16 acreage in farm use in a manner that will destabilize the overall character of the study area, if
17 required.

18
19 Because the proposed facility will use more farmland than allowed under OAR 660-033-
20 0130(38), the proposed facility will also require an exception to Statewide Planning Goal 3
21 (Agricultural Lands). The Council’s goal exception process is described at ORS 469.504(2) and
22 OAR 345-022-0030(4). Because the land within the site is not physically developed or
23 irrevocably committed to non-agricultural use ORS 469.504(2)(a) and (b) are not applicable to
24 the proposed facility and Exhibit K must evaluate whether each of the standards listed under
25 ORS 469.504(2)(c) are met:

- 26
- 27 • Reasons justify why the state policy embodied in the applicable goal should not apply
- 28 • The significant environmental, economic, social and energy consequences anticipated
- 29 because of the proposed facility have been identified and adverse impacts will be
- 30 mitigated in accordance with rules of the council applicable to the siting of the proposed
- 31 facility
- 32 • The proposed facility is compatible with other adjacent uses or will be made compatible
- 33 through measures designed to reduce adverse impacts
- 34

35 Exhibit K must clearly demonstrate that all three standards are met and must provide site-
36 specific evidence to support the evaluation. Evaluation of significant impacts to agriculture
37 should include relevant information about specific uses and historic agricultural production on
38 properties within and adjacent to the proposed facility, including agricultural revenue and
39 number of workers employed for agricultural activities. Reasons that support a local economic
40 benefit should provide specific and detailed information about how the proposed facility would
41 provide agricultural-based economic benefits which differ from any other type of development.
42 The applicant should address comments by reviewing agencies, the SAGs, and stakeholder
43 groups about impacts to agriculture in the context of the Goal 3 exception request. The
44 applicant is encouraged to contact the Department for current guidance and information on

1 recent Council decisions in the development of its exception request.

2

3 IV.L. Exhibit L – Protected Areas

4

5 **Applicable Paragraphs:** All paragraphs apply.

6 **Related Council and Other Standards:** Protected Areas [OAR 345-022-0040]

7 **Discussion:** Under OAR 345-021-0010(1)(L)(A) and (B), Exhibit L must include a list and map of
8 the protected areas within the analysis area showing the distance and direction from the
9 proposed facility. Table 9 below presents the protected areas identified in the NOI.

10

Table 9: Protected Areas Inventory within 20 Miles of Facility Site Boundary

Type	Area Name	Distance to Facility Site Boundary (miles)	Direction from Facility
National Park or other unit of the National Park System OAR 345-001-0010(26)(a)	Oregon National Historic Trail	10.25	West
Wilderness Area OAR 345-001-0010(26)(c)	Badger Creek Wilderness	19.0	West
Wild, Scenic, or Recreational River included in the National Wild and Scenic River System OAR 345-001-0010(26)(d)	White Wild and Scenic River	4.5	Southwest
	Deschutes Wild and Scenic River	2.1	West
	John Day Wild and Scenic River	14.7	East
Wilderness Study Area OAR 345-001-0010(26)(h)	Lower John Day Wilderness Study Area	11.4	Northeast
	North Pole Ridge Wilderness Study Area	17.9	Southeast
	Thirtymile Wilderness Study Area	14.4	East
Area of Critical Environmental Concern OAR 345-001-0010(26)(i)(A)	Armstrong Canyon	19.5	Southeast
State park, wayside, corridor, monument, historic, or recreation	Lawrence Memorial Grassland	17.8	South

Table 9: Protected Areas Inventory within 20 Miles of Facility Site Boundary

Type	Area Name	Distance to Facility Site Boundary (miles)	Direction from Facility
area under the jurisdiction of the Oregon Parks and Recreation Department OAR 345-001-0010(26)(j)	Deschutes River State Recreation Area	6.8	North
	White River Falls State Park	5.0	West
Natural area listed in the Oregon Register of Natural Areas OAR 345-001-0010(26)(L)	Tygh Valley State Natural Area	5.5	West
	Lawrence Memorial Grassland Natural Area	17.8	South
Source: BSFNOIDOC01-01 NOI 2024-08-09, Table L-1.			

1

2 If any additional protected areas in the analysis area are identified during the development of
 3 the ASC or if the site boundary is amended, the table and map must be updated accordingly.
 4 Under OAR 345-021-0010(1)(L)(C), Exhibit L must include a description of significant potential
 5 impacts of the proposed facility, if any, on the protected areas including, but not limited to,
 6 potential impacts such as:

7

- 8 • Noise resulting from facility construction or operation.
- 9 • Increased traffic resulting from facility construction or operation.
- 10 • Water use during facility construction or operation.
- 11 • Wastewater disposal resulting from facility construction or operation.
- 12 • Visual impacts of facility structures.
- 13 • Visual impacts from air emissions resulting from facility construction or operation.

14

15 Please note that compliance with the DEQ noise rules does not correlate to compliance with
 16 the noise assessment considered in the Protected Areas standard. Particularly, while
 17 construction noise is exempt from the DEQ noise rules, construction noise must be considered
 18 under the Protected Areas standard. However, information developed to demonstrate
 19 compliance with the DEQ noise rules (such as noise modeling) included in Exhibit Y can be used
 20 in the assessment under the Protected Areas standard.

21

22 If the applicant becomes aware of any potential significant impacts to Protected Areas including
 23 impacts to wildlife or wildlife habitat in the protected areas, the impacts must be disclosed and
 24 evaluated in Exhibit L.

1 IV.M. Exhibit M – Financial Capability

2

3 **Applicable Paragraphs:** All paragraphs apply.

4 **Related Council and Other Standards:** Retirement and Financial Assurance [OAR 345-022-0050]

5 **Discussion:** Exhibit M must include information about the applicant’s financial capability and
6 must include basic information about the applicant’s financial condition. The applicant is not
7 required to provide information or records protected from public disclosure by any provision of
8 state or federal law.

9

10 Under OAR 345-021-0010(1)(m)(A), Exhibit M must include an opinion or opinions from legal
11 counsel stating that, to counsel's best knowledge, the applicant has the legal authority to
12 construct and operate the facility without violating its bond indenture provisions, articles of
13 incorporation, common stock covenants, or similar agreements.

14

15 Under OAR 345-021-0010(1)(m)(B) and (C), Exhibit M must include the type and amount of the
16 applicant’s proposed bond or letter of credit. The proposed amount must be based on the
17 information provided under Exhibit X, and the applicant must explain any discrepancies
18 between the proposed bond amount and the retirement estimate.

19

20 Exhibit M shall include evidence that the applicant has a reasonable likelihood of obtaining the
21 proposed bond or letter of credit from a reputable financial institution in that amount before
22 beginning construction of the facility. If applicant chooses to provide a comfort letter from a
23 financial institution as evidence to support Council’s review of this requirement, the letter must
24 refer to the applicant or facility, be on letterhead, and provide assurance that the financial
25 would issue a bond or letter or credit to the applicant in an amount greater than or equal to the
26 estimated decommissioning amount.

27

28 IV.N. Exhibit N – Need for Nongenerating Facility

29

30 **Applicable Paragraphs:** OAR 345-021-0010(1)(n) does not apply because the proposed facility is
31 a generating facility. Exhibit N is not required.

32

33 IV.O. Exhibit O – Water Use

34

35 **Applicable Paragraphs:** All paragraphs apply except (D).

36 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]; OAR
37 690, Divisions 310 and 380 (Water Resources Department permitting requirements)

38 **Discussion:** Exhibit O must include information about anticipated water use during construction
39 and operation of the proposed facility.

40

41 Under OAR 345-021-0010(1)(o)(A) through (C) and (G), Exhibit O must include a description of
42 how water will be used during construction and operation of the proposed facility, and must
43 describe each source of water and the estimated amount of water the facility will need from

1 each source during construction and during operation under annual average and worst-case
2 conditions, and a description of proposed actions to mitigate the adverse impacts of water use
3 on affected resources.

4
5 Under OAR 345-021-0010(1)(o)(E) and (F), Exhibit O must provide an evaluation of whether the
6 proposed facility would need a groundwater permit, surface water permit or a water right
7 transfer. If the proposed facility needs a groundwater permit, a surface water permit or a water
8 right transfer, Exhibit O information to support a determination by the Council that the Water
9 Resources Department should issue the permit or water right transfer, including information in
10 the form required by the Water Resources Department under OAR Chapter 690, Divisions 310
11 and 380. See Section IV.E for a discussion of OWRD permits and Section IV.U for information
12 requirements related to water service providers.

13
14 In the NOI, the applicant indicates that approximately 175 million gallons of water will be
15 required for the construction of the proposed facility, primarily for dust suppression and road
16 and earthwork compaction. The applicant indicates that it expects water to be obtained from
17 nearby municipalities with existing water rights but that the construction contractor will be
18 responsible for identifying water sources, as needed, and ensuring that any needed permits or
19 approval are obtained for construction water use.³⁴ Exhibit O must identify any potential water
20 sources and provide evidence that the expected water demand can be met.

21
22 The NOI indicates that water will either be used immediately or stored in a tank or holding
23 pond.³⁵ If the applicant will construct or utilize a water holding pond or reservoir as part of the
24 facility it must be identified as a related or supporting facility in Exhibit B and C and the
25 applicant must demonstrate compliance with the applicable provisions of ORS chapter 537 in
26 Exhibit O.

27
28 The NOI indicates that water needed during operations, including water for panel and
29 equipment washing and domestic uses may be provided by an on-site permit exempt well or
30 nearby municipalities with existing water rights.³⁶ Exhibit O must indicate whether or not
31 exempt wells will be constructed at the site and provide evidence to demonstrate that the wells
32 will comply with ORS 537.545.

33 34 IV.P. Exhibit P – Fish and Wildlife Habitat

35
36 **Applicable Paragraphs:** All paragraphs apply.

37 **Related Council and Other Standards:** Fish and Wildlife Habitat [OAR 345-022-0060]

38 **Discussion:** Exhibit P must include Information about fish and wildlife habitat and the species
39 that could be affected by the proposed facility, providing evidence to support a finding by the
40 Council that the design, construction, and operation of the facility, taking into account

³⁴ BSFNOIDoc01-01 NOI 2024-08-09, pg. 29, 45.

³⁵ BSFNOIDoc01-01 NOI 2024-08-09, pg. 29.

³⁶ BSFNOIDoc01-01 NOI 2024-08-09, pg. 29.

1 mitigation, are consistent with the general fish and wildlife habitat mitigation goals and
2 standards of OAR 635-415-0025(1) through (6) in effect as of February 24, 2017.

3
4 The applicant must consult with the Oregon Department of Fish and Wildlife (ODFW) in
5 developing the resources and methods used to develop materials for Exhibit P.

6
7 The Oregon Fish and Wildlife Habitat Mitigation Policy under OAR Chapter 635, Division 415
8 classifies six habitat categories and establishes a mitigation goal for each category. Under OAR
9 345-021-0010(1)(p)(B) and (C), Exhibit P must identify all fish and wildlife habitat in the analysis
10 area, classified by both vegetation class and habitat category as set forth in OAR 635-415-0025
11 and describe the characteristics and condition of that habitat in sufficient detail to justify the
12 categorizations. Note that the proposed site is located within the ODFW mapped Big Game
13 Winter Range. ODFW considers all habitats within winter range, with the exception of areas
14 designated as Category 6 in the Columbia Plateau Ecoregion, to be Category 2 habitat.

15
16 The habitat classification is subject to the Department and ODFW review. Exhibit P must include
17 maps and a table of the areas of permanent disturbance and temporary disturbance (in acres)
18 in each habitat category and subtype. The maps and disturbance tables should also identify any
19 disturbance in Priority Wildlife Connectivity Areas (PWCAs) identified by ODFW.³⁷

20 21 **IV.P.1 Required Surveys**

22
23 Under OAR 345-021-0010(1)(p)(A) through (E), Exhibit P must include a description of biological
24 and botanical surveys performed or scheduled to support the habitat categorization and other
25 information in Exhibit P. At a minimum, the timing, scope, methods, and sources for each
26 survey must be discussed. Requirements for specific surveys are discussed in more detail
27 below. Additional surveys may be required based on consultation with ODFW.

28 29 **IV.P.1.1 Habitat Surveys**

30
31 Under OAR 345-021-0010(1)(p)(B), Exhibit P must include the results of habitat surveys
32 identifying habitat type, vegetation and characteristics, habitat condition, and species use and
33 presence.

34
35 Based on the results of the habitat surveys, the applicant must categorize all habitat within the
36 site boundary as provided under OAR 635-415-0025. The habitat categorization is subject to
37 review and approval by ODFW. Please note that the site is entirely within Big Game Winter
38 Range mapped by ODFW and as a result, all areas not designated as Category 6 will be
39 considered Category 2, essential habitat.

40
41 The habitat categories and the mitigation goals are summarized in Table 10 below.

³⁷ <https://experience.arcgis.com/experience/6979b6598f904951bd0af1821e1595f1/>

Table 10: Habitat Categories Under OAR 635-415-0025

Category	Description	Mitigation Goal
1	Irreplaceable, essential habitat for a fish or wildlife species, population, or a unique assemblage of species and is limited on either a physiographic province or site-specific basis, depending on the individual species, population or unique assemblage.	No loss of either habitat quantity or quality.
2	Essential habitat for a fish or wildlife species, population, or unique assemblage of species and is limited either on a physiographic province or site-specific basis depending on the individual species, population or unique assemblage.	If impacts are unavoidable, no net loss of either habitat quantity or quality and to provide a net benefit of habitat quantity or quality.
3	Essential habitat for fish and wildlife, or important habitat for fish and wildlife that is limited either on a physiographic province or site-specific basis, depending on the individual species or population.	No net loss of either habitat quantity or quality.
4	Important habitat for fish and wildlife species.	No net loss in either existing habitat quantity or quality.
5	Habitat for fish and wildlife having high potential to become either essential or important habitat.	If impacts are unavoidable, it is to provide a net benefit in habitat quantity or quality.
6	Habitat that has low potential to become essential or important habitat for fish and wildlife.	Minimize impacts.

1
2 Under OAR 345-021-0010(C), Exhibit P must include tabular data and maps depicting the areas
3 of permanent and temporary disturbance (in acres) in each habitat category, type and subtype
4 based on the results of the habitat survey.
5

6 IV.P.1.2 Sensitive Species Surveys
7

8 Under OAR 345-021-0010(D), based on consultation with the ODFW and appropriate field study
9 and literature review, Exhibit P must identify all state sensitive species that might be present in
10 the habitat survey areas and a discussion of any site-specific issues of concern to ODFW. In its
11 comments on the NOI, ODFW noted that the project has the potential to affect state special-
12 status species including burrowing owl, bald eagle, golden eagle, long-billed curlew, loggerhead
13 shrike, and Swainson’s hawk as well as locally important species such as bighorn sheep, mule
14 deer, pronghorn and white-tailed jack rabbit.
15

16 Exhibit P must include baseline surveys in appropriate habitats for these species, and any other
17 identified state sensitive species within the analysis area and must provide a map showing the

1 locations of the different species and habitats with respect to the proposed activities. If
 2 sensitive species surveys are required by other jurisdictions, the applicant is encouraged to
 3 provide a single survey report that identifies occurrences of all sensitive species.

4
 5 If state sensitive species, or suitable habitat for state sensitive species, are identified within the
 6 analysis area that could be adversely affected as a result of the proposed facility, the applicant
 7 shall include a description of the nature, extent, and duration of potential adverse impacts and
 8 a description of any proposed measures to avoid, minimize, or mitigate impacts, consistent
 9 with Exhibit P requirements, the Council’s Fish and Wildlife Habitat standard, and ODFW’s
 10 Habitat Mitigation Policy. The applicant is encouraged to engage with ODFW and Department
 11 staff during the development of the ASC to identify appropriate mitigation measures.

12
 13 **IV.P.1.3 Raptor Nest Surveys**

14
 15 The applicant must conduct surveys for raptor nests within 0.5 miles of all proposed
 16 disturbance areas, unless a smaller survey area is approved in writing by ODFW. The applicant
 17 must also provide information on how it will avoid or minimize and monitor impacts to raptors
 18 and other avian species, including curtailing construction activities within the distances of
 19 active nest and burrows and timeframes shown in Table 11 below.

20
Table 11: Seasonal and Spatial Activity Restrictions for Raptor Species

Species	Spatial Buffer	Seasonal Restriction	Release Date if Unoccupied
Western burrowing owl	0.25 mile	April 1 to August 15	31-May
Golden eagle	0.5 mile	Feb 1- Aug 15	15-May
Red-tailed hawk	300-500 ft	Mar 1- Aug 15	31-May
Ferruginous hawk	0.25 mile	Mar 15- Aug 15	31-May
Swainson’s hawk	0.25 mile	April 1- Aug 15	31-May
Prairie Falcon	0.25 mile	Mar 15- Jul 1	15-May
Peregrine falcon	0.25 mile	Jan 1- Jul 1	15-May
American kestrel	0.25 mile	Mar 1- Jul 31	15-May

21
 22 **IV.P.2 Assessment of Impacts to Habitat, Sensitive Species, and Wildlife Movement**

23
 24 Under OAR 345-021-0010(1)(p)(F), Exhibit P must describe the nature, extent and duration of
 25 potential adverse impacts on the habitat and species identified in surveys that could result from
 26 construction and operation of the proposed facility. This assessment must discuss, at a
 27 minimum, the temporary and permanent disturbance (during construction or maintenance
 28 activities) to habitat, sensitive species, and wildlife movement.

29
 30 Portions of the project overlap with mapped PWCA corridors, and the applicant is strongly
 31 encouraged to avoid disturbance in these areas. The primary PWCA corridor near this site is
 32 within and along the edge of Buck Hollow canyon. In addition to protecting the corridor within

1 the canyon itself the applicant is encouraged to maximize unfenced areas along the rim of this
2 canyon to facilitate movement of species that may be impeded by the boundary fence. In
3 addition, strategically placing unfenced corridors within the project boundary footprint to
4 facilitate wildlife passage through the facility footprint could minimize lost connectivity.
5

6 **IV.P.3 Proposed Monitoring and Mitigation**

7
8 Under OAR 345-021-0010(1)(p)(G) and (H), Exhibit P must describe any monitoring and
9 mitigation activities proposed by the applicant to ensure that the construction, operation, and
10 retirement of the facility will comply with the habitat mitigation goals and standards and to
11 otherwise avoid, reduce, or otherwise mitigate adverse impacts to habitat and state sensitive
12 species. The mitigation measures should explain how the applicant will avoid, minimize, and
13 offset the impacts to big game winter range, PWCAs, and other habitat loss that will occur due
14 to the construction and operation of the proposed facility. The applicant is strongly encouraged
15 to consult with ODFW’s Solar Siting Guidance (March 2024) and Oregon Columbia Plateau
16 Ecoregion Wind Energy Siting and Permitting Guidelines (September 2008) in the development
17 of Exhibit P. While these guidelines were developed for wind facilities, much of the guidance is
18 also applicable to solar projects.³⁸
19

20 The analysis area includes several habitats that are rare and declining including wetlands,
21 sagebrush steppe and native grasslands. The applicant is encouraged to demonstrate that the
22 design and micrositing of facility components has minimized disturbance of intact habitats,
23 including any wetlands, sagebrush steppe and native grasslands found on the site, as well as
24 impacts to PWCAs within the analysis area.
25

26 The applicant is also encouraged to design the facility in a manner that minimizes the
27 fragmentation of habitat due to fencing construction, to lessen potential impacts on species
28 such as, but not limited to, mule deer, pronghorn and white-tailed jackrabbit. Utilization of
29 wildlife-friendly fencing designs is encouraged in areas where appropriate. The applicant is also
30 encouraged to limit the removal of native vegetation within the site boundary to the maximum
31 extent possible given the challenges revegetation has presented in similar development
32 scenarios in the region.
33

34 To further minimize impacts to habitat and species, the Exhibit, the applicant will be required to
35 limit construction activities outside of fenced areas between December 1- April 1; avoid
36 conducting any initial site preparation (ground disturbance, vegetation removal) during the
37 critical nesting period for ground nesting birds, April 15- September 1; and avoid construction
38 activities near active raptor nests during sensitive nesting periods as specified in Table 11
39 above.

³⁸ These documents are available here:

Solar Siting Guidance: https://www.dfw.state.or.us/habitat/solar/docs/ODFW_Solar_Guidance.pdf

Oregon Columbia Plateau Ecoregion Wind Energy Siting and Permitting Guidelines:

https://www.dfw.state.or.us/conservationstrategy/docs/OR_wind_siting_guidelines.pdf

1 This information must also be incorporated into a draft Habitat Mitigation Plan and a draft Post
2 Construction Monitoring Plan, which must be included as attachments to Exhibit P.

3
4 The draft Habitat Mitigation Plan and associated information in Exhibit P must clearly
5 demonstrate how the applicant will provide mitigation for any unavoided short- and long-term
6 habitat impacts in accordance with the ODFW Habitat Mitigation Policy. This includes
7 identifying the location of a specific habitat mitigation area that could be used to provide in-
8 kind, in-proximity mitigation for any impacts to Category 2 Habitat, as well as ecological uplift
9 mitigation actions that could be implemented at the habitat mitigation area to provide the
10 appropriate mitigation. Note that ODFW has recommended a 2:1 mitigation ratio for impacts to
11 any functioning, intact Category 2 habitats (i.e., sagebrush steppe, native grasslands, wetlands)
12 that would be impacted by this project. The applicant may propose smaller mitigation ratios for
13 non-functioning habitat areas. Additional mitigation obligations may be imposed for impacts to
14 PWCA's.

15
16 The draft Habitat Mitigation Plan must include the results of the habitat categorization surveys
17 as well as surveys of any proposed habitat mitigation areas and must provide the draft legal
18 mechanism or mechanisms proposed for acquiring the legal right to maintain and enhance the
19 habitat mitigation area. The Habitat Mitigation Plan must include draft success criteria for the
20 proposed ecological uplift actions and describe a process for evaluating monitoring and
21 reference site locations, prior to construction.

22 23 IV.Q. Exhibit Q – Threatened and Endangered Species

24
25 **Applicable Paragraphs:** All paragraphs apply.

26 **Related Council and Other Standards:** Threatened and Endangered Species [OAR 345-022-
27 0070]

28 **Discussion:** Exhibit Q must include information about threatened and endangered plant and
29 animal species that may be affected by the proposed facility, providing evidence to support a
30 finding by the Council as required by OAR 345-022-0070. The ASC will include a desktop analysis
31 for 5 miles from the proposed site boundary and field survey data for within the site boundary.

32
33 Under OAR 345-021-0010(1)(q)(A) through (G), Exhibit Q must include a list of all threatened
34 and endangered species listed in OAR 635-100-0125 or 603-073-0070 that have the potential to
35 occur in the analysis area. The applicant shall identify these species based on a review of
36 literature, consultation with knowledgeable individuals, and reference to the list of species
37 maintained by the Oregon Biodiversity Information Center. For each species identified, Exhibit
38 Q must describe the nature, extent, locations, and timing of its occurrence in the analysis area;
39 how the facility might adversely affect the species; what measures the applicant proposes to
40 avoid or reduce and adverse impact; and the applicant's proposed monitoring program for
41 impacts.

42
43 For each threatened and endangered plant species, Exhibit Q must describe how the proposed
44 facility, including any mitigation measures, complies with the protection and conservation

1 program adopted by the Oregon Department of Agriculture (ODAg), or if there is no protection
2 and conservation program in place for an identified threatened or endangered plant species,
3 describe any significant potential impacts the proposed facility may have on the continued
4 existence of the species and on the critical habitat of such species, and must provide evidence
5 that the proposed facility, including any mitigation measures, is not likely to cause a significant
6 reduction in the likelihood of survival or recovery of the species.

7
8 For each threatened and endangered animal species, Exhibit Q must describe any significant
9 potential impacts of the proposed facility on the continued existence of such species and on the
10 critical habitat of such species, and must provide evidence that the proposed facility, including
11 any mitigation measures, is not likely to cause a significant reduction in the likelihood of
12 survival or recovery of the species.

13
14 Field surveys for any threatened and endangered species that may occur within the analysis
15 area are required within or near suitable habitat that will be disturbed during construction and
16 operation of the proposed facility. The applicant must consult with ODFW and ODAg's Native
17 Plant Conservation Program regarding appropriate field survey methods, survey areas, survey
18 seasons, qualifications of field survey personnel, and the information to be included in a field
19 survey report.

20 21 IV.R. Exhibit R – Scenic Resources

22
23 **Applicable Paragraphs:** All paragraphs apply.

24 **Related Council and Other Standards:** Scenic Resources [OAR 345-022-0080]

25 **Discussion:** Exhibit R must include an analysis of potential significant visual impacts of the
26 proposed facility on scenic resources identified as significant or important in local, state or
27 regional land use plans, tribal land management plans and federal land management plans for
28 any lands located within the analysis area.

29
30 Under OAR 345-021-0010(1)(r)(A) and (B), Exhibit R must include an inventory and a map, or
31 maps of scenic resources identified as significant or important in a land use management plan
32 adopted by one or more local, tribal, state, regional, or federal government or agency
33 applicable to lands within the analysis area. The applicant must provide a list of the land
34 management plans reviewed in developing the inventory and a copy of the relevant portion of
35 the plans.

36
37 For any scenic resources deemed “significant” or “important” in a local, state, regional tribal or
38 federal land management plan, the applicant shall include in the ASC an evaluation of the
39 proposed facility’s consistency or compliance with any development or land use criteria
40 included in the land management plan for the identified resource. The applicant shall also
41 describe the measures it proposes to avoid, reduce, or otherwise mitigate any significant
42 adverse impacts to these scenic resources.

1 A visual impact assessment is required as part of Exhibit R; while no specific methodology is
2 required by EFSC rule, the applicant must submit evidence adequate to demonstrate why the
3 proposed facility is in compliance with the Scenic Resources standard. Visual simulations or
4 other visual representations are not required but can provide important evidence for use by the
5 Department and Council in understanding the potential visual impact of the proposed facility to
6 Scenic Resources.

7
8 IV.S. Exhibit S – Historic, Cultural and Archaeological Resources

9
10 **Applicable Paragraphs:** All paragraphs apply.

11 **Related Council and Other Standards:** Historic, Cultural, and Archaeological Resources [OAR
12 345-022-0090]

13 **Discussion:** Exhibit S must include information about historic, cultural, and archaeological
14 resources. As described under OAR 345-022-0090(2), the Council may issue a site certificate for
15 a facility that would produce power from solar energy without making the findings required
16 under OAR 345-022-0090(1); however, the applicant must still provide sufficient information
17 for the Council to determine whether conditions of approval to ensure compliance with the
18 Standard are appropriate.

19
20 The applicant is strongly encouraged to discuss the proposed facility with all Tribes that could
21 be potentially affected by the construction and operation of the proposed facility, including but
22 not limited to the tribes identified by the Legislative Commission on Indian Services: the Burns
23 Paiute Tribe, Confederated Tribes of the Warm Springs Reservation of Oregon, Confederated
24 Tribes of the Umatilla Indian Reservation.

25
26 Information concerning the location of archaeological sites or objects may be exempt from
27 public disclosure under ORS 192.345(11). Such information, including archaeological survey
28 reports, should be provided confidentially under separate cover in **hard copy only** format, and
29 only after consultation with the Department. Confidential material shall also be provided
30 directly to SHPO, following guidance from the Department and SHPO. Please contact the
31 Department to discuss current practices regarding treatment and submittal of confidential
32 material.

33
34 As described under OAR 345-021-0010(1)(s)(D)(i) to (iii), Exhibit S must describe survey
35 methodology, survey areas, and the results of all surveys conducted for historic, cultural, and
36 archaeological resources as well as an analysis of any significant adverse impacts anticipated
37 and proposed mitigation measures. The information must be adequate to confirm that study
38 methodologies were consistent with applicable State Historic Preservation Office guidelines for
39 conducting field archaeology and historic resource surveys in Oregon and with any U.S.
40 Secretary of Interior standards for cultural resource surveys under Section 106 of the National
41 Historic Preservation Act.

42
43 Under OAR 345-021-0010(1)(s)(A) through (C), Exhibit S must include an inventory of all historic
44 properties identified in the analysis area, including any archaeological sites or objects on private

1 land in the analysis area and archaeological sites on public land in the analysis area. Exhibit S
2 must include an evaluation of whether the historic properties have been listed on, or would
3 likely be listed on, the National Register of Historic Places, based on an evaluation of the
4 National Register Evaluation Criteria as described in National Register Bulletin 15.

5
6 Under OAR 345-021-0010(1)(s)(D), Exhibit S must also include an impact assessment, and
7 proposed measures to avoid or mitigate potential impacts to historic, cultural, or archaeological
8 resources that have been listed on, or would likely be listed on the National Register of Historic
9 Places. Please note that the historic Cutoff to the Barlow Road, part of the Oregon Trail, passes
10 through the site and the Oregon-California Trails Association (OCTA) has indicated that the
11 location may contain trail remnants and artifacts from the period 1848-1884. The applicant is
12 encouraged contact OCTA to discuss potential impacts to this resource during the development
13 of Exhibit S.

14
15 Under OAR 345-021-0010(1)(s)(E), Exhibit S must include the applicant’s proposed monitoring
16 program, if any, for impacts to historic, cultural, and archaeological resources during
17 construction and operation of the proposed facility, including a program to address inadvertent
18 discovery of resources during ground disturbing activities at the site.

20 IV.T. Exhibit T – Recreation

21
22 **Applicable Paragraphs:** All paragraphs apply.

23 **Related Council and Other Standards:** Recreation [OAR 345-022-0100]

24 **Discussion:** Exhibit T must include information about the impact the proposed facility would
25 have on important recreational opportunities in the analysis area.

26
27 Under OAR 345-021-0010(1)(t)(A), Exhibit T must include a description of recreational
28 opportunities in the analysis area, and information identifying whether the opportunity is
29 considered “important” under OAR 345-022-0100, and a map of the analysis area showing the
30 locations of identified important recreational opportunities.

31
32 Under OAR 345-021-0010(1)(t)(B), (C), and (E), Exhibit T must include a description of any
33 potential significant adverse impacts to important recreation opportunities, and a description
34 of measures the applicant proposes to avoid, reduce, or otherwise mitigate and monitor those
35 impacts. Impacts that must be evaluated in Exhibit T include:

- 36 • Direct or indirect loss of a recreational opportunity because of facility construction or
37 operation.
- 38 • Noise resulting from facility construction or operation.
- 39 • Increased traffic resulting from facility construction or operation.
- 40 • Visual impacts of facility structures.

41
42 Note that a visual impact assessment is required as part of Exhibit T. While no specific
43 methodology is required, the applicant must submit sufficient evidence to demonstrate how

1 the proposed facility would comply with the Recreation standard. The applicant should consider
2 the extent of impacts and prior Council evaluations when designing the impact assessment
3 methodology. Visual simulations or other visual representations are not required but can
4 provide important evidence for use by the Department and Council in understanding the
5 potential visual impact of the proposed facility to important recreational opportunities.
6

7 Compliance with the DEQ noise rules (Exhibit Y) does not correlate to compliance with the noise
8 assessment considered in the Recreation standard. Particularly, while construction noise is
9 exempt from the DEQ noise rules, construction noise must be considered under the Recreation
10 standard. However, information developed to demonstrate compliance with the DEQ noise
11 rules such as noise modeling can be used in the assessment under the Recreation standard.
12

13 If the applicant becomes aware of any potentially significant impacts to the identified
14 recreational opportunities other than those described above, the impacts must be disclosed
15 and evaluated in Exhibit T.
16

17 IV.U. Exhibit U – Public Services

18
19 **Applicable Paragraphs:** All paragraphs apply.

20 **Related Council and Other Standards:** Public Services [OAR 345-022-0110]

21 **Discussion:** Exhibit U must include information on how the construction and operation of the
22 proposed facility will impact public services in the analysis area, including sewers and sewage
23 treatment, water, storm water drainage, solid waste management, housing, traffic safety,
24 police and fire protection, health care and schools. Due to the rural nature of the site, the
25 analysis area for public services that may be impacted by increases in traffic or population,
26 including housing, traffic safety, police and fire protection, health care and schools includes the
27 entirety of Sherman and Wasco County.
28

29 Exhibit U must include sufficient evidence to support a finding by the Council that construction
30 and operation of the proposed facility, taking into account mitigation, are not likely to result in
31 significant adverse impact to the ability of public and private service providers to provide
32

33 Under OAR 345-021-0010(1)(u)(A) through (D), Exhibit U must include an analysis identifying
34 the public and private service providers in the analysis area that would likely be affected by
35 construction and operation of the proposed facility, a description of any likely impacts on the
36 ability of the service providers to provide their respective services, and evidence that any
37 adverse impacts, taking into account any mitigation proposed by the applicant, are not likely to
38 be significant. The analysis must describe any important assumptions the applicant used to
39 evaluate potential impacts.
40

41 The applicant may include information developed in support of Exhibit V in its evaluation of
42 impacts to fire protection providers. The evaluation must address potential impacts that may
43 affect responders to wildfire or structural fires at the proposed facility, including but not limited
44 to fires involving the BESS or electrical equipment at the site. The applicant shall provide

1 evidence of consultation with Sherman County Emergency Services and the South Sherman
2 Rural Fire Protection District in the development of this evaluation.

3
4 In evaluating impacts to traffic safety, Exhibit U must contain sufficient evidence to
5 demonstrate that the construction and operation of the proposed facility will not result in
6 significant safety impacts to drivers along major roads near the proposed facility, including but
7 not limited to US 97, US 197, and Oregon Highway 216 (OR-216).

8
9 Impacts that must be evaluated should include the impacts of construction related traffic,
10 vehicles entering and exiting the site during construction, and the potential for glint or glare
11 from solar modules and other surfaces during operation. Exhibit U should also evaluate
12 whether any significant traffic delays will occur and whether these delays could affect other
13 public services, including ambulance services or other emergency responders. The applicant is
14 encouraged to consult with Sherman County Emergency Services in the development of this
15 evaluation.

16
17 The applicant must demonstrate that they consulted with local public works department staff
18 and ODOT on potential haul and traffic routes to be used during construction and discussed
19 existing conditions and capacity of those roads. A draft road use agreement and traffic
20 management plan to be used for the project must also be included in Exhibit U.

21
22 In addition, Exhibit U must evaluate the impacts that the construction and operation of the
23 proposed facility will have on local aviation resources, sufficient to demonstrate compliance
24 with OAR chapter 738, division 070.

25
26 Exhibit U must evaluate the impact that the temporary and permanent workforce will have on
27 housing in the analysis area, including the availability of hotels, RV parks, and other temporary
28 accommodations. **This evaluation must assume that 100 percent of the temporary
29 construction workforce will require temporary accommodations within Sherman or Wasco
30 County unless the applicant can provide evidence to demonstrate the availability of local
31 workers or provide evidence of a local hiring program.**

32
33 In addition to the analysis described above, the applicant is encouraged to obtain letters from
34 local public services providers to demonstrate that the proposed facility would not cause a
35 significant adverse impact on their ability to provide their respective services. Including:

- 36
37
- 38 • Local fire departments,
 - 39 • Police departments,
 - 40 • Public works departments,
 - 41 • Sewer and sewage treatment providers,
 - 42 • Water service providers
 - 43 • Solid waste providers

1 Letters obtained from public service providers include analysis indicating that their level of
2 service would not be impacted. For instance, letters obtained from water service providers
3 should include an evaluation of permit limits, permit or water right numbers, type of water use,
4 and historical demand to demonstrate that it can meet proposed facility needs. Letters from
5 fire service providers should explain how resources used by the facility, in the event of a fire-
6 related issue, would not impact their ability to provide fire emergency response, rather than a
7 conclusory statement without supporting analysis demonstrating a clear understanding of the
8 facility. Letters from public works departments should demonstrate an understanding of
9 proposed road use, including maximum number of vehicle miles travelled and vehicle weight,
10 and confirmation of whether the use would impact local roads.

11
12 Under OAR 345-021-0010(1)(u)(E), Exhibit U must include the applicant's proposed monitoring
13 program, if any, for impacts to public services.

14
15 **IV.V. Exhibit V – Wildfire Prevention and Risk Mitigation**

16
17 **Applicable Paragraphs:** All paragraphs apply.

18 **Related Council and Other Standards:** Wildfire Prevention and Risk Mitigation [OAR 345-022-
19 0115]

20 **Discussion:** Exhibit V must include sufficient information about wildfire risk within the analysis
21 area to support the Council findings required under OAR 345-022-0115. As described in the
22 Sherman County Community Wildfire Protection Plan, Sherman County has a long history of
23 wildfire due to climate, topography, and vegetation profile and conditions at the site are
24 conducive to large, fast-moving fires. Due to the high-level of fire risk, analysis area for wildfire
25 risk will consist of the area within and extending 5 miles from the site. Mapping of wildfire risk
26 and hazard provided to support Exhibit V must include the entire analysis area. Additional
27 supporting information may be based on an analysis of county-wide data.

28
29 Exhibit V must include a characterization of wildfire risk within the analysis area that identifies
30 each of the following:

- 31
32
- 33 • Baseline wildfire risk, based on factors that are expected to remain fixed for multiple
34 years, including but not limited to topography, vegetation, existing infrastructure, and
35 climate.
 - 36 • Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple
37 months but may be dynamic throughout the year, including but not limited to
38 cumulative precipitation and fuel moisture content.
 - 39 • Areas subject to a heightened risk of wildfire, based on the Baseline and Seasonal risk
40 information.
 - 41 • High-fire consequence areas, including but not limited to areas containing residences,
42 critical infrastructure, recreation opportunities, timber and agricultural resources, and
43 fire-sensitive wildlife habitat.

1 The characterization must also describe all data sources and methods used to model and
2 identify risks. The applicant may select data sources and methods as appropriate for the site,
3 but all data must be current and from reputable sources. Sources that should be consulted in
4 the development of Exhibit V include the Sherman County Community Wildfire Protection Plan,
5 the Oregon Community Wildfire Protection Plan Planning Tool and the Oregon Wildfire Risk
6 Explorer.

7
8 Exhibit V must also include separate draft Wildfire Mitigation Plans for construction and
9 operation of the proposed facility. The certificate holder must consult with the South Sherman
10 Rural Fire Protection District (RFPD) and Sherman County Emergency Services Department in
11 the development of the plan, and documentation of the consultation must be included in
12 Exhibit V.

13
14 The Wildfire Mitigation Plan(s) must, at a minimum:

- 15 • Identify areas within the site boundary that are subject to a heightened risk of wildfire,
16 using current data from reputable sources, and discuss data and methods used in the
17 analysis.
- 18 • Describe the procedures, standards, and time frames that the applicant will use to
19 inspect facility components and manage vegetation in any identified areas of
20 heightened risk of wildfire.
- 21 • Identify preventative actions and programs that the applicant will carry out to minimize
22 the risk of facility components causing wildfire, including procedures that will be used to
23 adjust operations during periods of heightened wildfire risk. This should include a
24 discussion of the use of fire breaks, defensible space and vegetation management, fire
25 hardened infrastructure, and power shutoff protocols, as applicable.
- 26 • Identify procedures to minimize risks to public health and safety, the health and safety
27 of responders, and damages to resources protected by Council standards if a wildfire
28 occurs at the facility site, regardless of ignition source. This should include:
 - 29 ○ A description of who will respond to wildfires at the site and a plan for ensuring
30 responders are aware of sensitive resources that should be avoided during fire
31 suppression activities.
 - 32 ○ A description and maps of access and egress options for wildfire responders and
33 emergency vehicles to enter and exit the site in a fire emergency; the locations
34 of stationary water sources, firefighting equipment, emergency shutoffs, or
35 other safety features; and the locations of any hazardous materials or fuels
36 storage, battery components, or other hazards.
 - 37 ○ Information about whether any specialized equipment or training will be needed
38 to respond to fire events at the site involving solar arrays, battery systems, or
39 other facility components.
 - 40 ○ Information about whether facility components, including solar panels and
41 battery components, have the potential to release hazardous materials during a
42 fire and what, if any, protocols will be used to avoid hazards to public health and
43 safety and site contamination.
- 44 • Describe methods the applicant will use to ensure that updates of the plan incorporate

1 best practices and emerging technologies to minimize and mitigate wildfire risk.

2
3 Please contact the Department during the development of the Wildfire Mitigation Plan for
4 current guidance and template documents.

5
6 IV.W. Exhibit W – Solid Waste and Wastewater

7
8 **Applicable Paragraphs:** All paragraphs apply.

9 **Related Council and Other Standards:** Waste Minimization [OAR 345-022-0120]; Public Services
10 [OAR 345-022-0110]

11 **Discussion:** Exhibit W must describe the applicant's plans to minimize the generation of solid
12 waste and wastewater and to recycle or reuse solid waste and wastewater, providing evidence
13 to support findings by the Council under OAR 345-022-0120. As provided in OAR 345-022-
14 0120(2), the Council may issue a site certificate for a facility that would produce power from
15 solar energy without making the findings required by OAR 345-022-0120(1); however, the
16 applicant must still provide sufficient evidence in Exhibit W for the Council to determine
17 whether conditions of approval are needed to ensure that waste generation will be minimized.

18
19 Under OAR 345-021-0010(1)(w)(A), (B), and (D), Exhibit W must include a description of the
20 major types and amount of solid waste and wastewater that construction and operation of the
21 facility are likely to generate; the structures, systems, and equipment for management and
22 disposal of the wastes, including any plans to minimize, recycle or reuse the wastes. This should
23 include a discussion of whether the applicant has plans in place to recycle solar modules,
24 batteries, or other facility components.

25
26 Under OAR 345-021-0010(1)(w)(C), Exhibit W must include a discussion of any actions or
27 restrictions proposed by the applicant to reduce consumptive water use during construction
28 and operation of the facility. This includes water needed for operation and maintenance of the
29 facility and should include a discussion of wastewater and runoff generated from panel
30 washing.

31
32 Under OAR 345-021-0010(1)(w)(E) and (F), Exhibit W must include a description of any adverse
33 impact on surrounding and adjacent areas from the accumulation, storage, disposal and
34 transportation of solid waste, wastewater and stormwater during construction and operation of
35 the facility and evidence that those impacts, taking into account any account any measures the
36 applicant proposes to avoid, reduce, or otherwise mitigate the impacts, will be minimal.

37
38 Under OAR 345-021-0010(1)(w)(G), Exhibit W must include the applicant's proposed monitoring
39 program, if any, for minimization of solid waste and wastewater impacts.

40
41 The applicant is encouraged to reference information provided under other exhibits, including
42 but not limited Exhibits O and U, in the development of this exhibit.

1 IV.X. Exhibit X – Facility Retirement

2

3 **Applicable Paragraphs:** All paragraphs apply.

4 **Related Council and Other Standards:** Retirement and Financial Assurance [OAR 345-022-0050]

5 **Discussion:** Exhibit X must provide information about site restoration, providing evidence to
6 support a finding that the site can be restored adequately to a useful, non-hazardous condition
7 following permanent cessation of construction or operation of the facility.

8

9 Under OAR 345-021-0010(1)(x)(A) and (B), this information must include the estimated useful
10 life of the proposed facility and a description of the specific actions and tasks to restore the site
11 to a useful, non-hazardous condition.

12

13 Under OAR 345-021-0010(1)(x)(C) and (D), Exhibit X must also include an estimate, in current
14 dollars, of the total and unit costs of restoring the site to a useful, non-hazardous condition and
15 a discussion and justification of the methods and assumptions used in preparing the estimate.
16 The estimate should include sufficient detail to identify costs associated with individual tasks
17 and units. The estimate should be provided using the template provided in Attachment 4.

18

19 Under 345-021-0010(1)(x)(E), Exhibit X must include a proposed monitoring plan for any
20 potential site contamination by hazardous materials, including oils or fuels used or stored on
21 site, such as periodic environmental site assessment and reporting. If the applicant believes no
22 monitoring for soil contamination is necessary, Exhibit X must provide evidence to support this
23 position.

24

25 IV.Y. Exhibit Y – Noise

26

27 **Applicable Paragraphs:** All paragraphs apply.

28 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]; DEQ
29 Noise Control Regulations [ORS 467.020 and ORS 467.030; OAR 340, Division 35]

30 **Discussion:** Exhibit Y must include information about noise generated by construction and
31 operation of the proposed facility, providing evidence to support a finding by the Council that
32 the proposed facility complies with the DEQ’s noise control standards in OAR 340-035-0035.³⁹

33

34 Under OAR 345-021-0010(1)(y)(A), Exhibit Y must include predicted noise levels from all
35 potential noise-generating components of the facility including, but not limited to the solar
36 inverters, transformers, transmission lines, switchgears, and the BESS.

37

38 Under OAR 345-021-0010(1)(y)(B), Exhibit Y must include an analysis demonstrating that the
39 predicted noise levels will not exceed the ambient antidegradation standards established under
40 OAR 340-035-0035. Noise generated by the facility may not increase the ambient statistical

³⁹ Please note that these standards were amended by DEQ in October 2024 to allow solar facilities to utilize certain provisions that previously only applied to wind facilities.

1 noise levels, L10 or L50, by more than 10 dBA in any one hour, and may not exceed the levels
2 specified in Table 12 below at any noise sensitive receptor location.

3
**Table 12: New Industrial and Commercial Noise Source Standards Allowable
Statistical Noise Levels in Any One Hour (OAR 340-035-0035, Table 8)**

7:00 a.m. – 10:00 p.m.	10:00 p.m. – 7:00 a.m.
L50 – 55 dBA	L50 – 50 dBA
L10 – 60 dBA	L10 – 55 dBA
L1 – 75 dBA	L1 – 60 dBA

4
5 Under OAR 340-035-0035(1)(b)(B)(iii), the increase in ambient statistical noise levels must be
6 based on an assumed background L50 ambient noise level of 26 dBA unless actual ambient
7 background level if measurements are conducted by the applicant.

8
9 The analysis must evaluate noise impacts using the maximum expected noise levels from all
10 noise-generating equipment during construction and operation. Operational noise from all
11 stationary sources and corona noise from transmission lines must be evaluated. The analysis
12 must clearly identify any noise sensitive properties where exceedances the ambient
13 antidegradation standards are expected.

14
15 Under OAR 345-021-0010(1)(y)(E), Exhibit Y must include a list of the names and addresses of
16 all owners of all dwellings or other noise sensitive properties within one mile of the proposed
17 site boundary; however, if the applicant determines potential exceedances of the ambient
18 antidegradation standards may occur beyond the 1-mile distance, impacts to noise sensitive
19 properties within the area of potential exceedance must be evaluated.

20
21 If actual background levels are used, the analysis must include a discussion and justification of
22 the methods and assumptions used, including methods used to determine ambient noise levels
23 at the site. Sound measurement procedures should be consistent with the requirements of OAR
24 345-035-0035(3). The applicant is not required to conduct ambient noise monitoring at each
25 noise sensitive property; however, the number of ambient monitoring sites must be sufficient
26 to reasonably represent the ambient noise conditions at noise sensitive receptor locations in
27 closest proximity to the proposed site.

28
29 Under OAR 345-021-0010(1)(y)(C) and (D), Exhibit Y must describe any measures the applicant
30 proposes to reduce noise levels or noise impacts or to address public complaints about noise
31 from the facility and any measures the applicant proposes to monitor noise generated by
32 operation of the facility. This information must be provided regardless of whether any
33 exceedances of the ambient antidegradation standards are expected.

34
35
36

1 IV.Z. Exhibit Z – Cooling Tower Impacts

2

3 **Applicable Paragraphs:** OAR 345-021-0010(1)(z) does not apply because the applicant has not
4 proposed to construct an evaporative cooling tower.

5

6 IV.AA. Exhibit AA – Electric and Magnetic Fields

7

8 **Applicable Paragraphs:** All paragraphs apply.

9 **Related Council and Other Standards:** Specific Standards for Transmission Lines [OAR 345-024-
10 0090].

11 **Discussion:** The provisions of OAR 345-021-0010(1)(aa) and OAR 345-024-0090 apply to the 500
12 kV transmission lines and any other aboveground transmission lines.

13

14 Exhibit AA must include sufficient information to support a finding that the applicant:

- 15 • Can design, construct, and operate the proposed transmission line so that alternating
16 current electric fields do not exceed 9 kV per meter at one meter above the ground
17 surface in areas accessible to the public.
- 18 • Can design, construct, and operate the proposed transmission line so that induced
19 currents resulting from the transmission lines will be as low as reasonably achievable.

20

21 This must include the information about the expected electric and magnetic fields of the
22 transmission line required under OAR 345-021-0010(1)(aa)(A), and information about any radio
23 interference likely to be caused by the transmission line.

24

25 IV.BB. Exhibit BB – Other Information

26

27 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]

28 **Discussion:** No additional information is requested at this time.

29

30 IV.CC. Exhibit CC – Other Law

31

32 **Related Council and Other Standards:** General Standard of Review [OAR 345-022-0000]

33 **Discussion:** All requirements apply.

34 (cc) Exhibit CC. Identification, by legal citation, of all state statutes and administrative rules and
35 local government ordinances containing standards or criteria that the proposed facility must
36 meet for the Council to issue a site certificate, other than statutes, rules and ordinances
37 identified in Exhibit E, and identification of the agencies administering those statutes,
38 administrative rules, and ordinances. The applicant must identify all statutes, administrative
39 rules, and ordinances that the applicant knows to be applicable to the proposed facility,
40 whether identified in the project order. To the extent not addressed by other materials in the
41 application, the applicant must include a discussion of how the proposed facility meets the
42 requirements of the applicable statutes, administrative rules, and ordinances.

43

1 IV.DD. Exhibit DD – Specific Standards

2

3 **Applicable Paragraphs:** Paragraph (C) applies.

4 **Related Council and Other Standards:** Specific Standards for Transmission Lines [OAR 345-024-
5 0090].

6 **Discussion:** The Council applies specific standards for transmission lines under its jurisdiction in
7 OAR 345-024-0090. The applicant must provide analysis regarding compliance with OAR 345-
8 024-0090 in Exhibit AA.

9

10 **V. EXPIRATION DATE OF THE NOTICE OF INTENT**

11

12 The NOI will expire on August 16, 2026, unless the applicant submits a petition to extend the
13 expiration date in accordance with OAR 345-020-0060 not less than 45 days before that date. If
14 the Council finds that such a petition shows good cause, the Council may extend the expiration
15 date for a period of up to one year. The applicant's submission of a timely petition for an
16 extension under this rule stays the expiration of the NOI until the Council's decision to grant or
17 deny the extension.

18

19 **VI. PROJECT ORDER AMENDMENT AND APPLICATION COMPLETENESS**

20

21 As provided in ORS 469.330(4) and OAR 345-015-0160(3), the Council or the Department may
22 amend this Project Order at any time. Amendments may include changes to the analysis areas.
23 To issue a site certificate, the Council must determine that the proposed facility complies with
24 Oregon statutes and administrative rules identified in the Project Order, as amended, as
25 applicable to the issuance of a site certificate for the proposed facility (ORS 469.503(3)).

26

27 Under OAR 345-015-0190(5), when the Department determines the ASC contains adequate
28 information for the Council to make findings or impose conditions on all applicable Council
29 standards, the Department will issue a determination of completeness on the ASC. The
30 applicant may submit a written request to waive specific information requirements in OAR 345-
31 021-0010 that are identified as applicable in this Project Order. If the Department grants the
32 waiver, it will amend the Project Order accordingly. In accordance with OAR 345-015-0190(9),
33 after a determination that an application is complete, the Department may require additional
34 information from the applicant if additional information is needed during its continued review
35 of the application.

36

37 **VII. APPLICABILITY AND DUTY TO COMPLY**

38

39 Failure to include an applicable statute, rule, ordinance, permit or other requirement in this
40 Project Order does not render that statute, rule, ordinance, permit or other requirement
41 inapplicable, nor in any way relieve applicant from the duty to comply with the same.

42

43

44

1 OREGON DEPARTMENT OF ENERGY

2

3 *Todd Cornett*

4 [Todd Cornett \(Dec 13, 2024 12:43 PST\)](#)

5

6 Todd R. Cornett, Assistant Director, Siting Division

7 Energy Facility Siting Division

8 Oregon Department of Energy

9

10 Date of Issuance: December 13, 2024

**Attachment 1:
Public Comments**

Comment [2024-289](#)

Organization: Oregon-California Trails Association

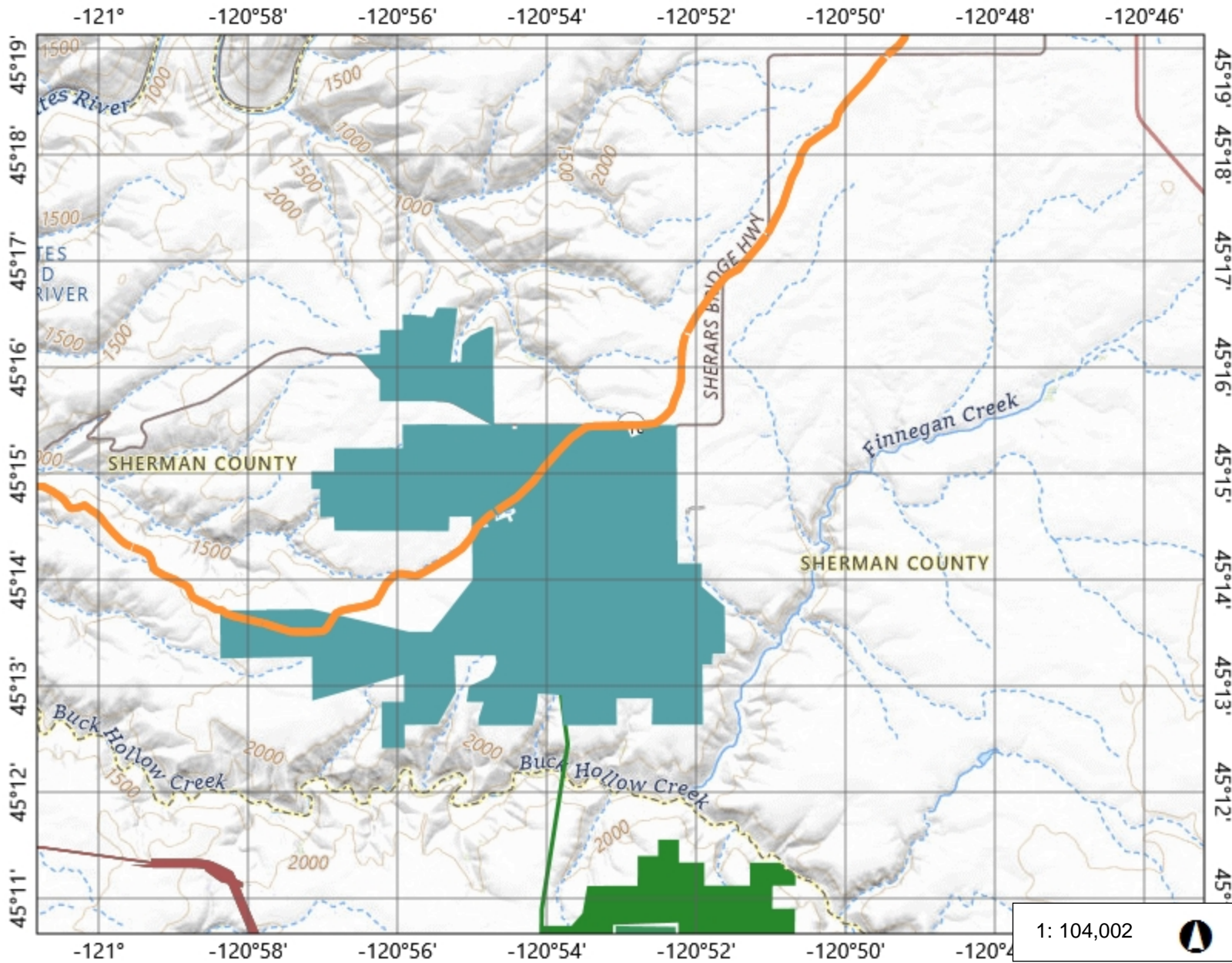
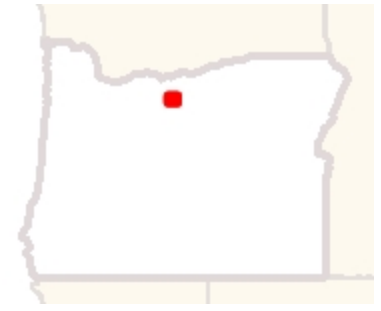
Submitted by: David Welch

Email: welchdj@comcast.net

Zip Code: 98516

Comment Summary: The proposed Buckley Solar Project overlays the historic Cutoff to the Barlow Road. This is a recognized Oregon historic trail as documented in the "Oregon Trails Report," Oregon Trails Coordinating Council, May 1998, page 219.

Comment: A map of the proposed project and the estimated location of the Cutoff to the Barlow Road is attached. The trail is recognized by the National Park Service, the State of Oregon ORS 358.057, the Oregon Governor's Oregon Trail Advisory Council, the Sherman County Historical Society, the Bureau of Land mangament, and the Oregon-California Trails Association (OCTA). The location may contain trail remnants and artifacts from the period 1848-1884. An appropriate archaeological survey should be undertaken. Protective measures and/or mitigation may be required. Members of OCTA can provide assistance as requested.

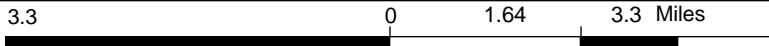


Legend

Oregon Energy Facility Siting Council (EFSC) Facilities

- Archway Solar Energy Facility
- Bakeoven Solar Project
- Biglow Canyon Wind Farm
- Blue Marmot Solar Energy Facility
- Boardman Coal Plant
- Boardman Solar Energy Facility
- Boardman to Hemingway Transmission Line ASC Approved Alternative
- Boardman to Hemingway Transmission Line ASC Approved Route
- Boardman to Hemingway Transmission Line RFA1 Proposed Alternative
- Boardman to Hemingway Transmission Line RFA2 Proposed Alternative
- Bonanza Energy Facility
- Buckley Solar Facility
- Carty Generating Station
- Carty Generating Station pRFA4
- Cascade Renewable Transmission System
- Columbia Ethanol Project
- Coyote Springs Cogeneration
- Daybreak Solar Project
- Eugene to Medford Transmission Line
- Eugene to Medford Transmission Line Amendment 4
- Golden Hills Wind Project
- Hermiston Generating Project
- Hermiston Power Project
- Klamath Cogeneration Project
- Klamath Falls Energy Center

1: 104,002



Notes

Buckley Solar Project Add your notes here

From: [Peacher, Kimberly](#) N [CIV USN NAVFAC NW SVD WA \(USA\)](#)
Sent: Tuesday, September 10, 2024 2:48 PM
To: [CLARK Christopher](#) * ODOE
Cc: [ESTERSON Sarah](#) * ODOE
Subject: RE: Comments on NOI for the Buckley Solar Facility in Sherman County requested by October 10, 2024

Follow Up Flag: Follow up
Flag Status: Completed

Hello Chris,

For this proposal, based on the location, we request a G/G for 060 degrees magnetic heading at 200, 500, 1000 and 1500 feet AGL at 10nm and 5nm prior to development on MTR centerline.

Information is need to inform pilots as to time/month of year when flash blindness could occur.

Please call or email with any questions. Happy to also make this request with the developer.

Thank you.

V/R,

Kimberly Peacher
Community Planning & Liaison Officer
Northwest Training Range Complex
(360) 930-4085
NIPR: Kimberly.peacher@navy.mil
SIPR: Kimberly.peacher@navy.smil.mil

From: CLARK Christopher * ODOE <Christopher.CLARK@energy.oregon.gov>
Sent: Monday, September 9, 2024 2:47 PM
To: BLEAKNEY Leann <bleakney@nwcouncil.org>; HAWKINS Chad * OSFM <chad.hawkins@osfm.oregon.gov>; OSFM OFC * OSFM <osfm.ofc@osfm.oregon.gov>; GIBSON Wade * OSFM <Wade.Gibson@osfm.oregon.gov>; JOHNSON James * ODA <James.JOHNSON@oda.oregon.gov>; BROWN Jordan A * ODA <Jordan.A.BROWN@oda.oregon.gov>; ABERCROMBIE Troy * ODA <Troy.ABERCROMBIE@oda.oregon.gov>; Brandon.PIKE@aviation.state.or.us; SVELUND Greg * DEQ <svelund.greg@deq.state.or.us>; THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>; CLARK Jessica S * ODFW <Jessica.S.Clark@odfw.oregon.gov>; HOLSCHBACH Tim J * ODF <Tim.J.HOLSCHBACH@odf.oregon.gov>; TOKARCZYK John A * ODF <John.A.TOKARCZYK@odf.oregon.gov>; HUBNER Daniel * ODF <Daniel.HUBNER@odf.oregon.gov>; MCCLAUGHRY Jason * DGMI <Jason.MCCLAUGHRY@dogami.oregon.gov>; hilary.foote@dlcd.oregon.gov; JININGS Jon * DLCD <Jon.JININGS@dlcd.oregon.gov>; FITZGERALD Richard W * DSL <Richard.W.FITZGERALD@dsl.oregon.gov>; SALGADO Jessica * DSL <Jessica.SALGADO@dsl.oregon.gov>; RASHID Yassir * PUC <Yassir.RASHID@puc.oregon.gov>; CRUSE Martha * DEQ <Martha.Cruse@deq.oregon.gov>; BJORK Mary F * WRD <Mary.F.BJORK@water.oregon.gov>; KOWITZ Chris C * WRD <Chris.C.Kowitz@oregon.gov>; kimberly.peacher@navy.mil; Jeff_Everett@fws.gov; cityofgrassvalley1901@gmail.com; morocityhall@cityofmoro.net
Cc: CORNETT Todd * ODOE <todd.cornett@energy.oregon.gov>; ESTERSON Sarah * ODOE <sarah.esteron@energy.oregon.gov>
Subject: [Non-DoD Source] Comments on NOI for the Buckley Solar Facility in Sherman County requested by October 10, 2024

Dear agency partners,

The Oregon Department of Energy requests your agency's comments and recommendations on the Notice of Intent to File Application for Site Certificate (NOI) for the Buckley Solar Facility in Sherman County. Specific information requests, as well as additional information about the proposed facility and the Energy Facility Siting Council's review process, are provided in the attached letter. A copy of the NOI and other supporting documents are available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Pages/BSF.aspx>.

Any comments you can provide by **October 10, 2024**, would be most helpful. As detailed in the letter, the Department is hosting a public informational meeting on the NOI at the Grass Valley Pavilion on October 1, 2024, and welcomes attendance by any interested agency staff. I will be following up with more specific requests for input from some individual agencies in the coming weeks, but don't hesitate to reach out if you have any questions about the proposed facility or the request for comments.

Thank you,

Christopher M. Clark
Senior Siting Analyst
550 Capitol St. NE | Salem, OR 97301

**Submission on behalf of the Oregon and Southern Idaho District Council of Laborers,
and Laborers' Local 737 to the Oregon Energy Facility Siting Council**

Comments regarding the Buckley Solar Facility Project

On behalf of the Oregon and Southern Idaho District Council, Laborers International Union of America (LIUNA) Local 737, we want to thank you for the opportunity to provide comments regarding the proposed application for the Buckley Solar Facility.

The developer of this project, Clenera LLC, has made it clear that they intend to ensure that this project is built with skilled workers from the local and surrounding communities in Oregon. It is important to highlight these efforts, as we have met with the developers, to discuss the opportunities for local workers and because of the opportunities available through the Inflation Reduction Act. More specifically, areas of the IRA require that 15% of all work hours be conducted with workers of registered apprenticeship programs. LIUNA Local 737 prides itself on being one of the few registered apprenticeship programs for construction craft laborers and our training center provides certified instructors that train our members and apprentices to guarantee a safe and skilled work environment on the project.

We also want to highlight the large opportunity in front of us in North Central Oregon. There is a large opportunity for workers who are trained and skilled in solar and other energy technologies due to the amount of solar work built and in development in Oregon. This means that when workers finish up one project, they can stay consistent in the solar industry with projects like Buckley Solar.

We ask the Commission to approve this project and commend the developer for their outreach efforts to the labor community prior to this hearing and prioritizing efforts with utilizing a local and skilled workforce in Oregon.

Thank you for the opportunity to speak, and for your consideration of our comments.

From: [Pat Benson](#)
Sent: Sunday, October 6, 2024 5:08 PM
To: [CLARK Christopher](#) * [ODOE](#)
Subject: Buckley Solar Facility

[You don't often get email from pabfarmer333@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

Hi! My name is Patricia A Benson.

I did attend the last meeting in Grass Valley, on October, 1st in Sherman County.

I however had to leave early as my oxygen machine had run out and I needed to leave for home.

I would like to leave my comments about this Buckley solar Facility at this time for the records.

My property Patricia A Benson/ Fred Benson Trust is on the North side of hwy 216 and butts up to and through the land belonging to the Clodfelters.

I have a right of way through the Northern back side of said property. This access of many years allows me to utilize my property in Jones Canyon.

Jones Canyon is home to Turkeys, Big Horn Sheep, Elk, Deer, Chucker's that are trying to come back, Quail, Cougher, Bobcats, Bear and the pesty Coyote. Have even seen a wolf here too.

Many of these

animals travel up from Jones Canyon and go through the Clodfelter property to cross the Hwy to get to the canyons in the south. It is heavy traveled.

There is also a big tree on this property which I have seen as many as 7 big Bucks at once taking up shade under that tree.

I need assurance that if this project goes through, that my access across this property to my property, will not be blocked or made difficult to get to.

How close will the fence around this property come to my property line?

Hopefully only the property on the south side of Hwy 216, that is close to the substation will be adequate.

I have read articles that say these batteries are not as safe as you say and that there is no way to get rid of them after their use or if damaged. We don't have a recycling system for them.

Sincerely, Patricia, Benson

Address:

58914 Brown Rd
Grass Valley, Or
97029

Phone:

541-980-0605

Sent from my iPhone

From: [Pat Benson](#)
Sent: Wednesday, October 9, 2024 9:03 PM
To: [CLARK Christopher](#) * [ODOE](#)
Subject: Scientific review : lithium-ion

You don't often get email from pabfarmer333@gmail.com. [Learn why this is important](#)

I am hoping this is the correct way to send this for you to view this information.

<https://www.google.com/gasearch?q=scientific%20review%20about%20lithium-ion%20battery%20farms&source=sh/x/g/m2/5>



Journal of Energy Storage

Volume 68, 15 September 2023, 107622

Review article

A review of research in the Li-ion battery production and reverse supply chains

Nowsheen Sharmili, Rakesh Nagi  , Pingfeng Wang

[Show more](#) 

 Share  Cite

<https://doi.org/10.1016/j.est.2023.107622> 

[Get rights and content](#) 

Highlights

- Life cycle analysis of Li-ion battery is provided from (re)manufacturing context.
- Prior state-of-knowledge is summarized in a schema.
- Different life cycle stages of Li-ion battery are described in terms of cost & energy.
- Future research directions for end-of-life management and integrated cell design.

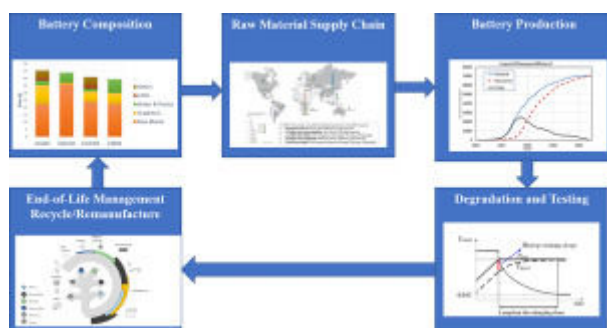
PDF

Help

Abstract

Attributed to the rising popularity of electric vehicles, the global demand for Li-ion batteries (LIBs) has been increasing steadily. This creates several potential issues in the raw material supply chain, as the production of the batteries is not sufficient to meet the increasing demand. Due to the variation of the battery cell designs, different manufacturing processes are typically followed at different stages in the battery life cycle, leading to the differences in both economic and environmental performance. In this regard, this review paper discusses the current battery raw material composition and battery manufacturing processes concerning their financial, and environmental impact. Moreover, the end-of-life management of the LIBs has not been acknowledged universally for various reasons, such as economic constraints, technical difficulties, regulatory gaps, environmental impacts, and logistics issues. The review describes the end-of-life management of the Li-ion battery (LIB) from raw material composition to recycling/remanufacturing from the perspective of industrial engineering, manufacturing, chemical engineering, material science, energy, and sustainability management. Finally, corresponding research gaps in production, reverse supply chains, and logistics for LIBs are discussed, and suitable future research directions are provided at the end.

Graphical abstract



[Download: Download high-res image \(196KB\)](#)

[Download: Download full-size image](#)

Introduction

Vehicle electrification is increasing due to environmental pollution concerns, as well as sustainability challenges of fossil fuels. The increase in electric vehicles (EVs) has spurred the need for new technologies and batteries. Among several types of potential batteries, LIBs have been considered the most suitable and promising candidates for electric vehicles due to their high energy density and good efficiency in the charge/discharge processes. The

PDF

Help

demand for LIBs has been increasing steadily since 2010 [1]. However, the production of LIBs is not sufficient enough to meet the increasing demand [2]. Battery manufacturers are still iterating on the exact standardized manufacturing process along with its economic and environmental impacts. Moreover, the electrochemistry of the batteries varies to a wide extent, creating a need for standardization of the cell design and sorting process [3], [4], [5]. The rising demand for LIBs also imposes several difficulties in the raw material supply chain and waste management. In terms of supply chain, Australia transfers unprocessed ores to China for production as it does not have battery manufacturing facilities. The supply time and transfer issues are related to the processes. Moreover, as the distributed supply chain system is not integrated, it may create several difficulties in mitigating the demand of the customers [6]. The closed loop supply chain formed with recycling/remanufacturing processes of the LIBs minimizes environmental impact [7]. Moreover, the recycling process may compensate for the demand for virgin material along with reducing environmental pollution. However, the battery dismantling technique before recycling does not follow any specific sequencing technique which is still a focus of research. In terms of remanufacturing the batteries, the optimal point of remanufacturing can be determined by several charge–discharge tests [8], [9]. However, the tests can be time-consuming and tedious in the industrial sector. Considering the whole life cycle, the battery cell development and end-of-life battery management have been considered separately in recent decades which leads to suboptimal performances in battery lifecycles.

This calls for a better comprehensive review of the LIB life cycle along with the issues in its life cycle stages. To provide aid to this problem, researchers from multiple varying disciplines have come forward to contribute in mitigating the issues of its life cycle stages. In this perspective, the authors of the paper are presenting a literature review on the life cycle of the LIBs for a better understanding of the state of the art of batteries in a view of manufacturing, supply chain, and end-of-life management. It will be helpful for the manufacturers, remanufacturers, recyclers, and fellow researchers in the field of manufacturing, material science, chemical engineering, energy, sustainable management, and industrial engineering.

The life cycle of the LIBs can be divided into materials extraction, manufacturing, use, and end-of-life management (i.e., recycling or remanufacturing) [10]. The existing work on specific life cycle stages, e.g., manufacturing, degradation, recycling or remanufacturing. Wagner et al. [11] reviewed the manufacturing processes and provided some suggestions for the improvement of the design. Other authors [12] have focused on the forward supply chain, i.e., trade flow of various LIB materials. Kim et al. [13] focused on the recycling operations of the LIBs. Piątek et al. [14] gave several insights on the energy aspect and

PDF

Help

sustainable management of LIBs. The number of papers reviewed for each life cycle stage of LIBs are presented in Fig. 1. Despite some overlap among stages, it can be stated that there is hardly any paper that integrates the entire life cycle stages of the battery. In this regard, the authors of this paper want to provide a holistic view of the LIB life cycle analysis. The authors direct the research in terms of manufacturing, remanufacturing, recycling technology, supply chain, and sustainable management perspectives. Additionally, the authors look forward to research gaps and directions of future research.

To our existing knowledge, no review paper discusses the LIB life cycle on such a large scale considering the battery composition, production, usage, testing, collection, transportation, sorting of waste batteries, and recycling or remanufacturing techniques associated with their risks and regulations. The topics of this review paper draw upon knowledge from different disciplines: manufacturing, material science, chemical engineering, energy, sustainable management, industrial engineering, etc. No specific search strategy for the paper was defined. The topics were searched from Google Scholar via keywords such as, LIB manufacturing, LIB recycling or remanufacturing, and the environmental aspect of LIB. This followed the arduous task of reviewing the abstracts and screening papers for their relevance. This phase resulted in 306 papers. The sources of articles comprised journals, conference proceedings, books, online content, and technical reports. The summarized chronology of these articles is illustrated in Fig. 2. From Fig. 2, it can be gleaned that the LIB research has increased gradually with an acceleration over the last five years, constituting approximately 54% of the volume. Fig. 3 depicts the diverse perspectives of the LIB state of the art which includes manufacturing, chemical engineering, environmental science, material science, power sources, energy storage system, and more. The highest number of citations from a single journal is 39, which is approximately 13% of the total cited articles. The percentage is high as this journal reviews the power sector issues related to batteries.

The organization of this article is as follows. The review methods, sources, and general statistics are presented in Section 1.1. Section 2 describes broadly the various compositions of LIBs. Section 3 reviews the forward supply chain of the lithium, cobalt, nickel, graphite, and LIB. Section 4 provides a thorough discussion about current LIB manufacturing processes along with possible improvements. Section 5 is devoted to the battery degradation during its lifetime and the tests related to the degradation. Section 6 provides a comprehensive review of the reverse supply chain process, i.e., the recycling and remanufacturing processes along with their associated risks and regulations. Section 7 analyzes the research gaps and sets forth ideas for future research directions. Section 8 summarizes the review and makes concluding statements.

PDF

Help

Section snippets

Battery composition

LIB systems typically consist of an anode, cathode, current collectors, separators, electrolyte, thermal management system, and battery management system. The anode consists of active material such as graphite that is bonded with the current collectors using a polymer binder [15]. The cathode constitutes of active materials such as lithium transitional metal oxides (Lithium Cobalt Oxide (LCO), Lithium Iron Phosphate (LFP), Lithium Nickel Manganese Cobalt oxide (NMC), Lithium manganese oxide

Forward supply chain

Potential manufacturing risks are assessed when the raw material supply chain is hampered. The essential raw materials for producing LIBs can be considered as Li, Ni, graphite, Co, etc. The mining, refining, demand, supply, trade flow, and supply risks of the raw materials along with the LIBs are described in the subsequent subsections to provide the reader a thorough understanding of the current supply chain of LIBs.

Battery production

Though there are three different cell designs of LIB: cylindrical (e.g., Panasonic made for Tesla), prismatic (Samsung SDI), and pouch (e.g., SK Innovation, and LG Chem) types based on the packaging methods, the manufacturing of the cells are quite similar [11]. The LIB production process contains three major parts: electrode preparation, slitting process and cell assembly, and battery electrochemistry activation. The schematic diagram of the LIB manufacturing process is attached in Fig. 6.

Battery life degradation and test methods

Manufactured LIBs are provided to EV manufacturers and original equipment manufacturer (OEM). With the use and repeated charge–discharge cycles, the charge capacity and effective battery life degrade. The degradation may occur in the anode or cathode of the electrode due to the formation of the SEI layer, increment of resistance, and loss of lithium or electrode area. The resulting degradation may decrease the lifetime of the battery if proper remedy action, i.e., charging, is not taken. The

PDF

Help

Reverse supply chain

At the end of the usage of LIBs, if they are disposed of in landfills, they can create detrimental impacts on the environment. A closed-loop system (i.e., remanufacturing or recycling) can lower the environmental impacts. The establishment of the closed-loop system introduces the spent LIB collection, transportation, and sorting processes. The environmental regulations of the end-of-life management of LIBs are not fully developed. As a result, there are several unresolved issues regarding the

Directions of future research

The preceding sections discussed different aspects of the state of the art of LIBs with accompanying relevant literature. The authors of the paper identified several gaps while reviewing them. If the research gaps are identified and processed strategically, the production and logistics of Li-ion batteries would be more advanced. The following paragraphs are expanded based on the gaps along with potential future directions to mitigate the gaps.

Conclusion

The demand for LIBs is increasing at a rapid pace which is creating barriers in manufacturing, supply chain, and end-of-life management of batteries. The current production rate of raw materials is not sufficient to compensate for the battery demand. Moreover, the battery production infrastructure is scattered. For instance, Australia transfers unprocessed ores to China for production which creates delays and difficulties in battery transportation. The end-of-life management of the batteries

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

This research is partially supported by the National Science Foundation (NSF) the Engineering Research Center for Power Optimization of Electro-Thermal Systems (POETS), USA with cooperative agreement EEC-1449548, and the Alfred P. Sloan Foundation, USA through the Energy and Environmental Sensors program with grant # G-2020-12455.

[PDF](#)[Help](#)

References (306)

SonocA. *et al.*

[A review of lithium supply and demand and a preliminary investigation of a room temperature method to recycle lithium ion batteries to recover lithium and other materials](#)

Procedia Cirp (2014)

WangX. *et al.*

[Economic and environmental characterization of an evolving li-ion battery waste stream](#)

J. Environ. Manag. (2014)

MayyasA. *et al.*

[The case for recycling: Overview and challenges in the material supply chain for automotive li-ion batteries](#)

Sustain. Mater. Technol. (2019)

ZhangY. *et al.*

[Cycling degradation of an automotive \$LiFePO_4\$ lithium-ion battery](#)

J. Power Sources (2011)

JaffeS.

[Vulnerable links in the lithium-ion battery supply chain](#)

Joule (2017)

JoM. *et al.*

[Effects of residual lithium in the precursors of NMC on their lithium-ion battery performance](#)

J. Phys. Chem. Solids (2018)

ChristmannP. *et al.*

[Global lithium resources and sustainability issues](#)

RaugeiM. *et al.*

PDF

Help

[Prospective LCA of the production and EoL recycling of a novel type of li-ion battery for electric vehicles](#)

J. Clean. Prod. (2019)

VäyrynenA. *et al.*

[Lithium ion battery production](#)

J. Chem. Thermodyn. (2012)

AhmedS. *et al.*

[Cost and energy demand of producing nickel manganese cobalt cathode material for lithium ion batteries](#)

J. Power Sources (2017)



[View more references](#)

Cited by (20)

[Thermochemically driven crystal phase transfer via mechanical activation-assisted chlorination roasting toward the selective extraction of lithium from spodumene](#)

2024, Journal of Industrial and Engineering Chemistry

[Show abstract](#) ✓

[Optimal pricing strategy in the closed-loop supply chain using game theory under government subsidy scenario: A case study](#)

2024, Journal of Energy Storage

[Show abstract](#) ✓

[A thermodynamic approach for characterizing the degradation of Li-ion ba](#)

2024, Journal of Energy Storage

[Show abstract](#) ✓

[Challenges and opportunities for second-life batteries: Key technologies and economy](#)

PDF

Help

2024, Renewable and Sustainable Energy Reviews

[Show abstract](#) 

[Prospects for practical anode-free sodium batteries](#)

2024, Materials Today

[Show abstract](#) 

[In-situ N/O-heteroatom enriched micro-/mesoporous activated carbon derived from natural waste honeycomb and paper wasp hive and its application in quasi-solid-state supercapacitor](#)

2023, Journal of Energy Storage

[Show abstract](#) 



[View all citing articles on Scopus](#) 

[View full text](#)

© 2023 Elsevier Ltd. All rights reserved.



All content on this site: Copyright © 2024 Elsevier B.V., its licensors, and contributors. All rights are reserved, including those for text and data mining, AI training, and similar technologies. For all open access content, the Creative Commons licensing terms apply.



PDF

Help

From: [Pat Benson](#)
Sent: Wednesday, October 9, 2024 9:25 PM
To: [CLARK Christopher](#) * [ODOE](#)
Subject: The green transition is pushing electric vehicles upon the American public as it is believed that they are less greenhouse...

You don't often get email from pabfarmer333@gmail.com. [Learn why this is important](#)

The green transition is pushing electric vehicles upon the American public as it is believed that they are less greenhouse...

Source: IER
Environmental Impacts of Lithium-Ion Batteries - IER

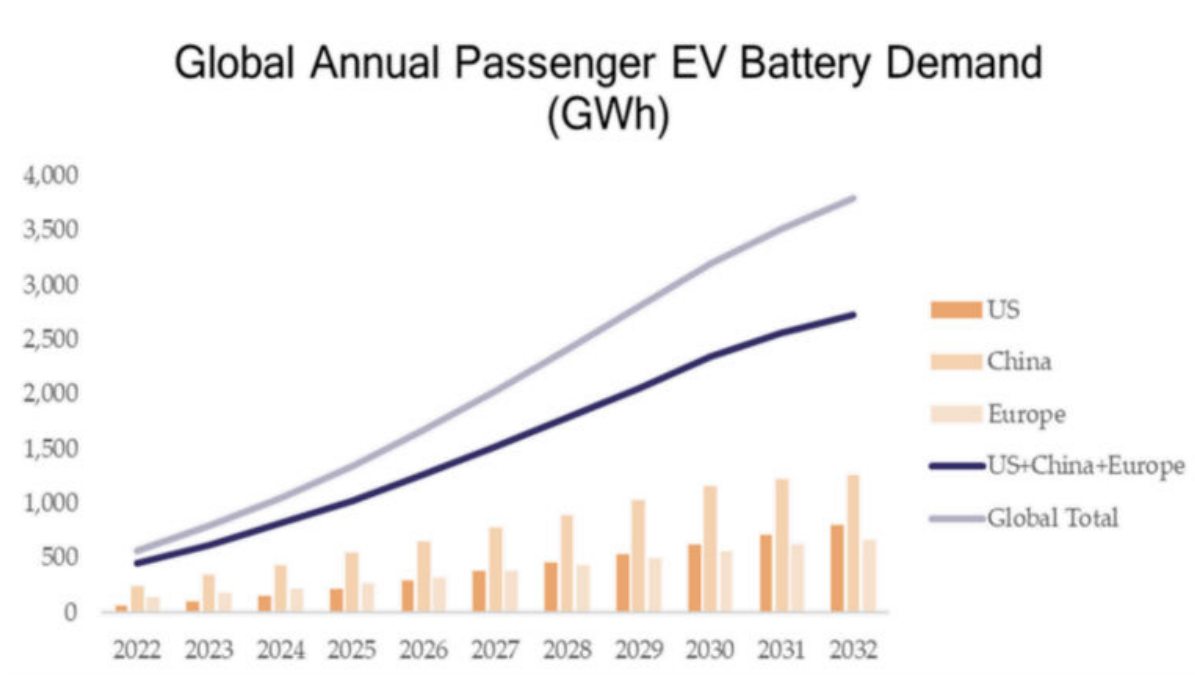
<https://search.app/9kJ7sQQ2uWoBGFAW9>

Environmental Impacts of Lithium-Ion Batteries

IER [instituteforenergyresearch.org/renewable/environmental-impacts-of-lithium-ion-batteries](https://www.instituteforenergyresearch.org/renewable/environmental-impacts-of-lithium-ion-batteries)

May 11, 2023

The green transition is pushing electric vehicles upon the American public as it is believed that they are less greenhouse gas intensive than gasoline vehicles. Electric vehicles, however, require lithium-ion batteries that have issues regarding greenhouse gas emissions during the mining and processing of the raw materials needed and the disposal of the batteries at the end of their life cycle. As more and more electric vehicles are sold, the problems inherent to mining and disposal increase. The graph below shows the huge increase expected in global EV battery demand. In the United States, electric vehicles are being forced on the public through proposed vehicle standards and purchase incentives in the Inflation Reduction Act, also known as the climate bill.

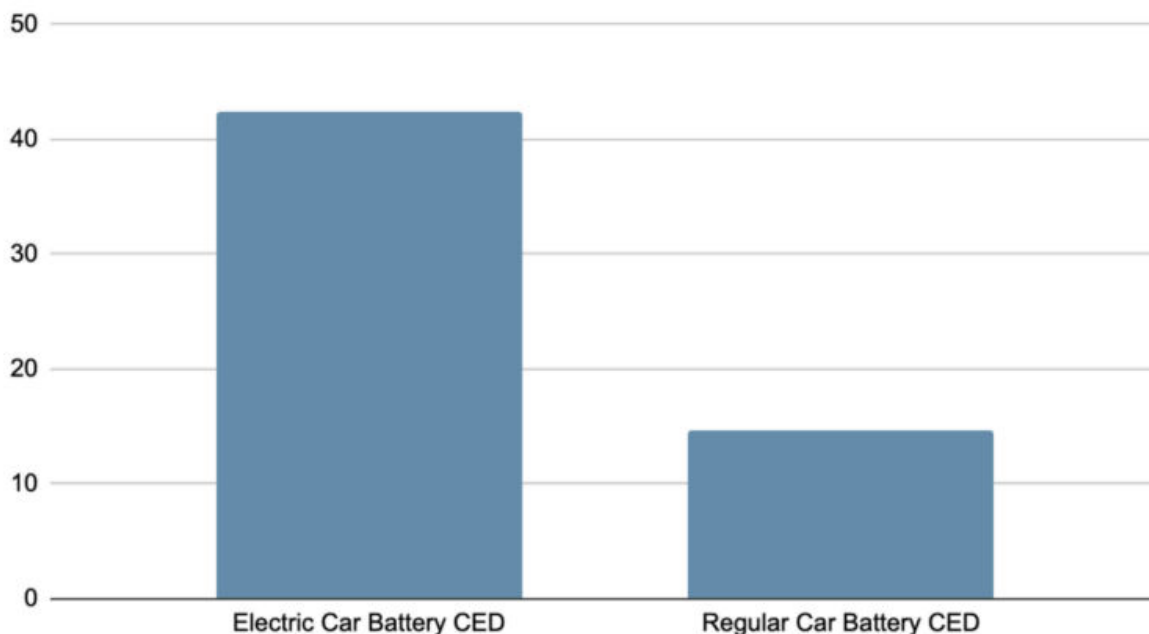


Source: CleanTechnia

The production of lithium-ion batteries that power electric vehicles results in more carbon dioxide emissions than the production of gasoline-powered cars and their disposal at the end of their life cycle is a growing environmental concern as more and more electric vehicles populate the world's roads. About 40 percent of the climate impact from the production of lithium-ion batteries comes from the mining and processing of the minerals needed. Mining and refining of battery materials, and manufacturing of the cells, modules and battery packs requires significant amounts of energy which generate greenhouse gases emissions. China, which dominates the world's EV battery supply chain, gets almost 60 percent of its electricity from coal—a greenhouse gas-intensive fuel. According to the Wall Street Journal, lithium-ion

battery mining and production are worse for the climate than the production of fossil fuel vehicle batteries. Production of the average lithium-ion battery uses three times more cumulative energy demand (CED) compared to a generic battery.

CED of Car Battery Production



Source: Climate News 360

The disposal of the batteries is also a climate threat. If the battery ends up in a landfill, its cells can release toxins, including heavy metals that can leak into the soil and groundwater. A study from Australia found that 98.3 percent of lithium-ion batteries end up in landfills, which increases the likelihood of landfill fires that can burn for years. One landfill in the Pacific Northwest was reported to have had 124 fires between June 2017 and December 2020 due to lithium-ion batteries. Fires are becoming increasingly more common, with 21 fires reported on the site in 2018, increasing to 47 by 2020.

Recycling of lithium-ion batteries is being pushed by governments due to the environmental waste issues associated with them and the growing demand for batteries as more and more electric vehicles are sold. Only about 5 percent of the world's lithium batteries are recycled compared to 99 percent of lead car batteries recycled in the United States. Recycling lithium batteries, however, can be hazardous. Cutting too deep into a cell or in the wrong place can result in it short-circuiting, combusting, and releasing toxic fumes. Because batteries differ widely in chemistry and construction, it is difficult to create efficient recycling systems. And because the cells are often held together with tough glues that make them difficult to take apart, it is often cheaper for battery makers to buy newly mined metals than to use recycled materials, even with rapidly increasing prices.

Governments are beginning to require some level of recycling, however. In 2018, China, which has the largest EV market and lithium-ion battery production, imposed rules aimed at promoting the reuse of EV battery components. Last year, the European Union passed rules for battery recycling that requires a certain percentage of recycled materials to be used in the manufacturing of new batteries.

Composition of Lithium Ion Batteries

A lithium-ion battery is composed of cells, which contain the active materials, a battery management system, and a pack, which is the structure in which the cells are mounted. Aluminum is important for the pack component because of its light weight but it is a very energy-intensive material, representing 17 percent of the battery's carbon footprint. About 40 percent of the carbon footprint of the battery comes from the mining, conversion and refining step of the active materials of the cells where nickel, manganese, cobalt and lithium are processed into cathode powder. Actual cell production is the second most energy-demanding activity and represents 20 percent of the carbon footprint due to the energy used during the manufacturing process.

Issues with Mining of Battery Raw Materials

Two types of mining commonly required to extract minerals for batteries are open-pit mining and brine extraction. One of the major ways to extract lithium called brine extraction uses a large amount of water that is pumped into salt flats, bringing saltwater containing minerals to the surface. Once the water evaporates, lithium is filtered out of the mixture. But, the water-intensive process has the potential to contaminate the water supply. More than half the earth's lithium supply is located in an area called the Lithium Triangle, spanning the Andean Mountain sections of Argentina, Bolivia and Chile. The area is one of the driest places on the globe, and lithium mining consumes as much as 65 percent of the region's water. Any expansion of demand will place more pressure on water issues.

Also needed for electric vehicles is cobalt, the majority of which is mined in the Democratic Republic of Congo (DRC). The mining of cobalt produces hazardous byproducts that can toxify the environment. Cobalt mine sites often contain sulfur, which generate sulfuric acid when exposed to air and water that infiltrates rivers, streams and aquatic life. Child labor is also being used in the Congo to mine cobalt, and about 80 percent of the industrial cobalt mines in the DRC are owned or financed by Chinese companies.

Conclusion

Electric vehicle batteries require mining natural resources, processing them, and manufacturing the materials into batteries, which is energy intensive—3 times more energy intensive than the batteries in internal combustion vehicles. Further, when a battery is at the end of its life cycle, it is usually disposed as e-waste in landfills that can result in hazardous

compounds leaching into the soil and can cause large fires, which are extremely difficult to control due to the large amount of combustible waste that they are mixed with. Recycling the batteries is being pursued by governments, but it is expensive as there is no standardization in battery design and they are difficult to dismantle. Like many things related to the government-imposed green transition, it appears that much of the foresight that typically accompanies market-driven revolutions is actually hindsight, with consumers left to bear the brunt of unwise decisions and edicts.

Comment 2024-301**Comment Summary:** sight location and foreseen issues & impacts**From:** Christopher Whitley**From email address:** cdub8668@gmail.com**Comment Date:** 10/8/2024

Comment: My wife Kristin and I live within the bounds of the proposed Buckley Solar project. There are a few concerns as to this site. As of now our home has a beautiful view of Mount Hood and the surrounding landscape. If the proposed facility goes as planned, we will lose one of the main reasons we moved out into the country and not into the city like we used to live. A 10'-12' high cyclone fence with barbed wire will surround our house. Who would want this? This no doubt will have a major impact for us, and our property value, if we ever needed to sell. Not to mention the negative effect on us to live and see such an industrialized facility next door. I used to work for Iberdrola renewables on Klondike I, II, IIIa out of Wasco, Oregon which is now Ivangrid. Many of my old coworkers still work at those sites, but many now work at the John Day or The Dalles dams. A few now work for them in the solar division and my old partner is now their regional solar manager. In talks with them and others that live near these facilities, it has come to light that during home loan refinancing, that merely within sight of these facilities have caused a devaluation of said properties. The ones most affected are one with mountain and Nature like views such as mine. Properties already in industrialized neighborhoods don't seem as affected as the former. I know I have read that these don't have an impact on property values, but I question such a blanket statement to all properties. If the sight does go in as proposed and through an appraiser it is found to have significantly devalued our property, would and who would compensate us? Would there be something signed by the state or Cleanera to bind them to this compensation?

Another issue facing this project is the fact that the property behind our house just got sold from the previous owner to the "Richardson corporation" out of Seattle Washington. Now that renewable energy has become the next best thing, many are easily paying double the land values in hopes they can build solar or wind. This impacts the surrounding landowners as our ground is zoned for Agriculture. These inflated land purchases on agricultural ground has caused property taxes to go up for everyone else. If these type of properties get bought under agricultural zoned property and have no intent of farming or ranching said ground, what can be done so surrounding landowners do not get slapped with increased cost because of this type of land grab? It is not merely the fact they are going in, but there needs to be a rule that when purchasing or selling said properties in hopes for these type of projects, that they don't affect others. It is also interesting that the state would allow productive Ag land to be taken out in lieu of solar. The impact is other neighboring farms and ranches will lose out on grazing and wheat production, that impacts future generations, as well as current ones. We lose beef, wheat, labor, MCP co-op production, fertilizer, farm equipment and repair (John Deere & MCGG). The long term impact seems to far outweigh the short term construction net gain.

This Buckley solar project also seems to have another issue of concern. The Barlow Trail cutoff (Oregon Trail) runs right through three of the proposed landowners properties. It would seem that such an industrialized project, shouldn't be allowed to erase our history like this. Farming and ranching is one thing, as that is inline with its historical heritage. What protections would the Barlow trail cutoff get if any? There is also numerous native American sites scattered throughout this area. I could take you to several with

arrowheads and pottery and I know one of the landowners that is proposed for this solar has at least one sight such as this in the effected solar area. What protections and guarantees would there be that the barlow trail cutoff and the historic sites from our history wont get impacted?

Lastly a big issue is that it would appear that there is no protection from the State or these Energy facilities as far as fire liability. Right now fire is a normal occurrence in our area and region, due to the nature of running equipment for farming etc. Our community is outstanding with everyone having there own fire fighting rigs and equipment. If a farmer accidentally starts one, we all come together and put it out. Nobody sues or goes after the neighbor. If the public cannot go into a solar facility to protect and put out a fire that may have started from a farmer, the Solar companies insurance will. No farmer has enough insurance liability to cover such expense. They then could easily take out a farmer and his entire operation. What would the state do or say to this major possible impact to our community?

Thank you for taking the time to listen! Christopher & Kristin Whitley

Public Comment 2024-302

From: Wendell Clodfelter

From email address: teamcross1515@gmail.com

Comment Date: 10/9/2024

Comment: I am one of the landowners that has property within the proposed Buckley Solar Project.

I am in my eighties and have lived my entire life on this property. My family and I have produced wheat, raised cattle and participated in programs to plant species that will improve environmental health, quality and habitat.

We have controlled noxious weeds and have supported each other and neighbors the best that we can over the years. With our farmland being so shallow (we are lucky to get 30 bushels per acre) and the astronomical costs of farming equipment, supplies and farmland my family and I would not be able to produce enough wheat for us to be able to afford to farm anymore or create financial sustainability throughout the future. In addition, we would not be able to afford to rent out our property to another farmer.

We have carefully considered this solar project and reviewed the information provided. We have attended open houses and formal meetings. The Oregon Department of Energy requires Clenera LLC to have strict and complete mitigation procedures in place. We are in support of the Buckley Solar Project.



SHERMAN COUNTY SOIL & WATER CONSERVATION DISTRICT

P. O. BOX 405
MORO, OREGON 97039

PHONE (541) 565-3216
FAX (541)565-3430

October 10, 2024

Oregon Department of Energy
Attn: Christopher Clark, Senior Siting Analyst
550 Capitol Street NE
Salem, OR 97031

Re: Buckley Solar Facility Notice of Intent

To Mr. Clark and Whom it May Concern,

I am writing this letter on behalf of the Sherman County Soil & Water Conservation District (SWCD) in response to the proposed Buckley Solar Facility in Sherman County Oregon. As a conservationist with over a decade of experience, I am concerned about the potential affects large scale solar facilities could have on our land, wildlife and water bodies.

Sherman County has a long history of conservation, and the Buckley Solar Facility could negatively affect prior conservation work in Sherman County. In the 1930's the Civilian Conservation Corps (CCC) came to Sherman County to help combat water and soil erosion. To combat erosion the CCC installed soil erosion controls, re-seeded grazing lands and planted trees. Sherman County has traditionally and continues to have a pro-active approach to resource conservation in agricultural operations. As early as the 1950's progressive practices such as strip cropping, and residue management were adopted by early conservationists. Structural erosion control practices were pioneered by dry-land wheat producers in the early 1960's and proved invaluable by the winter of 1964. In the mid 1980's crop residue management became mandatory by the federal government, and in the early 2000's producers began implementing direct seed and no-till farming throughout the County. Farming and conservation practices continue to evolve with advances in technology and watershed health awareness. Since 1999, Oregon Watershed Enhancement Board (OWEB) alone has spent \$2.1 million dollars on restoration projects in Sherman County. This includes 75 miles of instream and riparian habitat treatment and 60,269 acres of upland habitat improvement to protect and improve fish and wildlife habitat. Other funding sources for restoration and water quality improvement projects include Oregon Department of Agriculture (ODA), Department of Environmental Quality (DEQ), Bonneville Power Administration (BPA), Oregon Department of Fish and Wildlife (ODFW), USDA Farm Service Agency (FSA) and USDA Natural Resources Conservation Service (NRCS).

Buck Hollow creek provides critical habitat for steelhead spawning and rearing. In 1991, the implementation of the Buck Hollow Watershed project began, treating land to rectify water quality problems, specifically related to salmonid fisheries. Project measures were installed to reduce water quality impairments such as sediment and nutrient loading, high water temperature and low flows. The phase 8 of the multi-phase project was completed in 2006. Projects consisted primarily of erosion control practices on agricultural and rangelands. Other projects included off stream watering for wildlife and livestock, riparian fencing and enhancements to rangeland health. These projects aimed at restoring the watershed function

to reduce peak runoff events and provide a more stable delivery of clean water to Buck Hollow Creek. The phrase “capture, store and safely release” became the motto of this watershed, and with a ridge top to ridge top approach, represented the philosophy of how this watershed was treated.

The Buckley Solar facility could negatively affect prior conservation practices that have been installed in Sherman County. The installation of this facility will increase the rate of degradation of upland habitat, range, pasture and farmland and will have reaching impacts downstream, including soil run-off, invasive weeds and annual grasses. With years of focus on implementing upland restoration activities, we’ve been able to increase soil health, water storage capacity, and water quality. The land that is proposed for this solar facility is active farmland, Conservation Reserve Program (CRP) and rangeland. Much of this land is designated by FSA as Highly Erodible Land (HEL). The landowners have implemented many practices to limit the amount of erosion that is distributed into the nearby streams, specifically Buck Hollow creek. Will these conservation practices that have been implemented be removed or damaged? If current water and soil erosion structures are removed the likelihood of that sediment ending up in the below stream is very high. Any disturbance on this land allows invasive noxious weeds and annual grasses to take over. Once those are present, they are very costly and difficult to eradicate. During the public meeting we were told that there will be plans in place to prevent degradation of our natural resources and prior conservation work. It has been my experience, as District Manager, that when the time comes to start construction, those plans are not prioritized and any measures that were said to be in place did not happen. The companies are then left with an even bigger problem than what they originally anticipated and have little knowledge on how to deal with it. The statement from the company that this solar facility is in the uplands and not close enough to the stream to affect it is irrelevant. If crop and rangeland have an affect on the water quality and quantity from miles away then there is no doubt in my mind that a 7,800+ acre solar facility will absolutely affect our natural resources, streams, wildlife and fish habitats.

Many of the conservation practices that have been implemented benefit wildlife habitat. The area of this facility provides habitat to a wide range of wildlife including mule deer, elk, upland game birds, and many other species. The Oregon Conservation Strategy is a plan to conserve Oregon’s fish and wildlife and their habitats. It identifies strategy species, strategy habitats, conservation opportunity areas and key conservation issues. The proposed site of this solar facility borders the Bakeoven Creek-Buck Hollow Creek Conservation Opportunity Area (COA) identified by ODFW. While it is not directly in this COA, it will greatly affect the habitat associated with the COA. As per the Oregon Conservation Strategy website, key conservation issues of concern include water quality and quantity and invasive species. In addition to the statewide issues, soil erosion, habitat fragmentation, and large-scale energy development are of conservation concern in this ecoregion. When I have asked what studies have been done on large scale solar facilities and the affect they have on native vegetation, habitat, streams and fish and wildlife, I have not been given any information or a definite answer. Without knowing the impact that this size of facility will have on our environment, how can you approve a facility of such size when there are so many natural resource concerns surrounding it already? The statewide land use planning program has been charged by the legislature to manage urban growth, and protect farm and forestlands and natural resource lands, including coastal and ocean resources. How can taking out 7,800 acres of natural habitat be protecting those natural resource lands?

Currently a priority focus of natural resource management in Sherman County, and much of the Western United States, is the prevention and control of catastrophic wildfires. Every year Sherman County is affected by catastrophic wildfires and according to the USDA Forest

Service we have a very high risk of wildfire; higher than 97% of counties in the United States. The Sherman County SWCD has historically and is currently focusing many of its efforts on wildfire preventative measures such as fire breaks, fuel breaks, and the treatment of annual grasses. The landowners spend time and money every year helping to prevent and put out fires. What steps will be taken to ensure that this facility will not be an additional fire danger to this community? Fire restoration is timely and expensive. In 2018 and 2019, approximately \$345,000 was spent on just 4,000 acres for fire restoration. Since then, seed, chemical and application costs have gone up significantly. Will these energy companies be willing to allocate the resources needed to help with fire restoration?

The resource conservation work that takes place in our watersheds continues on a daily basis. Active restoration and management practices are being implemented all the time. Land managers invest considerable time and money to ensure their land is capable of providing a living while sustaining the health and function of the environment. My concerns with not only the Buckley Solar Facility, but all the large-scale facilities that are being proposed in Sherman County is that we will be going backwards. Decades of conservation and natural resource work will be gone in a matter of months. Why take this ground and make it to where it will potentially never be the same again if we don't even have data that shows the effect of these large-scale facilities? I am concerned that a facility of this size would not only increase sediment in streams but also increase water temperature. Buck Hollow creek is already listed on the DEQ 303(d) list for fish and aquatic life. There have been billions of dollars invested in the State of Oregon to protect fish and wildlife habitat and our natural resources for over 20 years. How can the State disregard the investment they and others have made on conservation and natural resources in communities like Sherman County and not realize the detriment these large-scale solar facilities will have?

Sincerely,

A handwritten signature in blue ink that reads "Amanda Whitman". The signature is cursive and fluid.

Amanda Whitman
District Manager
Sherman County Soil & Water Conservation District

OREGON WHEAT GROWERS LEAGUE115 SE 8th Street 📍 Pendleton, OR 97801 📞 541.276.7330 🌐 www.owgl.org

Oregon Department of Energy
ATTN: Christopher Clark, Senior Siting Analyst
550 Capitol Street NE
Salem, OR 97301

Re: Buckley Solar Facility Notice of Intent to File an ASC

Dear Mr. Clark,

The Oregon Wheat Growers League is a nonprofit trade association supporting the wheat industry throughout the state. We appreciate the opportunity to comment on the public notice of intent to file an Application for Site Certificate for the Buckley solar project in Sherman County. Given the scale of the project and potential impacts to the industry, we offer comments for your consideration, with the intent to minimize negative impacts to neighboring properties and impacts that would reduce viability of the wheat industry overall.

The League supports protection of private property rights and the ability to enhance agricultural land, to the extent it remains compatible with neighboring uses and the ability for the wheat industry to remain viable. We further support studies and assessments during the review process to ensure that a non-agricultural use proposed for an area zoned for exclusive farm use will not force a significant change to, or significantly increase the costs of, farm practices on neighboring lands. In regard to the proposed 7,852 acre Buckley solar project, our specific comments are as follows:

Recommendations regarding the size and location of analysis areas:

- The analysis area is not sufficient to assess the impact of the project on the economic and community vitality, with ongoing industry viability. The project represents a significant amount of land proposed to be taken out of long-term wheat production. Using an analysis area for grain flow from the county footprint would allow for a more complete understanding of the project's contribution to the decline in overall trade flow. The assessment size needs to consider the ongoing ability for handlers and input suppliers to efficiently serve the agricultural communities in the county, given the proposed change in grain flow, and address mitigations that would be necessary with a concentrated area taken out of production.
- The proposed 0.5 mile radius is insufficient to address a number of issues, particularly those related to wildfire and conservation programs.

Studies that should be conducted to identify potential impacts of the proposed facility and mitigation measures:

- **Weed Control/Management.** Soil disturbed in construction becomes a favorable environment for noxious and invasive species. Farms must actively manage weeds and are heavily adversely impacted by weed banks from neighboring properties. The review

OREGON WHEAT GROWERS LEAGUE115 SE 8th Street 📍 Pendleton, OR 97801 📞 541.276.7330 🌐 www.owgl.org

should include an appropriate weed management plan that can be reasonably enforced, completed in consultation with the County weed department.

- **Neighboring property access.** Changes to access points can both positively and negatively impact neighboring parcels. If access points become constrained or disrupted for time-sensitive agricultural operations, those alterations can prevent a farmer from efficiently planting, raising and harvesting crops. A review of current access, and any positive or negative changes that would result, is necessary to include.
- **Fire:** As the state struggles heavily with impacts from wildfire, fire management and response is critical. Assessment of the project's fire safety plan, with adequate fire access and effective management of areas in and around projects to minimize fire risk must be coordinated with the local fire district.
- **Transmission:** Verification that additional transmission is not required across unwilling landowners is important.
- **Runoff and erosion:** Solar construction clears and grade lands which leads to soil compaction and increased erosion. That practice impacts not only the ground the project is on but leads to degradation in waterways and adverse impacts to neighboring properties dealing with the erosion runoff. Ensuring any project consideration includes a robust site restoration plan, with a no bare-earth policy, is necessary. In addition, it should include a long-term plan to address impacts for precipitation runoff being concentrated and avoiding resulting erosion that would adversely impact neighboring properties.
- **Conservation/Restoration.** Conservation and restoration projects take place on a large scale in the county and represent a significant public and private investment. Assessment should include consultation with the Soil and Water Conservation District and NRCS on the impact of conservation practices installed in the county.

Areas specific to our entity / further considerations

- **Industry investment:** In addition to the areas commonly considered in reviews, one that is unique to agricultural production are assessments. Each bushel of wheat produced is assessed and those funds are collectively used to primarily fund research and market development, as well as grower services through the League. The scale of the acres proposed to be taken out of wheat production, unless mitigated, would have an adverse impact on the ability of the industry to invest in itself and its long-term sustainability.
- **Proximity to other properties, houses:** Farms are also homes and the lands are part of communities. Without buffers, neighboring farmers experience a degradation of their quality of life. Setbacks to avoid reducing the degradation of quality of life for neighbors should be considered.

Thank you for the opportunity to provide comment.

Sincerely,

Thad Eakin

Oregon Wheat Growers League Secretary/Treasurer and Sherman County League Past-President

From: [Jamie Wilson](#)
Sent: Thursday, October 10, 2024 5:11 PM
To: [CLARK Christopher](#) * [ODOE](#)
Subject: Buckley Solar Facility Comments

You don't often get email from j30wilson@hotmail.com. [Learn why this is important](#)
Oregon Department of Energy, Clenera, and to whom it may concern,

We are the owners of WB Ranch, Jamie Wilson and Cathy Brown. We own the property directly West of the 7,852 acre Buckley Solar and Battery Project and have many comments and concerns about this proposed project.

Our number one concern is fire. All of Sherman County and especially this particular area is notorious for wildfires. According to the US Forest Service, Sherman County's risk of wildfire is higher than 98% of counties in the United States. A draft map can be seen on "Oregon Wildfire Risk Explorer". As bordering neighbors, we are very concerned that if a fire were to somehow start on our property and burn into this billion dollar facility that Clenera's insurance would come after us. It is not feasible for us to have an insurance policy that would cover potentially millions of dollars in damage.

In our small community it is primarily the farmers and ranchers that fight wildfires. Through a very efficient communication system our local farmers, ranchers, and rural fire departments are able to respond quickly and in most cases get these fires under control in a timely manner. In the event that a fire were to start in or burn into a solar facility of this size it will take hours if not days for specialized fire crews to respond to our remote location. With our counties commonly dry and windy conditions this could be a recipe for disaster. The 50-60 acre battery storage area is also a great concern to us until self fire suppression on these huge batteries can be better proven and tested.

Criminal activity is yet another concern that we have. Eric Desmarais stated himself at the meeting on October 1 that they are required to surround the project with chain link and barbed wire fence to keep criminals out. In neighboring Wasco County, ads were placed needing night security guards for the Bakeoven Solar Project because they were having problems with "Tweakers" stealing at night. We are located 25 miles from the nearest Police Department and do not welcome crime in this otherwise peaceful area.

It was stated in your public notice and on your website that this proposed facility will be on land zoned F-1 (Exclusive Farm Use) so how is it okay to cover it in solar panels? We are nearing a global food crisis and no agricultural zoned land should be succumbed to green energy when it can produce food or be grazed by livestock that in return feed our Nation and the World. A good proportion of this proposed land is utilized for dry land

wheat farming, cattle grazing, and all of this land provides a high quality habitat and forage for all types of game and wildlife.

Directly North of this proposed facility is Jones Canyon and straight to the South is Buckhollow Canyon. Both of these large canyons are major habitats for numerous species of wildlife which include; Mule Deer, Elk, Antelope, Big Horned Sheep, Black Bear, Cougar, Coyote, Bobcat, Fox, Turkey, and Wolf. The canyons are also home to various wild birds as well as sensitive species like the Peregrine Falcon and Golden Eagle. We have lived on this property for over 20 years and can attest that wildlife commonly migrate between these two prominent canyons, foraging along the way. This project would be truly devastating to all of the wildlife in Jones Canyon, Buckhollow Canyon and all areas in between.

When attending your meeting on October 1 your display of the NOI study area distances caught our attention as the entire boundary of this proposed solar facility will be within 0.5 miles distance from wildlife and wildfire hazards. The facility will also be well within 5 miles of recreation opportunities that include hunting, fishing, camping, rafting and boating. There are numerous scenic resources all well within 10 miles of the proposed facility such as Sherar's Falls, the wild and scenic Deschutes River, and White River Falls State Park. Highway 216, known as Sherar's Bridge Highway, is a scenic byway that would run right along the North side and through part of the proposed project. While traveling this highway, rural farmland and vistas can be taken in for as far as the eye can see including the Three Sisters mountains, Mt. Washington, Mt. Jefferson, Mt. Hood and Mt. Adams. This area also has a very rich cultural history with the historic Barlow Cutoff Trail running directly through the proposed solar facility site.

In conclusion, with the great risk of wildfires and dusty conditions we feel that Sherman County is not a suitable location for solar facilities. A solar facility of this size would take valuable farm and grazing land out of production and devastate our vast wildlife population. Given our rural location it would take hours if not longer for law enforcement or specialized fire crews to respond for emergencies. This solar facility would take a huge toll on the recreation in our area and turn our majestic rural landscapes into a complete eyesore. A huge part of Sherman County's history, the Barlow Cutoff Trail, would be lost if the Buckley Solar and Battery facility project is allowed to move forward.

Sincerely,
Jamie Wilson
Cathy Brown

From: [Energy Siting](#) * [ODOE](#)
Sent: Friday, October 11, 2024 11:52 AM
To: [CLARK Christopher](#) * [ODOE](#)
Subject: FW: Buckley Solar Project
Attachments: Comment for ODOE.docx

From: Kathy McCullough <kathymcc@gorge.net>
Sent: Thursday, October 10, 2024 8:28 PM
To: Energy Siting * ODOE <energy.siting@oregon.gov>
Subject: Buckley Solar Project

You don't often get email from kathymcc@gorge.net. [Learn why this is important](#)

The Buckley Project will greatly impact surrounding farming operations. Farmers cannot buy enough insurance to insure their way out of a bad situation. Hot bearings, hot brakes, and equipment issues can start fires during harvest, generally the hottest and driest time of the year. Who will be considered “negligent” or at fault if the solar project catches fire, even if it was by accident? Insurance companies and lawyers take charge, and even the best intentions won’t stop them from suing and bankrupting the farmer whose equipment malfunctioned.

We have a major problem with fire. Fires in Sherman County are dangerous because of the high winds and dry conditions. There is a reason there are so many wind turbines in Sherman County. Winds often exceed 50 mph. Our county lies at the end of the Columbia Gorge - the opening of a big venturi. (An increase in pressure that results when the wind speeds up as it flows through the constricted section to the east, then decreases as it opens up.) The Substation Fire of 2018 was unstoppable because of these winds and burned 78,000 acres in Wasco and Sherman counties.

Our rural fire departments are not equipped for lithium battery fires. Will the solar companies be required to have some sort of fire suppression in place? It could be disastrous, even with suppression, but it would help.

Several of us have talked to our insurance agents about fire - which from a landowner's perspective, is a huge liability. In this area we have gone from approximately twenty companies willing to write farm liability policies to three. Some of these are so expensive that people are opting out of insurance altogether and taking their chances or picking and choosing what to insure. **They agents said there is NO WAY the solar companies can offer or guarantee no litigation because their insurance companies won't agree to that, and the money at the top of these companies won't take a loss like that. The investors and insurance companies will absolutely go after your policy and then liquidate your farm.** One of the agents had to be part of a liquidation process (not solar-related), so he knows firsthand. We knew this. This just confirms it.

ODOE, EFSC, and our county court need to answer the question: If you force us into this situation, and it impacts MY rights on my land, will you personally stand behind fixing it? With your funds and influence you have the power to make a decision to put me in harm's way... and potentially wipe me out; what is your plan to mitigate it?

The Savion project is just across Buck Hollow Canyon: It has a 50-mile potential fire line. Where they are locating it, the fire won't be fought as it goes down into the canyon. Guess where it will come out? On the Sherman County side right by all of us living near the Buckley project.

There is a major problem in the stated goals of DLCD, the Oregon Department of Energy, EFSC, and Oregon law regarding siting solar projects. It is hard to site a solar project (they are *not* farms) on agricultural ground because it has to be reclassified as industrial. It may never go back to *Agricultural* use. Once an industrial powerplant is sited and built, it impinges on the agricultural use surrounding it. The only way to circumvent the law is to declare land in eastern Oregon as a lower-class of farm ground. Then you can ignore the fact that the soft, white winter wheat we grow is a commodity that is prized in Asia for its consistency and quality.

Solar "farms" (misnomer) in the middle of agricultural areas are an accident waiting to happen. Not only does vegetation grow under the panels, but batteries are now being added to the mix. Sixty acres of lithium batteries at the Buckley Project is their estimate, not ours. Will the acreage of panels affect our local weather patterns? They gather a lot of heat and reflect light. During the

winter, our temperatures drop to negative 15 degrees. Lithium batteries are known for their cold soaking and performance issues at low temperatures.

The Buckley project is in one of the higher-risk areas in the county for hail. This can be confirmed through RMA rates for crop hail insurance. Are there contingencies if the panels are damaged, such as in Oklahoma, for hazardous containment?

Did you know the country of Italy has banned the placement of solar projects on agriculture ground because of food security and other issues, like the fact that these companies are all LLCs that aren't liable for much?

Just because the batteries have fire suppression does not mean they are safe. Thermal runaways are fact, not fiction. Look up the UPS 2010 747 crash in Dubai that occurred twenty-two minutes after takeoff. Lithium batteries do not belong in aircraft and they don't belong in regions where there are only rural fire departments and high winds.

<https://www.flyingmag.com/news-ups-747-crash-highlights-lithium-battery-danger/>

Solar companies are not doing well in the stock market. They make money upfront with government kickbacks. The contracts with landowners are five times what a farmer can make farming. Are these contracts sustainable? Solar companies have been placing liens on the landowner's land. Are these companies being vetted? If you have the power to permit, you should have some responsibility to ensure that we are protected. Clenera Energy representatives had no answers for most of our questions at the meetings in Grass Valley. It was very telling to hear so many serious issues raised that have not even been considered.

Chris, at the public comment meeting in Grass Valley, you said your office has all the bonds and ensures they are updated yearly for inflation. Will the bond still be covered if the solar company goes bankrupt? Will they be liable if their insurance policy lapses? I understand that the Oregon Department of Energy does not consider this as part of their job, but it should. It is irresponsible to ignore the issues of bonds, insurance, and accountability. It feels like a land grab.

Off your website: “For more than four decades, Oregon has maintained a strong policy to protect farmland. The state legislature adopted the policy in 1973. It calls for the "preservation of a maximum amount of the limited supply of agricultural land" ([Oregon Revised Statutes 215.243](#)).

The main tool for carrying out that policy is the statewide planning program. Oregon's [Land Conservation and Development Commission](#) (LCDC) sets standards and criteria for protecting farmland. The cities and counties then apply these state requirements through local comprehensive plans and land-use ordinances. Under this system, all counties in Oregon have adopted planning and zoning measures to protect agricultural land.”

There are 66,000 acres slated for solar in Sherman County as of September 2024. This will take out a quarter of our current farmland (257,887 cropland). Try to imagine the impact this will have on our communities. We will lose some of our critical businesses and our local COOP, Mid Columbia Producers (MCP) will lose wheat revenue. Not only will our grain handlers be affected, but every supplier to the local agriculture economy and their employees will be negatively impacted. Equipment dealerships, fertilizer suppliers, fuel companies, stores, and restaurants will all be affected. All support businesses will be hurt, as we are a small, agricultural county. Even what you and the state of Oregon consider “useless” scrub ground supports local businesses and the beef industry. This irresponsible push for solar by the state will devastate our county. https://www.nass.usda.gov/Publications/AgCensus/2022/Online_Resources/County_Profiles/Oregon/cp41055.pdf

What about young and beginning farmers who will be displaced? Many of FSA’s (Farm Service Agency) programs revolve around young and beginning farmers, so this must be important to the state of Oregon.

Finally, agrivoltaics are being touted as the next latest and greatest development in solar. Yet some of our equipment is 150 feet wide, and solar panels that pivot to allow a tractor don’t begin to address this issue. Planning in the western part of the state at OSU in agrivoltaics does not apply here.

Our county in eastern Oregon is a completely different story when it comes to fire risks and solar feasibility. We are very concerned.

Respectively submitted,

Sheriff Brad Lohrey bradlohrey@yahoo.com

Donna Lohrey bradlohrey@yahoo.com

Captain Kathryn McCullough captainkathymccullough@gmail.com

James Kevin McCullough jameskevinmccullough@gmail.com

Carol von Borstel stucarvb@hotmail.com

Stuart von Borstel stucarvb@hotmail.com

Darren Padget ddpadget@gmail.com

Brenda Padget brendapadget@gmail.com

Josh Macnab joshmacnab@yahoo.com

Ashley Macnab joshmacnab@yahoo.com

Jim Macnab jmacnab12@hotmail.com

Dorene Macnab jmacnab12@hotmail.com

Lee von Borstel merlevon2@gmail.com

Merrie von Borstel merlevon2@gmail.com

Dr. Kendra Moulton kendra.moulton22@gmail.com

Colton McCullough mcculloctloc@gmail.com

From: [Energy Siting * ODOE](#)
Sent: Friday, October 11, 2024 11:51 AM
To: [CLARK Christopher * ODOE](#)
Subject: FW: Buckley solar project
Attachments: Alans letter.docx

From: Alan von Borstel <vonborstelranch@gmail.com>
Sent: Thursday, October 10, 2024 10:59 PM
To: CLARK Christopher * ODOE <christopher.clark@energy.oregon.gov>; Energy Siting * ODOE <energy.siting@oregon.gov>
Subject: Buckley solar project

You don't often get email from vonborstelranch@gmail.com. [Learn why this is important](#)

I am writing to oppose the “Buckley Solar Facility” located in south Sherman County Oregon. This will be the first of its kind and size in south Sherman County. This project will set a precedent for future projects.

President Trump’s administration has designated the entire county of Sherman as an opportunity zone. The available transmission lines have attracted a huge number of solar projects, which, if allowed to continue, will significantly affect the culture and historical lifestyle of our area.

I am deeply concerned about the survival of local ag businesses if thousands of acres of farmland are removed from production every year. Witnessing the devastating effects of the Conservation Reserve Program, which removed 25% of this county’s farmland from production in the mid-eighties, is a stark reminder of the potential consequences.

I live seven miles from the Bakeoven solar farm, which is under construction in South Wasco County. It is an eye sore at best and a complete destruction of the “Ag use” land. I live six miles from the proposed Buckley Project and will get to view it from my living room. I settled here because of the wide open spaces, the lifestyle, and the view. Every time I hear people comment about this area, the first thing they comment about is how spectacular the views are here. If this and other future projects are allowed, you will ruin the scenic landscape not only for the current local residents but also for all Oregon residents and travelers.

My son and I currently farm across the fence from the proposed project. I graduated from Oregon State University in 1982 with a degree in Ag Engineering and have been involved in farming and construction ever since. No matter what the solar companies proclaim, these solar sites will never be returned to their original condition and will never be used for agricultural production again.

I have heard people say they should be able to do whatever they want with their land. What about the historic use of these lands by the neighboring properties? Sherman County has a very high risk of wildfires starting and spreading within the community. According to the US Forest Service (USFS), Sherman County's risk of wildfire is higher than 98% of counties in the United States (wildfirerisk.org). Contrary to what the solar companies are saying, it is documented that solar farms start fires. We have talked with the solar company proposing the Buckley Project, and they have said they would not allow anyone to enter their project to extinguish a fire. So we have the potential to allow a fire to grow to 7000 acres in very difficult terrain to fight fire before anyone can attempt to fight the fire in an area already designated by USFS as a "very high risk" wildfire area. This risk will only get worse with the predicted climate change.

Last but not least, I am deeply concerned about our fifth-generation farmers' liability exposure farming near these proposed solar projects. The Buckley Project, when completed, will have an estimated value of 1.2-1.5 billion dollars. There is no way our farm can afford to purchase liability insurance to cover the risk of accidental fires leaving our property and entering the project area. The solar company has already stated they won't allow entry to extinguish the fire, so the potential for a complete loss is extremely high. If allowed to develop this project and any future projects, it will not only remove the project area from Ag uses but has the potential to drastically affect the neighboring farm's ability to continue operation. We will be dealing with multi-billion dollar foreign companies protected by multi-level LLCs.

I urge you to deny the construction of the proposed facility based on its adverse effects on the area's cultural, historic, and scenic values. I further urge you to deny based on the extreme fire risk and potential devastating economic effects on the current "Ag use" community.

Respectfully submitted,

Alan von Borstel

Attachment 2:
Special Advisory Group Comments



October 9, 2024

Christopher M. Clark
Siting Analyst
550 Capitol Street NE
Salem, Or 97301

RE: Buckley, NOI Comment

Dear Mr. Clark,

Thank you for the opportunity to comment on the Buckley Solar project. The following comments are conveyed on behalf of the Sherman County Court.

1) The name, address and telephone number of the contact person assigned to review the application for your agency:

Georgia Macnab
Sherman County Planning Director
PO Box 381
Moro, OR 97039

2) Comments on aspects of the proposed facility that are within the particular responsibility or expertise of your agency.

The Sherman County Court has listened to concerns from citizens that live near the proposed solar farm. They are concerned about the future impacts that the solar farm will create. These include the visual impact to those living near the potential site, wildfire, long term damage to the ground and loss of farm ground and grazing pasture.

Fire concerns are of high significance to the county. The NOI states that fire concerns are minimal and not anticipated when the project is operational. Where did the developer's determination of this statement come from? Wildfires can and do start and spread quickly. There is a history of wildfires in this area plus wildfire can spread from Wasco County to Sherman County. The county feels that this statement is highly underestimated and should be looked at more seriously. The developer will need to meet with the South Sherman Fire Department and create a fire plan that satisfies the department and community.

The county would like to see some kind of set backs from surrounding residents imposed on the solar farm. They will most likely propose a setback in the recommended conditions later in the process. At this time there is not a setback ordinance in place.

3) A list of statutes, administrative rules and local government ordinances administered by your agency that might apply to construction or operation of the proposed facility and a description of any information needed for determining compliance.

Article 3, 3.1, Exclusive Farm Use Zone 1. Conditional Uses Permitted

(q) Commercial Utility Facilities

(x) Transmission Lines over 200 Feet in Height.

Section 3.7 Natural Hazards Combining Zone

There appears to be areas within the proposed site that is bordering a Natural Hazards Combining Zone. This will need to be assessed.

The regulations regarding Conditional Use Permits are found in the SCZO:

Article 5 Sections 5.1 Authorization to Grant or Deny conditional Uses

5.2 General Criteria

5.3 General Conditions

Section 5.8 Standards Governing Specific Conditional Uses

- 10. Radio or Television Transmitter Tower, Utility or Substation
- 14. Public Facilities and Services
- 20. Non Farm Uses in an F-1 Zone

4) A list of any permits administered by your agency that might apply to construction or operation of the proposed facility and a description of any information needed for reviewing a permit application.

- Sanitation- North Central Public Health District provides sanitation permits for Sherman County. They are located in The Dalles, OR.
- Road Approach Permit- Sherman County Road Department
- Road Use Agreement- Sherman County Road Department
- Building permits- Oregon State building codes, Pendleton Regional Office.
- Conditional Use Permit- Sherman County Planning.

5. Recommendations regarding the size and location of analysis areas (see below for more information).

- Sherman County has a history of wildfires in the county. The analysis area should be expanded beyond the .5 mile radius.
- Land use should be expanded beyond the .5 mile radius.

6) A list of studies that should be conducted to identify potential impacts of the proposed facility and mitigation measures.

- Contact Sherman County Emergency Services for impacts of ambulance services
- Meet with South Sherman Rural Fire Protection District for wildfire concerns or wildfire plan.
- Meet with the Sherman County Weed Department for weed control on the site.
- Soils Impact Analysis/Study- contact Sherman County NRCS and SWCD
- Watersheds-Sherman County SWCD
- ODOT may require a Traffic Analysis Impact Study for state Hwy 216 which connects onto Buckley Rd.

If you have any questions please contact me at 541-565-3601.

Sincerely,

Georgia L. Macnab, Sherman County Planning Director
cc: Sherman County Court

**Attachment 3:
Reviewing Agency Comments**



Oregon

Tina Kotek, Governor

Department of Forestry
State Forester's Office
2600 State St
Salem, OR 97310-0340
503-945-7200
www.oregon.gov/ODF

September 13, 2024

Christopher M. Clark, Senior Siting Analyst
Oregon Department of Energy
550 Capitol St NE
Salem, OR 97301

RE: Buckley Solar Facility

Please accept the following response from the Oregon Department of Forestry (ODF) regarding the proposed Buckley Solar Facility in Sherman County. Based upon the facility location map provided with the memorandum received September 9, 2024, the proposed project would not be located on (or in close proximity to) any forest land. Therefore ODF does not have specific comments or recommendations on the project within the scope of its jurisdiction or expertise.

In general, ODF's concerns regarding any proposed project are primarily related to the potential for construction, operation, and/or maintenance of project components across state or privately-owned forest lands, as well as to the mitigation of hazards with respect to wildfire risk. Wherever a proposed project's components or activities may intersect with Oregon forest land and/or forest operations, it is expected that the applicant will be familiar with and fulfill all relevant obligations under the Oregon Forest Practices Act (Oregon Revised Statutes Chapter 527; Oregon Administrative Rules Chapter 629). Likewise, it is expected that the applicant will be familiar with and fulfill all relevant obligations related to fire prevention (Oregon Revised Statutes Chapter 477). While ODF does not have specific comments on the proposed Buckley Solar Facility, complete understanding and observance of these requirements is the responsibility of the applicant wherever they may be applicable to activities carried out as part of a proposed project.

ODF appreciates the opportunity to comment on the proposed project. In the event that future questions or concerns arise relative to ODF's scope of expertise, please do not hesitate to contact me by email at daniel.hubner@odf.oregon.gov or by phone at 503-779-4004.

Sincerely,

Dan Hubner, Information Analyst
Resource Planning Office
Oregon Department of Forestry



Oregon

Tina Kotek, Governor

Department of State Lands

951 SW Simpson Ave., Suite #104

Bend, OR 97702

(541) 388-6112

FAX (541) 388-6480

www.oregon.gov/dsl

State Land Board

September 23, 2024

RF600/65264

Oregon Department of Energy
ATTN: Christopher M. Clark, Senior Siting Analyst
550 Capitol Street NE
Salem, OR 97301

Tina Kotek

Governor

LaVonne Griffin-Valade

Secretary of State

Re: Comments on the Notice of Intent to Apply for a Site Certificate for the Buckley Solar Facility, located in Sherman County.

Tobias Read

State Treasurer

Dear Christopher M. Clark:

We have received the Notice of Intent for the Buckley Solar Facility, in Sherman County, Oregon. This letter is the Department of State Lands' response to the Notice.

1) The name, address and telephone number of the contact person assigned to review the application for your agency.

Richard Fitzgerald
Aquatic Resource Coordinator
Department of State Lands
951 SW Simpson Ave., Suite #104
Bend, OR 97702
richard.w.fitzgerald@dsl.oregon.gov
(503) 910-4565

2) Comments on aspects of the proposed facility that are within the particular responsibility or expertise of your agency.

- **The address and phone number listed for the Department of State Lands on pages 17 and 48 are incorrect. The correct headquarters address is Department of State Lands, 775 Summer St. NE, Suite 100, Salem, OR 97301-1279. The correct headquarters phone number is 503-986-5200.**
- **The Authority/Description listed for Removal / Fill Permit on page 19 is incorrect. A person or utility is required to have a permit if an activity will involve filling or removing 50 cubic yards or more of material in a wetland or waterway. For sites within a state designated Essential Indigenous Anadromous Salmonid Habitat (ESH), State Scenic Waterway, or compensatory mitigation site, a permit is required for any amount of removal or fill.**
- **Any potential impacts to waters of this state resulting from removal or fill should be identified.**

3) A list of statutes, administrative rules and local government ordinances administered by your agency that might apply to construction or operation of the proposed facility and a description of any information needed for determining compliance.

**Oregon Removal-Fill Law (ORS 196.795 - 196.990)
OAR Chapter 141, Divisions 85, 89, 90, 93, 100.**

4) A list of any permits administered by your agency that might apply to construction or operation of the proposed facility and a description of any information needed for reviewing a permit application.

Removal-Fill Permit (including Individual Permit, General Removal-Fill Permit, and General Authorization). Please submit

- a Wetland Delineation, and
- a complete Joint Permit Application.

5) Recommendations regarding the size and location of analysis areas (see below for more information).

A Wetland Delineation should be conducted to identify wetlands and other surface waters to identify the presence of regulated surface waters within the project site boundary. The Delineation should be conducted in accordance with the requirements of OAR Chapter 141, Division 90.

6) A list of studies that should be conducted to identify potential impacts of the proposed facility and mitigation measures.

Wetland Delineation.

If you have any questions, please call me at (503) 910-4565.

Sincerely,



Richard Fitzgerald
Aquatic Resource Coordinator
Aquatic Resource Management
Oregon Department of State Lands

RF:hsk

cc: Christopher M. Clark christopher.clark@energy.oregon.gov
Jess Salgado, Department of State Lands
Jason Seals, Oregon Dept. of Fish and Wildlife
US Army Corps of Engineers, Portland Office
Sherman County Planning Dept.
Vernon Wolf, DSL Proprietary Coordinator

From: [PIKE Brandon](#)
Sent: Thursday, October 10, 2024 3:12 PM
To: [CLARK Christopher](#) * ODOE
Subject: RE: Comments on NOI for the Buckley Solar Facility in Sherman County requested by October 10, 2024

Hi Christopher,

It doesn't look like ODAV will have any concerns with this proposal. Thanks for keeping us in the loop.

Best,

BRANDON PIKE
OREGON DEPARTMENT OF AVIATION (ODAV)
AVIATION PLANNER



PHONE 971-372-1339

EMAIL brandon.pike@odav.oregon.gov

3040 25TH STREET SE, SALEM, OR 97302

WWW.OREGON.GOV/AVIATION

Alternative Contacts:

COAR Grants: Grants@ODAV.Oregon.Gov
Procurement / Contracts: Contracts@ODAV.Oregon.Gov
Pavement (PEP/PMP): Pavement@ODAV.Oregon.Gov
Land Use / Tall Structures: LandUse@ODAV.Oregon.Gov

*****CONFIDENTIALITY NOTICE*****

This e-mail may contain information that is privileged, confidential, or otherwise exempt from disclosure under applicable law. If you are not the addressee or it appears from the context or otherwise that you have received this e-mail in error, please advise me immediately by reply e-mail, keep the contents confidential, and immediately delete the message and any attachments from your system.

From: CLARK Christopher * ODOE <Christopher.CLARK@energy.oregon.gov>
Sent: Monday, September 9, 2024 2:47 PM
To: BLEAKNEY Leann <lbleakney@nwcouncil.org>; HAWKINS Chad * OSFM <Chad.Hawkins@osfm.oregon.gov>; OSFM OFC * OSFM <osfm.ofc@osfm.oregon.gov>; GIBSON Wade * OSFM <Wade.Gibson@osfm.oregon.gov>; JOHNSON James * ODA <James.JOHNSON@oda.oregon.gov>; BROWN Jordan A * ODA <jordan.a.brown@oda.oregon.gov>; ABERCROMBIE Troy * ODA <Troy.ABERCROMBIE@oda.oregon.gov>; PIKE Brandon <Brandon.PIKE@odav.oregon.gov>; SVELUND Greg * DEQ <svelund.greg@deq.state.or.us>; THOMPSON Jeremy L * ODFW <Jeremy.L.THOMPSON@odfw.oregon.gov>; CLARK Jessica S * ODFW <Jessica.S.Clark@odfw.oregon.gov>; HOLSCHBACH Tim J * ODF <tim.j.holschbach@odf.oregon.gov>; TOKARCZYK John A * ODF <John.A.TOKARCZYK@odf.oregon.gov>; HUBNER Daniel * ODF <Daniel.HUBNER@odf.oregon.gov>; MCCLAUGHRY Jason * DGMI <Jason.MCCLAUGHRY@dogami.oregon.gov>; hilary.foote@dlcd.oregon.gov; JININGS Jon * DLCD <Jon.JININGS@dlcd.oregon.gov>; FITZGERALD Richard W * DSL <Richard.W.FITZGERALD@dsl.oregon.gov>; SALGADO Jessica * DSL <Jessica.SALGADO@dsl.oregon.gov>; RASHID Yassir * PUC <Yassir.RASHID@puc.oregon.gov>; CRUSE Martha * DEQ <Martha.Cruse@deq.oregon.gov>; BJORK Mary F * WRD <mary.f.bjork@water.oregon.gov>; KOWITZ Chris C * WRD <Chris.C.KOWITZ@water.oregon.gov>; Peacher, Kimberly N CIV USN NAVFAC NW SVD WA (USA) <kimberly.peacher@navy.mil>; Jeff_Everett@fws.gov; cityofgrassvalley1901@gmail.com; morocityhall@cityofmoro.net
Cc: CORNETT Todd * ODOE <Todd.CORNETT@energy.oregon.gov>; ESTERSON Sarah * ODOE <Sarah.ESTERSON@energy.oregon.gov>
Subject: Comments on NOI for the Buckley Solar Facility in Sherman County requested by October 10, 2024

This message was sent from outside the organization. Treat attachments, links and requests with caution. Be conscious of the information you share if you respond.

Dear agency partners,

The Oregon Department of Energy requests your agency's comments and recommendations on the Notice of Intent to File Application for Site Certificate (NOI) for the Buckley Solar Facility in Sherman County. Specific information requests, as well as additional information about the proposed facility and the Energy Facility Siting Council's review process, are provided in the attached letter. A copy of the NOI and other supporting documents are available at: <https://www.oregon.gov/energy/facilities-safety/facilities/Pages/BSF.aspx>.

Any comments you can provide by **October 10, 2024**, would be most helpful. As detailed in the letter, the Department is hosting a public informational meeting on the NOI at the Grass Valley Pavilion on October 1, 2024, and welcomes attendance by any interested agency staff. I will be following up with more specific requests for input from some individual agencies in the coming weeks, but don't hesitate to reach out if you have any questions about the proposed facility or the request for comments.

Thank you,

Christopher M. Clark
Senior Siting Analyst
550 Capitol St. NE | Salem, OR 97301



Oregon

Tina Kotek, Governor

Department of Fish and Wildlife

East Region

61374 Parrell Road

Bend, Oregon 97702

(541) 388-6363

FAX (541) 388-6281

October 10, 2024

Oregon Department of Energy
ATTN: Christopher M. Clark, Senior Siting Analyst
550 Capitol Street NE
Salem, OR 97301

RE: Request for comments on the Notice of Intent submitted by Buckley Solar, LLC, subsidiary of Clenera, LLC for the Buckley Solar Project in Sherman County

Dear Mr. Clark:

Oregon Department of Energy (ODOE) has requested comments from the Oregon Department of Fish and Wildlife (ODFW) on the Notice of Intent (NOI) to apply for a Site Certificate for Buckley Solar Facility in Sherman County. This Letter contains: (1) ODFW contact information for the project; and (2) ODFW's comments on the NOI.

A. Contacts

I will be the main contact person for ODFW for the Energy Facility Siting Council (EFSC) permitting process and my contact information is: Jessica Clark, 61374 Parrell Road, Bend, OR 97702. My phone number is (541) 388-6099. Jessica.s.clark@odfw.oregon.gov. In addition, please copy Jeremy Thompson, Energy Program Coordinator, 4034 Fairview Industrial Drive SE, Salem OR 97302. Phone number (541) 947-6794, Jeremy.L.Thompson@odfw.oregon.gov. ODFW requests that as applicable, all correspondence for this project be conveyed electronically.

B. Comments on the NOI

General Comments

Please find below a listing of the most applicable statutes, administrative rules and policies administered by ODFW that would pertain to the siting of this proposed facility. ODFW will review and make recommendations for the proposed project based on the following applicable statutes and rules.

Oregon Revised Statutes (ORS)

- ORS 496.012 Wildlife Policy
- ORS 506.036 Protection and Propagation of Fish

- ORS 496.171 through 496.192 Threatened and Endangered Wildlife and Fish Species. A listing of State and Federal threatened, endangered and candidate species can be found on ODFW's website at: http://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp
- ORS 498.301 through 498.346 Screening and By-pass devices for Water Diversions or Obstructions
- ORS 506.109 Food Fish Management Policy
- ORS 509-140 Placing Explosives in Water
- ORS 509.580 through 509.910 Fish Passage; Fishways: Screening Devices- a listing of requirements under ODFW's Fish Passage Program can be found on ODFW's website at <http://www.dfw.state.or.us/fish/passage/>

Oregon Administrative Rules (OAR)

- OAR Chapter 635, Division 100 provides authority for adoption of the State sensitive species list and the Wildlife Diversity Plan, and contains the State list of threatened and endangered wildlife and fish species. A current list of State sensitive species can be found on ODFW's website at: http://www.dfw.state.or.us/wildlife/diversity/species/docs/SSL_by_category.pdf
- OAR Chapter 635, Division 415 (ODFW's Fish and Wildlife Mitigation Policy found on ODFW's website at: http://www.dfw.state.or.us/lands/mitigation_policy.asp describes six habitat categories and establishes mitigation goals and standards for each wildlife habitat ranging from Category 1 (irreplaceable, essential, limited) to Category 6 (non-habitat)
- The Policy goal for Category 1 habitat is no loss of either habitat quantity or quality via avoidance of impacts through development alternatives, or an ODFW recommendation of denial of the proposed development action if impacts cannot be avoided. Categories 2-4 are essential or important but not irreplaceable habitats. Category 5 habitat is not essential or important habitat, but has a high restoration potential. The application for a site certificate must identify the appropriate habitat category for all affected areas of the proposed project on mapping; provide basis for each habitat category selection; and provide an appropriate mitigation plan; all subject to ODOE and ODFW review and comment. ODOE has adopted this rule into OAR 345-022-0060 as an energy facility siting standard for Applicants to meet in order to obtain a site certificate.
- ODFW also provides technical review and recommendations on compliance with Oregon EFSC rules, particularly OAR 345-02100010(1) (p) and (q) and 345-22-040, 060 and 070.
- ODFW also advocates for project proponents to site solar facilities in a manner consistent with the Oregon Columbia Plateau Ecoregion (CPE) Wind Energy Siting and Permitting Guidelines that were established in conjunction with multiple state, federal and industry partners. The intent of these guidelines were to create a balance between the development of renewable energy and environmental protection. While

these guidelines were developed for wind facilities, they are also applicable to solar projects within the CPE.

Specific Comments

This project has the potential to impact habitats for a myriad of species including special-status species (burrowing owl, bald eagle, golden eagle, long-billed curlew, loggerhead shrike, Swainson's hawk) and locally important species such as mule deer, pronghorn and white-tailed jack rabbit. It overlaps with over 6,728 acres of Habitat Category 2 and 1162 acres of Habitat Category 6 (OAR Chapter 635, Division 415). ODFW recommends measures be employed to avoid or minimize impacts to these species, and for impacts that cannot be avoided ODFW encourages the developer to engage early with local staff to develop appropriate mitigation.

The project falls wholly within the ODFW mapped Big Game winter range habitat overlay (*Oregon Department of Fish and Wildlife 2013 Big Game Winter Habitat White Paper*). ODFW considers all habitats within winter range, with the exception of areas designated as Category 6 in the Columbia Plateau Ecoregion (CPE), to be Category 2 as per the Oregon Habitat Mitigation Policy. For Category 2 habitats, ODFW's policy is to have "no net loss of habitat quantity or quality," and asks for "in-kind, in-proximity mitigation" (OAR Chapter 635, Division 415). The CPE contains several habitats that are rare and declining including wetlands, sagebrush steppe and native grasslands. Although the larger footprint of the site has been determined, ODFW encourages the applicant avoid these rare intact habitats when it comes to micro siting and favor siting in previously disturbed areas. We recommend a 2:1 mitigation ask for functioning, intact Category 2 habitats (i.e., sagebrush steppe, grasslands, wetlands) that would be impacted by this project.

The project has potential to disrupt wildlife movement. ODFW strives to reduce fragmentation of the landscape and to protect connectivity corridors by preventing barriers to movement, such as fencing and development. ODFW's Priority Wildlife Connectivity Areas (PWCAs) serve as a guiding tool to identify areas on the landscape that best facilitate wildlife movement between patches of habitat. Portions of the project overlaps designated PWCA corridors, and ODFW recommends avoiding areas of overlap to the extent feasible when micro siting. The primary PWCA corridor near this site is within and along the edge of Buck Hollow canyon. In addition to protecting the corridor within the canyon itself ODFW encourages the developer to maximize unfenced areas along the rim of this canyon to facilitate movement of species that may be impeded by the boundary fence. In addition, strategically placing fencing gaps within the project boundary footprint to facilitate wildlife passage through facility footprint could minimize lost connectivity.

ODFW requests that the applicant limit construction activities outside of the project footprint during the winter period, December 1- April 1, to reduce disturbance to wintering deer outside of the project area. In addition, ODFW requests that the placement of project infrastructure, including buildings and roads be sited within the project boundary in a manner to reduce the potential for disturbing wildlife outside of the project boundaries both during construction and in the operational phase.

Other projects in the immediate area have begun to employ the use of domestic sheep for vegetation control. Given this project's proximity (less than 4 miles) to existing bighorn sheep, ODFW requests that alternative means of vegetation control, if required, be used at this site that do not include domestic sheep. The risk of disease transmission (from diseases such as *M. Ovi*) that could negatively impact bighorn herds is highly concerning for this proposed project location.

ODFW requests that any ground disturbance or vegetation removal within the project boundary be conducted prior to or after the critical period for ground nesting birds, April 15- September 1. Should ground disturbance occur during this period, ODFW requests that vegetative removal occur prior to the critical nesting period. Where feasible, ODFW encourages retention of native vegetation to the maximum extent possible within project boundaries given the challenges revegetation has presented in similar development scenarios in the region. The Department recommends a rigorous monitoring and management plan to control and prevent the spread of noxious weeds.

ODFW recommends that raptor nest and burrow surveys be conducted within a two-mile buffer around the perimeter as well as within the proposed footprint of the project area. Impacts to all nests located should be avoided, and all activities prohibited during the timeframes and within the distances listed below for the species that may occur within the project boundary.

Species	Spatial Buffer	Seasonal Restriction	Release Date if Unoccupied
Western burrowing owl	0.25 mile	April 1 to August 15	31-May
Golden eagle	0.5 mile	Feb 1- Aug 15	15-May
Red-tailed hawk	300-500 ft	Mar 1- Aug 15	31-May
Ferruginous hawk	0.25 mile	Mar 15- Aug 15	31-May
Swainson's hawk	0.25 mile	April 1- Aug 15	31-May
Prairie Falcon	0.25 mile	Mar 15- Jul 1	15-May
Peregrine falcon	0.25 mile	Jan 1- Jul 1	15-May
American kestrel	0.25 mile	Mar 1- Jul 31	15-May

Table 1. Recommended seasonal and spatial activity restrictions for raptor species.

ODFW recommends that the applicant work with the county weed department, Oregon State Extension, or the Oregon Department of Agriculture to develop a revegetation and weed control plan that will be successful within the project area, given the challenges realized within this ecoregion with revegetation projects.

ODFW encourages the applicant to develop a mitigation plan that will effectively offset the impacts to big game winter range and habitat loss within in the project boundary. ODFW encourages the applicant to minimize fragmenting habitat due to fencing construction, to lessen potential impacts on species such as, but not limited to, mule deer, pronghorn and white-tailed jackrabbit. Utilization of wildlife-friendly fencing designs is encouraged in areas where appropriate. ODFW is willing to assist the applicant with the development of the plan.

ODFW appreciates the opportunity to comment on this NOI and looks forward to working with ODOE and the Applicant on this proposed project.

Respectfully,



Jessica Clark
 Regional Wildlife Habitat Biologist
 Deschutes Watershed District
 Jessica.s.clark@odfw.oregon.gov

541-388-6099

cc: Sara Gregory – ODFW Deschutes Watershed District Manager
Andrew Meyers – ODFW Mid-Columbia District Wildlife Biologist
Jeremy Thompson – ODFW Energy Coordinator
Applicant

Attachment 4:
Retirement Estimate Template

Table X: Proposed Facility Decommissioning Tasks and Cost Estimate

Task or Component	Quantity	Unit	Unit Cost (\$)	Estimate (\$)
1.1 Mobilization / Demobilization				
1.1.1 Equipment Mob		Lump Sum		0.00
1.1.2 Site Facilities		Lump Sum		0.00
1.1.3 Crew - Mob & Site Setup		Day		0.00
1.1.4 Crew - Demob & Site Cleanup		Day		0.00
			<i>Subtotal</i>	<i>0.00</i>
1.2 Project Site Support				
1.2.1 Site Facilities		Month		0.00
1.2.2 Field Management		Month		0.00
			<i>Subtotal</i>	<i>0.00</i>
1.3. Substation Retirement				
1.3.1 Fence Removal		Day		0.00
1.3.2 Transformer Removal		Each		0.00
1.3.3 Control Building Removal		Each		0.00
1.3.4 UG Utility & Ground Removal		Day		0.00
1.3.5 Remove Foundations		Cubic Yard		0.00
1.3.6 Misc. Material Disposal		Each		0.00
1.3.7 Restore Yard		Each		0.00
			<i>Subtotal</i>	<i>0.00</i>
1.4. Switchyard Retirement				
1.4.1 Fence Removal		Day		0.00
1.4.2 UG Utility & Ground Removal		Day		0.00
1.4.3 Dismantle/Loadout Racks & Switching		Each		0.00
1.4.4 Remove Foundations to Subgrade		Cubic Yard		0.00
1.4.5 Misc. Material Disposal		Each		0.00
1.4.6 Restore Yard		Each		0.00
			<i>Subtotal</i>	<i>0.00</i>
1.5 230 kV Transmission Line Retirement				
Conductor Removal		Feet		0.00
1.5.1 Remove Structures		Each		0.00
1.5.2 Remove Foundations to Subgrade		Each		0.00
			<i>Subtotal</i>	<i>0.00</i>
1.6 34.5 kV Overhead Collector Line Removal				
1.6.1 Conductor Removal		Feet		0.00
1.6.2 Utility Pole Removal		Each		0.00
			<i>Subtotal</i>	<i>0.00</i>
1.7 O&M Building Removal				
1.7.1 Structure Demo		Ton		0.00

1.7.2 Remove Foundations To Subgrade		Cubic Yard		0.00
1.7.3 Material T&D		Ton		0.00
			Subtotal	0.00
1.8 BESS Removal				
1.8.1 Battery Removal & Disposal		Each		0.00
1.8.2 Structure & Components Removal		Each		0.00
			Subtotal	0.00
1.9 Solar Array Retirement				
1.9.1 Fence Removal		Feet		0.00
1.9.2 Solar Panel Removal & Disposal		Panels		0.00
1.9.3.1 Solar Rack & Post Removal		Posts		0.00
1.9.3.2 Solar Rack & Post Trans. & Disposal		Truck Loads		0.00
			Subtotal	0.00
1.10 Inverter/Transformer Removal				
1.10.1 Disconnect Electrical		Each		0.00
1.10.2 Loadout Inverter & Transformer		Each		0.00
1.10.3 Trucking - Per Load		Each		0.00
			Subtotal	0.00
1.11 Inverter/Transformer/BESS Foundation Removal				
1.11.1 Excavate/Remove Foundations		Cubic Yard		0.00
1.11.2 Concrete Transport and Disposal		Each		0.00
			Subtotal	0.00
1.12 Site Restoration				
1.12.1 Site Roads - Removal and Restoration		Feet		0.00
1.12.2 Remove Conex Storage and Gravel Pads		Each		0.00
1.12.3 Spot Grade Disturbed Areas		Acre		0.00
1.12.4 Re-Seed Disturbed Areas		Acre		0.00
			Subtotal	0.00
Total Decommissioning Cost				0.00
Contractor Markups				
Home Office, Project Management			0.05	0.00
Contractor OH & Fee			0.15	0.00
			Subtotal	0.00
Total Decommissioning Cost				0.00
Performance Bond			0.01	0.00
			Gross Cost	0.00
	Basis (% of Cost)	Basis (\$)	Contingency	Estimate (\$)
Administration and Project Management	100%	-	0.10	0.00
Future Development (Exclude Battery)	#DIV/0!	#DIV/0!	0.10	#DIV/0!
Future Development (Battery Only)	#DIV/0!	#DIV/0!	0.20	#DIV/0!

	<i>Subtotal</i>	<i>#DIV/0!</i>
TOTAL ESTIMATED COST (\$Q12023)		#DIV/0!
ROUNDED		#DIV/0!

1. See ASC Exhibit X Attachment X-1 for detailed breakdown of tasks, actions and unit costs for the sum total costs presented in this Table.
2. To allow continued use of the land for agricultural or other purposes deemed appropriate at the time of decommissioning purposes, all subsurface features including underground collector lines and concrete foundations associated with the O&M, Substation, Solar, Battery, Transmission Line, and Met towers will be removed under the Final Order on ASC, or as agreed with the landowner, in a final Retirement Plan.
3. Tasks associated with a Lump Sum unit cost may be calculated using a fraction (in decimal form) of the actual quantities constructed or by using the more detailed breakdown of unit costs associated with the Lump Sum task identified in the cost estimating worksheet in ASC Exhibit X, Attachment X-1.
4. Added or modified by Department.