

Exhibit O Water Use

Boardman to Hemingway Transmission Line Project



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Preliminary Application for Site Certificate

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ACRONYMS AND ABBREVIATIONS

Note: Not all acronyms and abbreviations listed will appear in this Exhibit.

°C	degrees Celsius
4WD	4-wheel-drive
A	ampere
A/ph	amperes/phase
AC	alternating current
ACDP	Air Contaminant Discharge Permit
ACEC	Area of Critical Environmental Concern
ACSR	aluminum conductor steel reinforced
AIMP	Agricultural Impact Mitigation Plan
AMS	Analysis of the Management Situation
aMW	average megawatt
ANSI	American National Standards Institute
APE	Area of Potential Effect
APLIC	Avian Power Line Interaction Committee
ARPA	Archaeological Resource Protection Act
ASC	Application for Site Certificate
ASP	Archaeological Survey Plan
ASCE	American Society of Civil Engineers
AST	aboveground storage tank
ASTM	American Society of Testing and Materials
ATC	available transmission capacity
ATV	all-terrain vehicle
AUM	animal unit month
B2H	Boardman to Hemingway Transmission Line Project
BCCP	Baker County Comprehensive Plan
BCZSO	Baker County Zoning and Subdivision Ordinance
BLM	Bureau of Land Management
BMP	best management practice
BPA	Bonneville Power Administration
BOR	Bureau of Reclamation
C and D	construction and demolition
CAA	Clean Air Act
CadnaA	Computer-Aided Noise Abatement
CAFE	Corona and Field Effects
CAP	Community Advisory Process
CBM	capacity benefit margin
CFR	Code of Federal Regulations
CH	critical habitat
CIP	critical infrastructure protection
CL	centerline
cm	centimeter
cmil	circular mil
COA	Conservation Opportunity Area
CO ₂ e	carbon dioxide equivalent

COM Plan	Construction, Operations, and Maintenance Plan
CPCN	Certificate of Public Convenience and Necessity
cps	cycle per second
CRP	Conservation Reserve Program
CRT	cathode-ray tube
CRUP	Cultural Resource Use Permit
CSZ	Cascadia Subduction Zone
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
CWA	<i>Clean Water Act of 1972</i>
CWR	Critical Winter Range
dB	decibel
dBA	A-weighted decibel
DC	direct current
DoD	Department of Defense
DOE	U.S. Department of Energy
DOGAMI	Oregon Department of Geology and Mineral Industries
DPS	Distinct Population Segment
DSL	Oregon Department of State Lands
EA	environmental assessment
EDRR	Early Detection and Rapid Response
EIS	Environmental Impact Statement (DEIS for Draft and FEIS for Final)
EFSC or Council	Energy Facility Siting Council
EFU	Exclusive Farm Use
EHS	extra high strength
EMF	electric and magnetic fields
EPA	Environmental Protection Agency
EPC	Engineer, Procure, Construct
EPM	environmental protection measure
EPRI	Electric Power Research Institute
ERO	Electric Reliability Organization
ERU	Exclusive Range Use
ESA	Endangered Species Act
ESCP	Erosion and Sediment Control Plan
ESU	Evolutionarily Significant Unit
EU	European Union
FAA	Federal Aviation Administration
FCC	Federal Communication Commission
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FFT	find, fix, track, and report
FLPMA	Federal Land Policy and Management Act
Forest Plan	Land and Resource Management Plan
FPA	Forest Practices Act
FSA	Farm Services Agency
FWS	U.S. Fish and Wildlife Service
G	gauss

GeoBOB	Geographic Biotic Observation
GF	Grazing Farm Zone
GHG	greenhouse gas
GHz	gigahertz
GIL	gas insulated transmission line
GIS	geographic information system
GPS	Global Positioning System
GRMW	Grande Ronde Model Watershed
GRP	Grassland Reserve Program
HAC	Historic Archaeological Cultural
HCNRA	Hells Canyon National Recreation Area
HPFF	high pressure fluid-filled
HPMP	Historic Properties Management Plan
HUC	Hydrologic Unit Code
Hz	hertz
I-84	Interstate 84
ICC	International Code Council
ICES	International Committee on Electromagnetic Safety
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IDAPA	Idaho Administrative Procedures Act
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
IDWR	Idaho Department of Water Resources
ILS	intensive-level survey
IM	Instructional Memorandum
INHP	Idaho Natural Heritage Program
INRMP	Integrated Natural Resources Management Plan
IPC	Idaho Power Company
IPUC	Idaho Public Utilities Commission
IRP	integrated resource plan
IRPAC	IRP Advisory Council
ISDA	Idaho State Department of Agriculture
JPA	Joint Permit Application
KCM	thousand circular mils
kHz	kilohertz
km	kilometer
KOP	Key Observation Point
kV	kilovolt
kV/m	kilovolt per meter
kWh	kilowatt-hour
L _{dn}	day-night sound level
L _{eq}	equivalent sound level
lb	pound
LCDC	Land Conservation and Development Commission
LDMA	Lost Dutchman's Mining Association
LiDAR	light detection and ranging
LIT	Local Implementation Team

LMP	land management plan
LOLE	Loss of Load Expectation
LRMP	land and resource management plan
LUBA	Land Use Board of Appeals
LWD	large woody debris
m	meter
mA	milliampere
MA	Management Area
MAIFI	Momentary Average Interruption Frequency Index
MCC	Malheur County Code
MCCP	Morrow County Comprehensive Plan
MCE	Maximum Credible Earthquake
MCZO	Morrow County Zoning Ordinance
mG	milligauss
MHz	megahertz
mm	millimeter
MMI	Modified Mercalli Intensity
MP	milepost
MPE	maximum probable earthquake
MRI	magnetic resonance imaging
MVAR	megavolt ampere reactive
Mw	mean magnitude
MW	megawatt
$\mu\text{V/m}$	microvolt per meter
N ₂ O	nitrous oxide
NAIP	National Agriculture Imagery Program
NED	National Elevation Dataset
NEMS	National Energy Modeling System
NEPA	<i>National Environmental Policy Act of 1969</i>
NERC	North American Electric Reliability Corporation
NESC	National Electrical Safety Code
NF	National Forest
NFPA	National Fire Protection Association
NFS	National Forest System
NGDC	National Geophysical Data Center
NHD	National Hydrography Dataset
NHOTIC	National Historic Oregon Trail Interpretive Center
NHT	National Historic Trail
NIEHS	National Institute of Environmental Health Sciences
NIST	National Institute of Standards and Technology
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries	National Oceanic and Atmospheric Administration Fisheries Division
NOI	Notice of Intent to File an Application for Site Certificate
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service

NRHP	National Register of Historic Places
NSR	noise sensitive receptor
NTTG	Northern Tier Transmission Group
NWGAP	Northwest Regional Gap Analysis Landcover Data
NWI	National Wetlands Inventory
NWPP	Northwest Power Pool
NWR	National Wildlife Refuge
NWSRS	National Wild and Scenic Rivers System
NWSTF	Naval Weapons Systems Training Facility
O ₃	ozone
O&M	operation and maintenance
OAIN	Oregon Agricultural Information Network
OAR	Oregon Administrative Rules
OATT	Open Access Transmission Tariff
ODA	Oregon Department of Agriculture
ODEQ	Oregon Department of Environmental Quality
ODF	Oregon Department of Forestry
ODFW	Oregon Department of Fish and Wildlife
ODOE	Oregon Department of Energy
ODOT	Oregon Department of Transportation
OHGW	overhead ground wire
OHV	off-highway vehicle
OPGW	optical ground wire
OPRD	Oregon Parks and Recreation Department
OPS	U.S. Department of Transportation, Office of Pipeline Safety
OPUC	Public Utility Commission of Oregon
OR	Oregon (State) Highway
ORBIC	Oregon Biodiversity Information Center
ORS	Oregon Revised Statutes
ORWAP	Oregon Rapid Wetland Assessment Protocol
OS	Open Space
OSDAM	Oregon Streamflow Duration Assessment Methodology
OSHA	Occupational Safety and Health Administration
OSSC	Oregon Structural Specialty Code
OSWB	Oregon State Weed Board
OWC	Oregon Wetland Cover
P	Preservation
PA	Programmatic Agreement
pASC	Preliminary Application for Site Certificate
PAT	Project Advisory Team
PCE	Primary Constituent Element
PEM	palustrine emergent
PFO	palustrine forested
PGA	peak ground acceleration
PGE	Portland General Electric
PGH	Preliminary General Habitats
Pike	Pike Energy Solutions

PNSN	Pacific Northwest Seismic Network
POD	Plan of Development
POMU	Permit to Operate, Maintain and Use a State Highway Approach
PPH	Preliminary Priority Habitats
Project	Boardman to Hemingway Transmission Line Project
PSD	Prevention of Significant Deterioration
PSS	palustrine scrub-shrub
R	Retention
R-F	removal-fill
RCM	Reliability Centered Maintenance
RCRA	Resource Conservation and Recovery Act
ReGAP	Regional Gap Analysis Project
RFP	request for proposal
RLS	reconnaissance-level survey
RMP	resource management plan
ROD	Record of Decision
ROE	right of entry
RNA	research natural area
ROW	right-of-way
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SC	Sensitive Critical
SEORMP	Southeastern Oregon Resource Management Plan
SF6	sulfur hexafluoride
Shaw	Shaw Environmental and Infrastructure, Inc.
SHPO	State Historic Preservation Office
SLIDO	Statewide Landslide Inventory Database for Oregon
SMS	Scenery Management System
SMU	Species Management Unit
SPCC	Spill Prevention, Containment, and Countermeasures
SRMA	Special Recreation Management Area
SRSAM	Salmon Resources and Sensitive Area Mapping
SSURGO	Soil Survey Geographic Database
STATSGO	State Soil Geographic Database
SUP	special-use permit
SV	Sensitive Vulnerable
SWPPP	Stormwater Pollution Prevention Plan
T/A/Y	tons/acre/year
TDG	Total Dissolved Gas
TES	threatened, endangered, and sensitive (species)
TG	Timber Grazing
TMIP	Transmission Maintenance and Inspection Plan
TNC	The Nature Conservancy
tpy	tons per year
TSD	treatment, storage, and disposal
TV	television
TVES	Terrestrial Visual Encounter Surveys

TVMP	Transmission Vegetation Management Program
UBAR	Umatilla Basin Aquifer Restoration
UBWC	Umatilla Basin Water Commission
UCDC	Umatilla County Development Code
UCZPSO	Union County Zoning, Partition and Subdivision Ordinance
UDP	Unanticipated Discovery Plan
U.S.	United States
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USFS	U.S. Department of Agriculture, Forest Service
USGS	U.S. Geological Survey
UWIN	Utah Wildlife in Need
V/C	volume to capacity
V	volt
VAHP	Visual Assessment of Historic Properties
VMS	Visual Management System
VQO	Visual Quality Objective
VRM	Visual Resource Management
WAGS	Washington ground squirrel
WCU	Wilderness Characteristic Unit
WECC	Western Electricity Coordinating Council
WHO	World Health Organization
WMA	Wildlife Management Area
WOS	waters of the state
WOUS	waters of the United States
WPCF	Water Pollution Control Facility
WR	winter range
WRCC	Western Regional Climate Center
WRD	(Oregon) Water Resources Division
WRP	Wetland Reserve Program
WWE	West-wide Energy
XLPE	cross-linked polyethylene

1 **Exhibit O**
2 **Water Use**

3 **1.0 INTRODUCTION**

4 Exhibit O provides an analysis of water use for the Boardman to Hemingway Transmission Line
5 Project (Project). Exhibit O demonstrates that Idaho Power Company (IPC) will comply with
6 Oregon Administrative Rule (OAR) Chapter 345, Division 22 relating to water use, based on
7 information provided pursuant to OAR 345-021-0010(1)(o) paragraphs (A) through (C) and (E).

8 Specifically, Exhibit O demonstrates that water use requirements for construction and
9 operations of the Project are minimal and will not result in adverse impacts to water resources.
10 Exhibit O provides detailed information regarding the nature of water use during construction
11 and operation of the Project, estimated water quantities that will be needed during both the
12 construction and operations phases of the Project, identified sources for the needed water, and
13 anticipated water losses. Exhibit O establishes that Idaho Power Company (IPC) will be able to
14 procure all needed water from municipal water sources. Accordingly, no groundwater permit,
15 surface water permit, or water right transfer will be required by the Project. This exhibit does not
16 analyze the impacts that the Project's water use will have on the municipal providers, as that
17 analysis is set forth in Exhibit U to this Application for Site Certificate (addressing the Project's
18 potential impacts to public services, including water providers). Additionally, because the
19 Project's water use will not have adverse impacts on affected resources, IPC does not propose
20 any mitigation actions.

21 **2.0 APPLICABLE RULES AND STATUTES**

22 In accordance with OAR 345-021-0010(1)(o), Exhibit O must include the following in relevant
23 part:

- 24 *A. A description of the use of water during construction and operation of the proposed*
25 *facility;*
- 26 *B. A description of each source of water and the applicant's estimate of the amount of*
27 *water the facility will need during construction and operation from each source under*
28 *annual average and worst-case conditions;*
- 29 *C. A description of each avenue of water loss or output from the facility site for the uses*
30 *described in (A), the applicant's estimate of the amount of water in each avenue*
31 *under annual average and worst-case conditions and the final disposition of all*
32 *wastewater including estimated amounts of water loss or output;*
- 33 ******
- 34 *E. If the proposed facility would not need a groundwater permit, a surface water permit*
35 *or a water right transfer, an explanation of why no such permit or transfer is required*
36 *for the construction or operation of the proposed facility.*

37 Additionally, the Project Order requires Exhibit O to provide evidence that the facility will comply
38 with Oregon water rights laws. Specifically, the Project Order requires Exhibit O to include:

39 *Evidence and analysis to determine whether a new water right or water right transfer is*
40 *required, and if so, evidence that supports a finding by the Council that the water right*
41 *should be issued.*

1 **3.0 ANALYSIS**

2 **3.1 Analysis Area**

3 Pursuant to the Project Order, the analysis area for Exhibit O is the Site Boundary, which is
4 defined in OAR 345-001-0010(55) as “the perimeter of the site of a proposed energy facility, its
5 related or supporting facilities, all temporary laydown and staging areas, and all corridors and
6 micro-siting corridors proposed by the applicant.” The Site Boundary for the Project includes the
7 following related and supporting facilities in Oregon:

- 8 • Proposed Corridor: 277.2 miles of 500-kilovolt (kV) transmission line corridor, 5.0 miles
9 of double circuit 138/69-kV transmission line corridor, and 0.3 mile of 138-kV
10 transmission line corridor.
- 11 • Alternate Corridor Segments: Seven alternate corridor segments consisting of
12 approximately 134.1 miles that could replace certain segments of the Proposed Corridor.
13 IPC has proposed these alternate corridor segments in order to allow flexibility for IPC
14 and EFSC, as well as federal agencies, to reconcile competing resource constraints in
15 several key locations.
- 16 • One proposed substation expansion of 3 acres; two alternate substation sites (one 3-
17 acre substation expansion and one new 20-acre substation). IPC ultimately needs to
18 construct and operate only one substation expansion or substation in the Boardman
19 area.
- 20 • Eight communication station sites of less than one acre each in size; four alternate
21 communication station sites along alternate corridor segments.
- 22 • Temporary and permanent access roads.
- 23 • Temporary multi-use areas, pulling and tensioning sites, and fly yards.

24 The features of the Project are fully described in Exhibit B and the Site Boundary for each
25 Project feature is described in Exhibit C, Table C-21. The location of the Project (Site Boundary)
26 is outlined in Exhibit C.

27 **3.2 Methods**

28 Estimated quantities of Project water use were provided by IPC’s engineering group and IPC’s
29 engineering contractor, Pike Energy Solutions (Pike). IPC and Pike have experience that
30 qualifies them to make these estimates, as detailed in Exhibit D. Municipal water providers
31 located within the counties where the Project is proposed were contacted to verify that they
32 have adequate water available to provide water for the Project without impacting their supplies.

33 **3.3 Information Required by OAR 345-021-0010(1)(o)**

34 **3.3.1 Water Uses**

35 **OAR 345-021-0010(1)(o)(A) – Water Use During Construction and Operation**

36 A description of the use of water during construction and operation of the proposed facility.

37 Construction of the Project transmission lines, access roads, and the proposed Grassland
38 Substation, or the Horn Butte and Longhorn Alternate Substations, will require water. Major
39 water uses are for transmission line structure foundations and substation foundations, access
40 road construction, dust control during right-of-way (ROW) clearing, substation grading and site
41 work, and re-seeding restoration work upon Project completion. A minor amount of water will be

1 used to establish substation landscaping where required during construction. Drilling and fire
2 prevention also may require minor amounts of water.

3 In the construction of the transmission line foundations, if the concrete is not obtained from
4 commercial sources, but prepared at the batch plants located at multi-use areas, water will be
5 transported to the concrete batch plant sites where it will be used to mix concrete. From the
6 batch plants, the concrete (ready-mix) will be transported to the structure sites in concrete
7 trucks for use in foundation installations. For analysis and certification purposes, it is assumed
8 that all concrete will be produced at the multi-use areas. However, wherever possible concrete
9 will be purchased from commercial aggregate plants, thereby reducing the amount of water
10 storage and water use at multi-use areas.

11 Other water uses during foundation construction include water to prepare drilling slurry required
12 to maintain excavations for drilled shaft foundation construction, if required due to soil
13 conditions, and water used by concrete trucks to wash chutes and drums after delivering
14 concrete.

15 Water usage for access road construction is primarily for moisture conditioning of new bladed
16 roads necessary to achieve adequate compaction to support heavy equipment travel.

17 Construction of the transmission lines and related facilities will generate a temporary increase in
18 fugitive dust. Water will be applied to disturbed areas and unpaved roadways using water trucks
19 as needed to minimize dust.

20 Water usage for restoration will include the water needed to prepare and apply the hydro mulch
21 to help stabilize disturbed slopes and reseeded of disturbed work areas after construction
22 activities are complete.

23 Water usage for substation construction will be primarily for dust control during site preparation
24 work. During this period, construction equipment will be cutting, moving, and compacting the
25 subgrade surface. As a result, water will be used to compact the subgrade material prior to
26 foundation construction, and trucks providing dust control will make as many as one pass per
27 hour over the substation site. Once site preparation work is complete, concrete for the
28 placement of foundations will become the largest user of water, and dust control will be minimal.

29 If substation landscaping is required, drought-tolerant plants will be used to minimize watering
30 requirements after plant establishment.

31 Normal operations and maintenance of the transmission line and substation will not require any
32 water use.

33 **3.3.2 Water Sources and Estimated Amounts**

34 **OAR 345-021-0010(1)(o)(B) – Sources of Water and Estimated Amounts**

35 A description of each source of water and the applicant's estimate of the amount of water the facility
36 will need during construction and during operation from each source under annual average and worst-
37 case conditions.

38 The Project will contract with municipal water providers along the transmission-line route,
39 including the City of Boardman, City of Pendleton, City of La Grande, Baker City, and City of
40 Ontario, most likely under contracts between the water providers and the Project construction
41 contractor. If needed, the contracts could be executed directly between the water providers and
42 IPC. Representatives for each municipal water provider have stated that they have adequate
43 supply to fulfill Project needs during construction. As explained above, minor amounts of water
44 will be required during operation and maintenance at the proposed Grassland Substation or the

1 Horn Butte or Longhorn alternate substations. In addition, IPC contacted the City of Nampa,
2 Idaho to confirm that municipal water providers in Idaho have adequate water to supply the
3 needs for the southern part of the Project in Oregon and the Idaho portion of the Project. Water
4 provider contacts include:

- 5 • Dave Winters, City of Boardman Public Works, 541-481-9252
- 6 • Bob Patterson, City of Pendleton Public Works, 541-966-0201
- 7 • Lee Mannor, City of La Grande Public Works, 541-962-1325
- 8 • Michelle Owen, Baker City Public Works, 541-524-2031
- 9 • Chuck Mickelson, City of Ontario Public Works, 541-889-7684
- 10 • Daniel Badger, City of Nampa Waterworks Division, 208-468-5860

11 Further details regarding assurance of adequate water supply from these providers are included
12 in Attachment O-1. In addition, IPC mailed letters to each water provider requesting
13 documentation that they are willing and able to provide water, and confirming that doing so
14 would not adversely impact their ability to provide water for other uses or restrict future growth.
15 These letters are included in Attachment O-1, followed by written responses from water
16 providers.

17 During construction, water obtained from these contracted sources will be pumped into tanker
18 trucks at locations indicated by municipal providers and transported to Project staging areas.
19 Approximately 12.7 million gallons will be needed during the approximately 36-month
20 construction period, which is anticipated to commence no sooner than 2015 and continue to the
21 planned in service date, no sooner than 2018 (see Exhibit B, Section 3.6 for a detailed
22 construction schedule). A breakdown of the anticipated water requirements by county is
23 included in Table O-1. The amount of water required for the Project is equivalent to
24 approximately 38 acre-feet, or the amount of water that 29 typical families use over the same
25 time period (based on the Environmental Protection Agency [2011] estimate of 400 gallons per
26 day per family, applied over the 3-year construction schedule).

27 The amount of water required for dust control will depend on precipitation, temperature, soil
28 conditions, and frequency of use. Dust control water application may also include eco-safe
29 biodegradable, liquid copolymers to stabilize unpaved road surfaces and manage fugitive dust
30 where extended use is anticipated. Average water use for dust control along the transmission
31 line and related facilities was estimated assuming that one 3,000-gallon water truck will operate
32 in each county, emptying its tank twice per day during construction. However, it is anticipated
33 that the use of water will be more heavily concentrated over the earlier portions of the schedule
34 during access road construction, foundation construction and tower erection. Water for dust
35 control at the Substation was estimated based on the specific construction sequence planned at
36 that facility. Worst-case water use for the Project would occur if the weather were exceptionally
37 dry with high temperatures, which would require additional water for dust control. Worst-case
38 estimates (shown in Table O-1) were calculated assuming a 50 percent increase in water use
39 for all Project dust control throughout construction.

40 As each municipality has confirmed sufficient available capacity to meet the estimated water
41 needs of the Project, impacts to above-ground (surface water) or below-ground (groundwater)
42 water supplies are not anticipated as a result of Project construction or operation.

43 As indicated in the footnote to Table O-1, water estimates are provided for the Proposed
44 Corridor. The same amounts are assumed for the various alternate corridor segments because
45 the total corridor distances, terrain, and access are similar.

Table O-1. Estimated Water Use for Construction Activities by County ¹

County	Water Source	Foundation Construction (gallons)	Substation (gallons)	Communication Station Sites (gallons)	Dust Abatement (gallons)	Road Construction (gallons)	Restoration (gallons)	Total Water, Duration (gallons)	Annual Average Water Use (gallons/year)	Total Worst-Case Water Use (gallons)
Morrow	City of Boardman Public Works	490,000	263,500	400	1,268,000	28,600	206,000	2,256,500	752,200	2,890,500
Umatilla	City of Pendleton Public Works	377,000	NA	400	1,341,000	18,200	131,000	1,867,600	622,500	2,538,000
Union	City of La Grande Public Works	312,000	NA	700	1,058,000	46,800	336,000	1,753,500	584,500	2,283,000
Baker	Baker City Public Works	555,000	NA	700	2,118,000	80,600	580,000	3,334,300	1,111,000	4,393,300
Malheur	City of Ontario Public Works	534,000	NA	1,100	2,039,000	111,800	803,000	488,900	1,163,000	4,508,400
Total		2,268,000	263,500	3,300	7,824,000	286,000	2,056,000	12,701,000	4,233,000	16,163,000

¹ Water estimates are provided for the Proposed Corridor. Because the corridor distances are similar and the corridors are generally parallel, the same amounts are assumed for the various alternate corridor segments. Owyhee County is not included because it is outside the Oregon portion of the Project.

3.3.3 Water Losses

OAR 345-021-0010(1)(o)(C) – Water Losses or Outputs

A description of each avenue of water loss or output from the facility site for the uses described in (A), the applicant's estimate of the amount of water in each avenue under annual average and worst-case conditions and the final disposition of all wastewater.

The following describes water losses or outputs associated with water used for construction of the Project. Water used during construction for dust control (approximately 7.7 million gallons annual average, 11.5 million gallons under worst-case conditions) and hydro-mulching restoration, will infiltrate into the ground or evaporate into the atmosphere. The amount of water used for dust control will be sufficiently small that runoff will not occur outside of the Site Boundary. Water used for foundations (approximately 2.3 million gallons) will remain in the concrete mix. Management and handling of concrete truck washout areas and disposal of excess or degraded drilling slurry are addressed in Exhibit V. No Project wastewater will be discharged into wetlands, lakes, rivers, or streams. No water use or discharges are anticipated during operations.

3.3.4 Water Balance Diagram for Thermal Power Plants

OAR 345-021-0010(1)(o)(D) – Water Balance Diagram

For thermal power plants, a water balance diagram, including the source of cooling water and the estimated consumptive use of cooling water during operation, based on annual average conditions.

Because the Project is not a thermal power plant, this standard is not applicable.

3.3.5 Explanation for No Permits or Transfers

OAR 345-021-0010(1)(o)(E) – Explanation for No Permits or Water Right Transfers

If the proposed facility would not need a groundwater permit, a surface water permit or a water right transfer, an explanation of why no such permit or transfer is required for the construction and operation of the proposed facility.

The Project's need for water is temporary, occurring only during the construction of the Project. Water will be procured from municipal suppliers along the Project, and no groundwater permit, surface water permit, or water right transfer will be required. The municipal water rights will allow use for industrial purposes such as a transmission line project. Because no new water rights will be necessary for the Project, neither a Limited License for construction use nor other Water Right Permits will be required.

Attachment O-1 summarizes IPC communications with the municipal suppliers, who have each indicated willingness and ability to supply water for the Project. Letters from IPC to water suppliers requesting documentation that they are willing and able to provide water and responses from water providers are included in Attachment O-1. Based on communications with the municipal water providers, estimated water requirements and calculated equivalent family demand over the approximately 300-mile-long Project, the water requirement will be minimal and is not expected to injure any existing water rights or restrict planned future growth near the Project.

3.3.6 Permit or Transfer Information

OAR 345-021-0010(1)(o)(F) – Permits or Transfers Required

If the proposed facility would need a groundwater permit, a surface water permit or a water right transfer, information to support a determination by the Council that the Water Resources Department should issue the permit or transfer of a water use, including information in the form required by the Water Resources Department under OAR chapter 690, divisions 310 and 380.

As described in the previous section, water will be procured from municipal suppliers along the Project, and no groundwater permit, surface water permit, or water right transfer will be required. As a result, this standard is not applicable.

3.3.7 Mitigation Measures

OAR 345-021-0010(1)(o)(G) – Actions to Mitigate Adverse Impacts

A description of proposed actions to mitigate the adverse impacts of water use on affected resources.

Based on assurances from municipal water providers, which will supply Project construction needs, no adverse impacts are expected to result from water use at the Project during construction and operation; therefore, no mitigation measures are proposed.

4.0 CONCLUSIONS

IPC has demonstrated that it complies with the Council's general standard of review found in OAR 345-022-0000(1)(b). IPC's Exhibit O provides all the information required by OAR 345-021-0010(1)(o).

5.0 SUBMITTAL AND APPROVAL COMPLIANCE MATRICES

Tables O-2 and O-3 provide cross references between Exhibit submittal requirements of OAR 345-021-0010 and the Council's Approval standards of OAR 345-022-0000 and where discussion can be found in the Exhibit.

Table O-2. Submittal Requirements Matrix

Requirement	Location
OAR 345-021-0010(1)(o)	
(o) Exhibit O. Information about anticipated water use during construction and operation of the proposed facility. The applicant shall include:	
(A) A description of the use of water during construction and operation of the proposed facility.	Section 3.3.1
(B) A description of each source of water and the applicant's estimate of the amount of water the facility will need during construction and during operation from each source under annual average and worst-case conditions.	Section 3.3.2, Table O-1
(C) A description of each avenue of water loss or output from the facility site for the uses described in (A), the applicant's estimate of the amount of water in each avenue under annual average and worst-case conditions and the final disposition of all wastewater.	Section 3.3.3

1 **Table O-2. Submittal Requirements Matrix (continued)**

Requirement	Location
(D) For thermal power plants, a water balance diagram, including the source of cooling water and the estimated consumptive use of cooling water during operation, based on annual average conditions.	Because the Project is not a thermal power plant, this standard is not applicable (Section 3.3.4)
(E) If the proposed facility would not need a groundwater permit, a surface water permit or a water right transfer, an explanation of why no such permit or transfer is required for the construction and operation of the proposed facility.	Section 3.3.5
(F) If the proposed facility would need a groundwater permit, a surface water permit or a water right transfer, information to support a determination by the Council that the Water Resources Department should issue the permit or transfer of a water use, including information in the form required by the Water Resources Department under OAR chapter 690, divisions 310 and 380.	Because municipal water providers would supply water for the Project, groundwater permits, surface water permits, or water right transfers would not be required, and this standard is not applicable (Section 3.3.6)
(G) A description of proposed actions to mitigate the adverse impacts of water use on affected resources.	Section 3.3.7
Project Order Comments	
Exhibit O of the application must identify the sources of water to be used during construction and operation of the proposed facility, the water right under which the water would be provided, the quantity of water needed, and the means of disposal of all water discharges from the proposed facility. The application should provide evidence and analysis to determine whether a new water right or water right transfer is required, and if so, evidence that supports a finding by the Council that the water right should be issued. [See ORS Chapter 537 (Appropriation of Water Generally) or transfer of a water use under ORS Chapter 540 (Transfer or Forfeiture of Water Rights), including a discussion and evaluation of all relevant factors, including those factors listed in ORS 537.153(2) and (3), ORS 537.170(8) and OAR Chapter 690, Divisions 310 (Water Right Application Processing) and 380 (Water Right Transfers).]	Sections 3.1.1 through 3.3.7
Water not obtained from a municipal supplier would require a Limited License. Because such licenses cannot authorize use or discharge of water outside a single basin, multiple Limited Licenses may be required. Limited Licenses are also under Council jurisdiction.	Because water would be provided by municipal providers, Limited Licenses would not be required, and this requirement is not applicable (Section 3.3.5)
If a new water right, water right transfer, or Limited License is required, Exhibit O must include adequate evidence for the Council to evaluate and make findings approving the required permit or license. The applicant should consult with the Oregon Water Resources Department to ensure that all information otherwise required by OWRD is included in the site certificate application.	Because water would be provided by municipal providers, new water rights, water right transfers, or Limited Licenses would not be required, and this requirement is not applicable (Section 3.3.5)

2

1 **Table O-3.** Approval Standard

Requirement	Location
<p>The Oregon EFSC does not have a specific standard relating to water use. Instead, the relevant approval standard is found in OAR 345-022-0000, which provides that in order to issue a site certificate, the Council must find that:</p> <p><i>The preponderance of evidence on the record supports the conclusion that the facility complies with all other Oregon statutes and administrative rules identified in the Project Order, as amended, as applicable to the issuance of a site certificate for the proposed facility.</i></p>	Section 3.3

2 **6.0 RESPONSE TO COMMENTS FROM REVIEWING AGENCIES AND**
 3 **THE PUBLIC**

4 Table O-4 cross references comments cited in the Project Order from reviewing agencies and
 5 the public and where discussion can be found in the exhibit.

6 **Table O-4.** Reviewing Agency and Public Comments

Comments Related to General Standard of Review (OAR 345-022-0000)	Location
Impacts to water sources should be addressed in Exhibit I (especially erosion and sediment control and impacts of herbicide use); on above- and below-ground water supplies, Exhibit O (Water use and sources), Exhibit P (especially impacts to fish-bearing streams from construction activities and herbicide use).	Impacts to water supplies are addressed in Sections 3.3.2 and 3.3.7 and Attachment O-1. Other impacts to water sources are addressed in Exhibits I and P, as noted in the Project Order comment.

7

8 **7.0 REFERENCES**

9 Environmental Protection Agency. 2011. Water Sense [Internet]. Available online at:
 10 <http://www.epa.gov/WaterSense/pubs/indoor.html>.

**ATTACHMENT O-1
RECORD OF COMMUNICATIONS WITH MUNICIPAL WATER
PROVIDERS**

The following table summarizes preliminary communications with municipal water providers who are willing and have adequate water available to supply the Project. The water volumes in this table represent the initial Project estimates, which were revised during subsequent Project design. The current estimates are presented in Table O-1 of this exhibit. All of the listed suppliers have provided IPC with either oral or written assurances that the amounts of water requested by IPC will be available at the time of construction. In addition, IPC mailed letters to municipal water providers requesting documentation that they are willing and able to provide water (based on the updated estimates), and confirming that doing so would not adversely impact the providers' ability to provide water for other uses or restrict future growth. These letters are included following the summary table below, followed by written responses from water providers.

County	Water Source	Preliminary Estimates of Water Quantity Needed (gallons)	Contact Person	Municipal Water Provider Assurance
Morrow	Boardman	2,013,900	Dave Winters <i>Public Works Director</i> (541) 481-9252 publicworks@cityofboardman.com	Dave Winters provided oral assurance that there is adequate water supply to fulfill the Project needs. <i>Voicemail, 6/2/2011, 12:54pm</i>
Umatilla	Pendleton	2,000,000	Bob Patterson <i>Public Works Director</i> (541) 966-0201 bob.patterson@ci.pendleton.or.us	"We have the capacity [] to provide about 2,000,000 gallons of water during the construction from 2013 to [2015]. We are presently setting up fill stations for water haulers / contractors at various locations in town. This will allow the contractor to set up an account with the City and fill from any of the fill locations via an access code at any time. We would bill water use based on a monthly base charge (to be determined in the near future) and our current volumetric charge (about \$1.05 per 748 gallons or \$5.60 per 4,000 gallon water truck tank). So when construction is ready to pass through our area, your contractor would just need to contact the City of Pendleton to make arrangements in setting up an account." <i>Email, 6/1/2011, 5:23pm</i>
Union	La Grande	1,500,000	Lee Mannor <i>Water Superintendent</i> Norman J Paullus, Jr. <i>Public Works Director</i> (541) 962-1325 publicworks@cityoflagrande.org	Lee Mannor provided oral assurance that there is adequate water supply to fulfill the Project needs. <i>Phone call, 6/2/2011, 1:19pm</i>

County	Water Source	Preliminary Estimates of Water Quantity Needed (gallons)	Contact Person	Municipal Water Provider Assurance
Baker	Baker City	2,900,000	Michelle Owen <i>Public Works Director</i> (541) 524-2031 mowen@bakercity.com	"The City has adequate water supply as we have 200 million gallons stored in the aquifer for municipal use as well as the ability to draw from our surface water to meet our daily demand. The proposed usage from 2013-2015 is approximately equivalent to one to two days worth of water usage for the City. The City does have a water curtailment ordinance in place and should there be drought conditions (which seems unimaginable at this point!) [t]he first items curtailed would be irrigation and dust abatement so that could potentially impact the City's ability to supply water for that portion of the project." <i>Email, 6/1/2011, 5:26pm</i>
Malheur	Ontario	2,800,000	Chuck Mickelson <i>Public Works Director</i> (541) 889-7684 chuck.mickelson@ontariooregon.org	"I am sure that the City of Ontario can accommodate the needs of a contractor locally." <i>Email, 6/1/2011, 6:12pm</i>
Owyhee ¹	Nampa	1,251,000	Daniel Badger <i>Staff Engineer</i> (208) 468-5860 badgerd@cityofnampa.us	Daniel Badger provided oral assurance that there is adequate water supply to fulfill the Project needs. <i>Phone call, 6/2/2011, 10:07am</i>

¹ Owyhee County, Idaho is included to demonstrate that adequate municipal water is available in Idaho to provide for the portion of the Project in Idaho.

Letters to Water Providers

March 13, 2012

Mr. Dave Winters, Public Works Director
City of Boardman, Public Works Department
200 City Center Circle
P.O. Box 229
Boardman, Oregon 97818
publicworks@cityofboardman.com

Subject: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Mr. Winters:

Idaho Power Company (IPC) is proposing to construct the Boardman to Hemingway Project, an approximately 300-mile transmission line from the Grassland Substation near Boardman, Oregon to the Hemingway Substation in southwest Idaho. More information is available at <http://www.boardmantohemingway.com>. Construction of the transmission line would begin in approximately fall 2013 and continue to the planned in-service date in summer 2016.

The major water needs for the Project would occur during construction, and include water for foundation concrete mixing and dust control during grading and site work. In Morrow County, Project water needs for construction are estimated at approximately 1,986,000 gallons, or approximately 662,000 gallons per year for three years.

IPC currently is seeking permits for the Project via Oregon's Department of Energy, Energy Facilities Siting Council (EFSC). Permitting requirements include providing evidence that the Project will not result in significant adverse impacts to the ability of water providers like the City of Boardman to meet other water needs or provide water for other uses.

Based on our preliminary communications with you (in June 2011), it is our understanding that the City of Boardman's water supplies are adequate to meet Project needs in Morrow County (estimated above) without affecting your ability to serve other water demands and without restricting planned future growth. Also, we understand that the City of Boardman's water rights allow use for industrial purposes such as a transmission line project.

IPC respectfully requests acknowledgement of this letter and a written response by the City of Boardman confirming water availability and indicating whether providing the estimated amount of water needed for the Project would impact your ability to provide water. IPC intends to submit your letter as documentation for the EFSC permitting process. Formal contracting for water would occur at a later time, if the Project is approved and permitted.

We appreciate your assistance in this matter. If you have questions or comments, please contact us at your convenience.

Respectfully submitted,

A handwritten signature in cursive script that reads "Keith Georgeson". The signature is written in black ink and is positioned below the typed name.

Keith Georgeson
Project Leader
Boardman to Hemingway Project



March 13, 2012

Mr. Bob Patterson, Public Works Director
City of Pendleton, Public Works Department
500 Southwest Dorion Avenue
Pendleton, Oregon 97801
bob.patterson@ci.pendleton.or.us

Subject: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Mr. Patterson:

Idaho Power Company (IPC) is proposing to construct the Boardman to Hemingway Project, an approximately 300-mile transmission line from the Grassland Substation near Boardman, Oregon to the Hemingway Substation in southwest Idaho. More information is available at <http://www.boardmantohemingway.com/>. Construction of the transmission line would begin in approximately fall 2013 and continue to the planned in-service date in summer 2016.

The major water needs for the Project would occur during construction, and include water for foundation concrete mixing and dust control during grading and site work. In Umatilla County, Project water needs for construction are estimated at approximately 1,722,000 gallons, or approximately 574,000 gallons per year for three years.

IPC currently is seeking permits for the Project via Oregon's Department of Energy, Energy Facilities Siting Council (EFSC). Permitting requirements include providing evidence that the Project will not result in significant adverse impacts to the ability of water providers like the City of Pendleton to meet other water needs or provide water for other uses.

Based on our preliminary communications with you (in June 2011), it is our understanding that the City of Pendleton's water supplies are adequate to meet Project needs in Umatilla County (estimated above) without affecting your ability to serve other water demands and without restricting planned future growth. Also, we understand that the City of Pendleton's water rights allow use for industrial purposes such as a transmission line project.

IPC respectfully requests acknowledgement of this letter and a written response by the City of Pendleton confirming water availability and indicating whether providing the estimated amount of water needed for the Project would impact your ability to provide water. IPC intends to submit your letter as documentation for the EFSC permitting process. Formal contracting for water would occur at a later time, if the Project is approved and permitted.

We appreciate your assistance in this matter. If you have questions or comments, please contact us at your convenience.

Respectfully submitted,

A handwritten signature in cursive script that reads "Keith Georgeson". The signature is written in black ink and is positioned below the typed name.

Keith Georgeson
Project Leader
Boardman to Hemingway Project



March 13, 2012

Mr. Lee Mannor, Water Superintendent
City of La Grande, Public Works Department
800 X Avenue
La Grande, OR 97850
publicworks@cityoflagrande.org

Subject: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Mr. Mannor:

Idaho Power Company (IPC) is proposing to construct the Boardman to Hemingway Project, an approximately 300-mile transmission line from the Grassland Substation near Boardman, Oregon to the Hemingway Substation in southwest Idaho. More information is available at <http://www.boardmantohemingway.com/>. Construction of the transmission line would begin in approximately fall 2013 and continue to the planned in-service date in summer 2016.

The major water needs for the Project would occur during construction, and include water for foundation concrete mixing and dust control during grading and site work. In Union County, Project water needs for construction are estimated at approximately 1,397,000 gallons, or approximately 466,000 gallons per year for three years.

IPC currently is seeking permits for the Project via Oregon's Department of Energy, Energy Facilities Siting Council (EFSC). Permitting requirements include providing evidence that the Project will not result in significant adverse impacts to the ability of water providers like the City of La Grande to meet other water needs or provide water for other uses.

Based on our preliminary communications with you (in June 2011), it is our understanding that the City of La Grande's water supplies are adequate to meet Project needs in Union County (estimated above) without affecting your ability to serve other water demands and without restricting planned future growth. Also, we understand that the City of La Grande's water rights allow use for industrial purposes such as a transmission line project.

IPC respectfully requests acknowledgement of this letter and a written response by the City of La Grande confirming water availability and indicating whether providing the estimated amount of water needed for the Project would impact your ability to provide water. IPC intends to submit your letter as documentation for the EFSC permitting process. Formal contracting for water would occur at a later time, if the Project is approved and permitted.

We appreciate your assistance in this matter. If you have questions or comments, please contact us at your convenience.

Respectfully submitted,

A handwritten signature in black ink that reads "Keith Georgeson". The signature is written in a cursive, flowing style.

Keith Georgeson
Project Leader
Boardman to Hemingway Project

March 13, 2012

Ms. Michelle Owen, Public Works Director
Baker City, Public Works Department
1655 First Street
P.O. Box 650
Baker City, OR 97814
mowen@bakercity.com

Subject: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Ms. Owen:

Idaho Power Company (IPC) is proposing to construct the Boardman to Hemingway Project, an approximately 300-mile transmission line from the Grassland Substation near Boardman, Oregon to the Hemingway Substation in southwest Idaho. More information is available at <http://www.boardmantohemingway.com/>. Construction of the transmission line would begin in approximately fall 2013 and continue to the planned in-service date in summer 2016.

The major water needs for the Project would occur during construction, and include water for foundation concrete mixing and dust control during grading and site work. In Baker County, Project water needs for construction are estimated at approximately 2,583,000 gallons, or approximately 861,000 gallons per year for three years.

IPC currently is seeking permits for the Project via Oregon's Department of Energy, Energy Facilities Siting Council (EFSC). Permitting requirements include providing evidence that the Project will not result in significant adverse impacts to the ability of water providers like Baker City to meet other water needs or provide water for other uses.

Based on our preliminary communications with you (in June 2011), it is our understanding that Baker City's water supplies are adequate to meet Project needs in Baker County (estimated above) without affecting your ability to serve other water demands and without restricting planned future growth. Also, we understand that the Baker City's water rights allow use for industrial purposes such as a transmission line project.

IPC respectfully requests acknowledgement of this letter and a written response by Baker City confirming water availability and indicating whether providing the estimated amount of water needed for the Project would impact your ability to provide water. IPC intends to submit your letter as documentation for the EFSC permitting process. Formal contracting for water would occur at a later time, if the Project is approved and permitted.

We appreciate your assistance in this matter. If you have questions or comments, please contact us at your convenience.

Respectfully submitted,

A handwritten signature in black ink that reads "Keith Georgeson". The signature is written in a cursive, flowing style.

Keith Georgeson
Project Leader
Boardman to Hemingway Project

March 13, 2012

Mr. Chuck Mickelson, Public Works Director
City of Ontario, Public Works Department
444 SW 4th Street
Ontario, OR 97914
chuck.mickelson@ontariooregon.org

Subject: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Mr. Mickelson:

Idaho Power Company (IPC) is proposing to construct the Boardman to Hemingway Project, an approximately 300-mile transmission line from the Grassland Substation near Boardman, Oregon to the Hemingway Substation in southwest Idaho. More information is available at <http://www.boardmantohemingway.com/>. Construction of the transmission line would begin in approximately fall 2013 and continue to the planned in-service date in summer 2016.

The major water needs for the Project would occur during construction, and include water for foundation concrete mixing and dust control during grading and site work. In Malheur County, Project water needs for construction are estimated at approximately 2,655,000 gallons, or approximately 885,000 gallons per year for three years.

IPC currently is seeking permits for the Project via Oregon's Department of Energy, Energy Facilities Siting Council (EFSC). Permitting requirements include providing evidence that the Project will not result in significant adverse impacts to the ability of water providers like the City of Ontario to meet other water needs or provide water for other uses.

Based on our preliminary communications with you (in June 2011), it is our understanding that the City of Ontario's water supplies are adequate to meet Project needs in Malheur County (estimated above) without affecting your ability to serve other water demands and without restricting planned future growth. Also, we understand that the City of Ontario's water rights allow use for industrial purposes such as a transmission line project.

IPC respectfully requests acknowledgement of this letter and a written response by the City of Ontario confirming water availability and indicating whether providing the estimated amount of water needed for the Project would impact your ability to provide water. IPC intends to submit your letter as documentation for the EFSC permitting process. Formal contracting for water would occur at a later time, if the Project is approved and permitted.

We appreciate your assistance in this matter. If you have questions or comments, please contact us at your convenience.

Respectfully submitted,

A handwritten signature in black ink that reads "Keith Georgeson". The signature is written in a cursive style with a prominent initial 'K' and a long, sweeping underline.

Keith Georgeson
Project Leader
Boardman to Hemingway Project



March 13, 2012

Mr. Daniel Badger, Staff Engineer
City of Nampa, Waterworks Division
24 1st St S, Nampa, ID 83651
badgerd@cityofnampa.us

Subject: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Mr. Badger:

Idaho Power Company (IPC) is proposing to construct the Boardman to Hemingway Project, an approximately 300-mile transmission line from the Grassland Substation near Boardman, Oregon to the Hemingway Substation in southwest Idaho. More information is available at <http://www.boardmantohemingway.com/>. Construction of the transmission line would begin in approximately fall 2013 and continue to the planned in-service date in summer 2016.

The major water needs for the Project would occur during construction, and include water for foundation concrete mixing and dust control during grading and site work. In Owyhee County, Project water needs for construction are estimated at approximately 898,000 gallons, or approximately 299,000 gallons per year for three years.

IPC currently is seeking permits for the Project via Oregon's Department of Energy, Energy Facilities Siting Council (EFSC). Permitting requirements include providing evidence that the Project will not result in significant adverse impacts to the ability of water providers like the City of Nampa to meet other water needs or provide water for other uses.

Based on our preliminary communications with you (in June 2011), it is our understanding that the City of Nampa's water supplies are adequate to meet Project needs in Owyhee County (estimated above) without affecting your ability to serve other water demands and without restricting planned future growth. Also, we understand that the City of Nampa's water rights allow use for industrial purposes such as a transmission line project.

IPC respectfully requests acknowledgement of this letter and a written response by the City of Nampa confirming water availability and indicating whether providing the estimated amount of water needed for the Project would impact your ability to provide water. IPC intends to submit your letter as documentation for the EFSC permitting process. Formal contracting for water would occur at a later time, if the Project is approved and permitted.

We appreciate your assistance in this matter. If you have questions or comments, please contact us at your convenience.

Respectfully submitted,

A handwritten signature in black ink that reads "Keith Georgeson". The signature is written in a cursive style with a prominent initial 'K' and a long, sweeping tail on the 'n'.

Keith Georgeson
Project Leader
Boardman to Hemingway Project

Letters from Water Providers



City of Baker City, Oregon

P.O. Box 650
Baker City, OR 97814-0650
541-523-6541 Voice/TDD
541-524-2049 FAX

May 21, 2012

Idaho Power Company
Keith Georgeson
PO Box 70
Boise, ID 83707

Re: Boardman to Hemmingway Transmission Line Project

Mr. Georgeson:

This letter is in response to your letter to me dated March 13, 2012. You have asked that I verify water availability for the Transmission Line Project. Your letter states the project would require 861,000 gallons each year for three years during the construction. We delivered over 681MG of water to the community in 2011 and the requested amount from Idaho Power amounts to only 0.13% of our annual usage.

The City of Baker City would be able to supply this amount of water for the project and still maintain water distribution services to the City. It is not anticipated that this request from Idaho Power Company would restrict future growth in Baker City.

If you need further information, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Michelle Owen", written over a light blue horizontal line.

Michelle Owen
Director of Public Works



City of Boardman

200 City Center Circle
P.O. Box 229
Boardman, OR 97818
Phone (541) 481-9252
Fax (541) 481-3244
TTY Relay 711
www.cityofboardman.com

June 1, 2012

Mr. Keith Georgeston, Project Leader
Boardman to Hemingway Project
1221 W. Idaho St. (83702)
P.O. Box 70
Boise, ID. 83707

Subject: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Mr. Georgeston:

This letter is to confirm that the City of Boardman's water supply can meet your project demands of the estimated amount of 662,000 gallons per year for three years at this time.

Please understand that if the City of Boardman's water demands change for any reason in that three year period the City of Boardman's demands are meet first and foremost.

Respectfully

A handwritten signature in black ink, appearing to read "David P. Winters", with a long horizontal line extending to the right.

David P Winters
Public Works Director
City of Boardman
200 City Center Circle
P.O. Box 229
Boardman, OR 97818

English, Aaron

From: Spillers, Paul
Sent: Wednesday, October 03, 2012 4:35 PM
To: English, Aaron
Subject: FW: B2H water supply letter.

From: Norm Paullus, City of La Grande Public Works Director [mailto:npaullus@cityoflagrande.org]
Sent: Friday, May 18, 2012 2:08 PM
To: Spillers, Paul
Cc: 'Lee Mannor'; Public Works Dept. - Josie
Subject: RE: B2H water supply letter.

Good morning,

I visited with Lee and he did respond with a phone call and felt that was adequate. As for the accessing of our water, we always reserve the right to cut water off for reasons that we feel will jeopardize our supply or may be unauthorized use. If the contractor should try getting it from a fire hydrant or a more convenient location for him that we have not approved they will be prosecuted and future use may be denied. We can supply your water needs, but if you want to receive the water all at once or in extremely large volumes at one time we would want to evaluate that demand as it relates to our local demand. All water would need to be picked up at the Public Works Department and documented for billing purposes. The contractor would need to set up an account for billing purposes. Access to our water source would be made available Monday through Friday from 8:00 a.m. to 4:30 p.m. If you have any questions or concerns please feel free to contact myself or Lee.

Thank You,
Norman J. Paullus, Jr.
City of La Grande
Public Works Director
800 'X' Avenue
La Grande, Oregon 97850
(541) 962-1325

From: Spillers, Paul [mailto:Paul.Spillers@tetrattech.com]
Sent: Thursday, May 17, 2012 9:26 AM
To: publicworks@cityoflagrande.org
Subject: B2H water supply letter.

Billie Jo,

In March Idaho Power sent a letter to Lee Mannor (see attached file) about estimated water needs for the construction of the planned Boardman to Hemingway transmission line project. To satisfy Oregon Department of Energy permitting

requirements, could you please return a brief letter to Idaho Power, verifying an adequate water supply or stating the effects of Idaho Power's use of the water? On Idaho Power's behalf, I thank you for your attention to this issue. Paul

Paul Spillers, P.G. | Project Manager

Phone: 208.389-1030 | Fax: 208-389-1183 | Cell 208.871.2191

paul.spillers@tetrattech.com

Tetra Tech | Complex World, CLEAR SOLUTIONS™

3380 Americana Terrace, Suite 201 | Boise, ID 83706 | www.tetrattech.com

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City of Ontario
Office of the City Manager
444 SW 4th Street
Ontario, OR 97914
Voice (541) 881-3223
Fax (541) 889-7121
chuck.mickelson@ontariooregon.org

April 13, 2012

Keith Georgeson
P.O. Box 70
Boise, ID 83707

SUBJECT: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Mr. Georgeson:

This letter is in response to your inquiry of March 13, 2012 regarding water for the above project. You requested confirmation that the City of Ontario could supply nearly 2.7 million gallons of water over a three year period during the construction of the transmission line.

The City of Ontario will be able to provide the necessary water without affecting our customers.

If you have any further questions, feel free to contact the City of Ontario.

Sincerely,

A handwritten signature in black ink, appearing to read "Charles R. Mickelson".

Charles R. Mickelson P.E.
City Manager Pro-Tem

Cc: Bob Walker, Public Works Director
Delhie Block, Water and Wastewater Superintendent
John Bishop, Operations Manager



CITY OF PENDLETON

Public Works Department
500 S.W. Dorion Avenue
Pendleton, Oregon 97801-2090
Telephone (541) 966-0202
FAX (541) 966-0251
TDD Phone (541) 966-0230



Keith Georgeson, Project Leader
Idaho Power
1221 West Idaho Street
PO Box 70
Boise, ID 83707

RE: Idaho Power's Boardman to Hemingway Transmission Line Project

Dear Mr. Georgeson:

Please accept this letter as confirmation that the City of Pendleton's water supplies are adequate to meet your Project needs in Umatilla County without impacting our ability to serve other water demands and without restricting planned future growth. The City of Pendleton's water rights do allow use for industrial purposes such as the above-referenced transmission line project.

If you require any other information, please contact me at 541 966-0202 or bob.patterson@ci.pendleton.or.us.

Sincerely,

Bob Patterson, PE
Public Works Director

BP/jh

