ATTACHMENT U-3 FIRE PREVENTION AND SUPPRESSION PLAN

B2H Exhibit U Errata Sheet

Dear Reader:

Exhibit U addresses the Boardman to Hemingway Transmission Line Project's (Project) potential impacts on the following services: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care, and schools.

The Applicant submitted its final Application for Site Certification on October 3, 2018. Subsequently, the Oregon Department of Energy requested certain additional information about the Project pursuant to Oregon Administrative Rule (OAR) 345-015-0190(9). This errata sheet provides the requested information—which may include corrections to the exhibit text, tables, figures, and/or proposed conditions—as it relates to Exhibit U.

As you read this exhibit, please keep in mind that any additional information identified in this errata sheet shall prevail over the contents of the exhibit document itself.

Page #	Section #	Description of Change(s) Made
U-16	3.4.6.2	Table U-10 updated to include information on the Burnt River and Lookout-Glasgow rangeland fire protection associations.
U-18	3.4.7	Saint Alphonsus Medical Center in Baker City added to list of medical facilities.
U-25	Section 3.5.6.2	Text added regarding Incident Management Team.
U-31	3.6.6	Public Service Condition 3 and 4 revised.
U-32	4.0	Public Service Condition 3 and 4 revised.
U-37	8.0	Personal Communications with Burnt River and Lookout-Glasgow rangeland fire protection associations added to the list of references.
Attachment U-1	U-1C and U-1D	Added the record of communication with Burnt River and Lookout-Glasgow rangeland fire protection associations, and St. Alphonsus Medical Center – Baker City.
Attachment U-3	Multiple	Updated multiple sections of the plan based on comments from Oregon Department of Forestry.
Attachment U-3	3.1	Provided additional information on the process for deenergizing the transmission line in case of emergency.

Summary of Additional Information Provided for Exhibit U and Its Attachments

Specific Additional Information Provided for Exhibit U

Page U-16, Section 3.4.6.2, Table U-10

Description of Additional Information: Added rows to Table U-10 to include information on Burnt River Rangeland Fire Protection Association and Lookout-Glasgow Rangeland Fire Protection Association.

Text Edits Shown in Red:

Burnt River Rangeland Fire Protection Association	<u>Baker</u>	<u>15-20</u> volunteers	 (1) D7 bulldozer (2) D6 and D4 bulldozers (Privately owned but are used on fires when needed) (1) 4,500-gallon tender (2) 750-gallon 4x4 tenders (6) 200-300-gallon pickup truck mounted tanks 	<u>45 minutes</u>
Lookout- Glasgow Rangeland Fire Protection Association	<u>Baker</u>	<u>15-30</u> volunteers	(1) D7 bulldozer (1) 3,500-gallon 4x4 tender (1) 1,000-gallon 4x4 tender (1) 750-gallon 4x4 tender (1) 1,200-gallon 10-wheel truck tender (1) Road grader	<u>30-60</u> <u>minutes</u>

Page U-18, Section 3.4.7

Description of Additional Information: Section 3.4.7 revised to include discussion of St. Alphonsus Medical Center in Baker City.

Text Edits Shown in Red:

3.4.7 Health Care

Several medical facilities serve the communities in the analysis area. Minor injuries are treated at local medical facilities or emergency rooms. Two major hospitals capable of treating serious injuries are located within the five counties in the Oregon portion of the analysis area: Grande Ronde Hospital in La Grande and Saint Alphonsus Medical Center in Ontario. One major hospital capable of treating serious injuries, Saint Anthony Hospital in Pendleton, is located outside the analysis area.

• Saint Alphonsus Medical Center (Ontario) is a Level II hospital that is licensed for 49 beds, 6 of which are intensive care beds. The hospital employs about 100 nurses, and 80 to 90 physicians have staffing privileges. Medical transportation is provided by Life Flight. A Life Flight helicopter is stationed at the Ontario airport, and flight times between the hospital and the Project area are about 20 to 30 minutes (Hart 2016).

• Saint Alphonsus Medical Center (Baker City) is a 25 bed, critical access hospital with a skilled nursing-type facility called a swing bed. They offer inpatient services and outpatient services. St. Alphonsus Medical Center in Baker City staffs approximately 160 full-time employees and has a total headcount of 200 employees. The medical center periodically conducts emergency preparedness drills with the county, utilizing the county's resources. They have approximately 7,000 ER visits per year. The Project would not likely impact their ability to serve the community, but it depends on the size of the construction crew in the area during construction. They could likely serve 3,500 more ER visits a year and would have capacity to still serve the community (Gaslin 2019).

Page U-25, Section 3.5.6.2

Description of Additional Information: Section 3.4.7 revised to include discussion Incident Management Team request in assistance in firefighting.

Text Edits Shown in Red:

Attachment U-3 establishes standards and practices for the Project to minimize risk of humancaused fire ignition and, in case of fire, provide for immediate suppression. Construction and operations crews will implement the Fire Prevention and Suppression Plan, so that the Project will not increase the risk of fire. Construction workers and maintenance personnel are not trained firefighters and are not expected to fight fires. However, qualified equipment operators, at the direction of Incident Command, may use construction equipment to assist local firefighting efforts when safe to do so. In the event of a fire, the Incident Management Team may request local assistance in firefighting if personnel have required training including the use construction equipment on the Project site.

Page U-31, Section 3.6.6 and Page U-32, Section 4.0

Description of Additional Information: Public Services Condition 3 revised to address fire districts and rural fire protection districts.

Text Edits Shown in Red:

Public Services Condition 3: Prior to construction, the certificate holder shall finalize, and submit to the department for its approval, a final Fire Prevention and Suppression Plan. <u>The final Fire Prevention and Suppression Plan shall include the following, unless otherwise approved by the department:</u> <u>a.</u> The protective measures as described in the draft Fire Prevention and Suppression Plan in ASC Exhibit U, Attachment U-3, shall be included and implemented as part of the final Fire Prevention and Suppression Plan.<u>; and</u> <u>b.</u> A description of the fire districts and rural fire protection districts that will provide emergency response services during construction and copies of any agreements between the certificate holder and the districts related to that <u>coverage</u>.

Page U-31, Section 3.6.6 and Page U-32, Section 4.0

Description of Additional Information: Public Services Condition 4 revised to include an Emergency and Medical Response Plan.

Text Edits Shown in Red:

Public Services Condition 4: Prior to construction, the certificate holder shall submit to the department for its approval an Environmental and Safety Training Plan, which shall address:

a. Measures for securing multi-use areas and work sites when not in use; and b. Drug/alcohol/firearm policies with clear consequences for violations-<u>; and</u> c. An emergency and medical response plan.

Page U-37, Section 8.0

Description of Additional Information: Added personal communications with Burnt River and Lookout-Glasgow Rangeland Fire Protection Associations to the list of references.

Text Edits Shown in Red:

Gaslin, R. 2019. St. Alphonsus Medical Center – Baker City. Personal Communication between Suzy Cavanagh (Tetra Tech) and Rob Gaslin (Financial Controller), March 6, 2019.

Jacobs, K. 2019. Lookout-Glasgow Rangeland Fire Protection Association. Personal Communication between Aaron English (Tetra Tech) and Kirk Jacobs (Fire Chief); February 19, 2019.

Siddoway, B. 2019. Burnt River Fire Protection Association. Personal Communication between Aaron English (Tetra Tech) and Burt Siddoway (Fire Chief); February 15, 2019.

Specific Additional Information Provided for Attachment U-1, Communications with Public Service Providers

Section U-1C, Contacts with Fire Departments

Description of Additional Information: Added record of communication with Burnt River and Lookout-Glasgow Rangeland Fire Protection Associations.

Text Edits Shown in Red:

Tetra Tech Telephone Conversation Record

Call To: Chief Burt Siddoway	Date: 2/15/2019	
Association: Burnt River Rural Fire Protection	Title: Chief	
Association		
Phone #: (541) 403-0490		
Message Taken By: Aaron English		
Subject: Capacities of the Burnt River Rural Fire Protection Association		

I spoke with Chief Burt Siddoway about the capacities of the Burnt River Rural Fire Protection Association.

He said that they have 1 station. Depending on who is available they have between 15-20 personnel. There are three personnel, including Burt that attend every fire. No EMT or other medical personnel He said that their response time to the project area is hard to predict as he is uncertain exactly where the project would be, but it would likely be around 45 minutes.

They have the following firefighting equipment.

<u>Number</u>	<u>Type</u>
<u>1</u>	D7 bulldozer
<u>2</u>	D6 bulldozers (privately owned but are used on fires when needed)
<u>2</u>	D4 bulldozers (privately owned but are used on fires when needed)
<u>1</u>	4,500 gallon tender
2	750 gallon 4x4 tenders
<u>6</u>	200-300 gallon pickup truck mounted tanks

<u>Are there any factors that you expect would affect the ability of your department to provide services and respond to emergencies in the future?</u>

No, during construction I would assume that the construction crews would have their own equipment. The line once in service would have no more likelihood of starting a fire than the existing lines or construction on interstate or cars and trucks (cigarettes, dragging chains, hot brakes).

Personnel have had no official training in fighting fires near high voltage powerlines.

Tetra Tech Telephone Conversation Record

Call To: Chief Kirk Jacobs	Date: 2/19/2019
Association: Burnt River Rural Fire Protection	Title: Chief
Association	
Phone #: (541) 519-0405	
Message Taken By: Aaron English	
Subject: Capacities of the Lookout-Glasgow Rural	Fire Protection Association

I spoke with Chief Kirk Jacobs about the capacities of the Lookout-Glasgow Rural Fire Protection Association.

Depending on who is available they have between 15-30 personnel. No EMT or other medical personnel He said that their response time to the project area is hard to predict but depending on location would be 30-60 minutes. He has worked with IPC staff on several occasions to extinguish fires near existing IPC transmission lines.

They have the following firefighting equipment.

Number	<u>Type</u>
<u>1</u>	D7 bulldozer
<u>1</u>	3,500-gallon 4x4 tender
<u>1</u>	1,000-gallon 4x4 tender
<u>1</u>	750-gallon 4x4 tender
1	1,200-gallon 10-wheel truck tender
<u>1</u>	Road grader

Are there any factors that you expect would affect the ability of your department to provide services and respond to emergencies in the future?

No, during construction I would assume that the construction crews would have their own equipment. The line once in service would have no more likelihood of starting a fire than the existing lines or construction on interstate or cars and trucks (cigarettes, dragging chains, hot brakes) or local land owners.

Personnel have had no official training in fighting fires near high voltage powerlines. Kirk would like to get to know the IPC linemen in the area and would like to get specific contact information staff working in the area of the Lookout-Glasgow Rural Fire Protection Association.

Section U-1D, Contacts with Medical Facilities

Description of Additional Information: Added record of communication with St. Alphonsus Medical Center – Baker City

Text Edits Shown in Red:

Tetra Tech Telephone Conversation Record

Emergency Medical

Interviewer: Suzy Cavanagh

Call To: Rob Gaslin	Date: 3/6/19
Association: Saint Alphonsus Medical Center (Baker City)	Title: Financial Controller
Phone #: (541) 523-6461	
Message Taken By: Suzy Cavanagh	
Subject: Capacities of the Saint Alphonsus Medical Center	1

I spoke with Mr. Gaslin about the capacities of the Saint Alphonsus Medical Center in Baker City, Oregon. He stated that the St. Alphonsus Medical Center in Baker City is a 25 bed, critical access hospital with a skilled nursing-type facility called a swing bed. They offer inpatient services and outpatient services. St. Alphonsus Medical Center in Baker City staffs approximately 160 full-time employees and has a total headcount of 200 employees.

St. Alphonsus Medical Center in Baker City periodically conducts emergency preparedness drills with the county, utilizing the county's resources. They have approximately 7,000 ER visits per year. Mr. Gaslin stated that the project would not likely impact their ability to serve the community, but it depends on the size of the construction crew in the area during construction. They could likely serve 3,500 more ER visits a year and would have capacity to still serve the community.

Specific Additional Information Provided for Attachment U-3, Fire Prevention and Suppression Plan

Page 2, Section 1.3.

Description of Additional Information: Deleted clause attempting to qualify the extent of fire risk, as requested by the Department of Forestry.

Text Edits Shown in Red:

As per Oregon Administrative Rule 345-022-0110, construction and operation of the Project and related mitigation are not likely to result in significant adverse impact to the ability of public and private providers to provide fire protection. <u>Fire risk is anticipated to be low during Project</u> <u>operations, and therefore tT</u>he fire prevention and suppression measures described in this Plan will be in effect from pre-construction to the end of restoration. These restrictions may change by advance written notice by fire-control authorities. However, required tools and equipment will be kept in serviceable condition and will be immediately available at all times.

Page 2, Section 2.1

Description of Additional Information: Revised reference so that it incorporates the 2017 version of Oregon Department of Forestry rules rather than the 2015 version.

Text Edits Shown in Red:

Methods and procedures to be implemented prior to and during construction, operation, maintenance, and termination of the Project to minimize the risk of fire are described in the following sections. The methods and procedures outlined below follow guidance in ODF's Fire Prevention Rules, OAR Chapter 629, Division 43 (ODF 2015) (ODF 2017).

Page 3, Section 2.1.5

Description of Additional Information: Corrected capacity of fire extinguisher from 8 pounds to 8 ounces. Deleted and added other text as requested by the Department of Forestry.

Text Edits Shown in Red:

All motor vehicles and equipment will carry at least 1 long-handled (48-inch minimum), round-point shovel with a blade no less than 8 inches wide; a double-bit ax or Pulaski (3.5 pounds or larger) with a handle of not less than 26 inches long; one 16–20 pound dry chemical fire extinguisher (with an Underwriters Laboratories [UL] rating of at least 5B or C); and 20–50 gallons of water with a mechanism to effectively spray the water. Individuals using power saws and grinders will have a shovel as described above, and an 8-pound 8-ounce capacity fire extinguisher immediately available. All equipment will be kept in a serviceable condition, stored in a clearly identified tool box, and readily available. Larger water supplies of 300 gallons or larger (self-propelled) or 500 gallons (not self-propelled) with a pump capable of providing not less than 20 gallons er-more discharge when pumping through 50 feet of hose and a ¼-inch-diameter nozzle will be made available as conditions warrant, as required by ODFper minute at a pressure of at least 115 pounds per square inch at pump level. A nozzle, and enough serviceable hose of not less than 3⁄4 inch inside diameter, to reach from the water supply to any location in the operation area affected by power driven machinery, or 500 feet, whichever is greater. In some situations, ODF district may allow alternate methods that may provide equal or better suppression of fire.

Page 4, Section 2.1.5

Description of Additional Information: Corrected "route" to "round." And substituted one paragraph for another, as provided by the Department of Forestry.

Text Edits Shown in Red:

All power saws will be equipped with an exhaust system which retains at least 90 percent of carbon particles as required by spark arrester guidance, be stopped while fueling, and moved at least 20 feet from the place of fueling before being restarted. Each power saw must have an 8-ounce or larger fire extinguisher and a <u>route-round</u> pointed shovel (8-inch-wide face and more than 26-inch handle) nearby for immediate use.

A watchman, with adequate facilities for transportation and communications to summon needed assistance, will conduct a continual observation of the area where power-driven machinery has been operated for up to 3 hours after power-driven machinery has been shut down for the day. If any fire is detected, the watchman must safely try to control and extinguish the fire and summon assistance as necessary. All power-driven machinery will be kept free of excess flammable material that could create a fire risk.

The firewatch must constantly observe the operation area during any breaks (up to three hours) in operation activity and for three hours after the power driven machinery used by the operator has been shut down for the day; visually observe all portions of the operation area on which operation activity occurred during the preceding period of activity; and be qualified in the use and operation of assigned firefighting equipment and tools; be physically capable of performing assigned fire suppression activities; and be advised of single employee assignment responsibilities (OAR 437-007-1315), when working alone. Each person providing fire watch service on an operation area must have adequate facilities for transportation and communication to be able to summon firefighting assistance in a timely manner. Upon discovery of a fire, fire watch personnel must first report the fire, summon any necessary firefighting assistance, describe intended fire suppression activities and agree on a checking system; then after determining a safety zone and an escape route that will not be cut off if the fire increases or changes direction, immediately proceed to control and extinguish the fire, consistent with firefighting training and safety.

Page 5, Section 2.2

Description of Additional Information: Deleted clause attempting to qualify the extent of fire risk, as requested by the Department of Forestry.

Text Edits Shown in Red:

The Contractor and IPC will restrict or cease operations in specified locations during periods of high fire danger fire season at the direction of the land-management agency's closure order. Restrictions may vary from stopping certain operations at a given time to stopping all operations. IPC may obtain approval to continue some or all operations if acceptable precautions are implemented. A written waiver must be issued to the Contractor and IPC.

Page 6, Section 3.1

Description of Additional Information: Added additional text to describe the process of deenergizing the transmission line in case of emergency.

Text Edits Shown in Red

A contact number directly to Idaho Power's 24/7 dispatch center will be provided to all necessary agencies for notification purposes. Upon being notified of a fire, Idaho Power dispatch will gather as much information as possible and immediately dispatches appropriate personnel to monitor the fire and/or coordinate with onsite emergency agencies.

Once onsite, and if requested, Idaho Power personnel will confirm facilities to be removed from service for safety of fire personnel and communicates this back to Idaho Power dispatch. Idaho Power dispatch then removes the line from service, relaying that information to the Idaho Power onsite personnel, who in turn communicates the condition to onsite emergency agencies.

Response time will vary, based on initial notification times to Idaho Power dispatch. Once onsite, Idaho Power personnel requesting a line outage for safety concerns can expect a line outage within a few minutes. The line would then be considered unavailable to return to service until onsite Idaho Power personnel are able to verify with onsite emergency agencies that all personnel and equipment are no longer in danger of electrical contact.

Emergency response entities concerned about overhead lines may contact IPC to discuss deenergizing the line by calling the IPC outage hotline at 1-800-488-6151. IPC also offers a free on line training course for emergency responders, *Responding to Utility Emergencies,* https://idaho-power.rtueonline.com/, which will help emergency responders learn how to recognize potential hazards involving electricity. This training will also address necessary guidelines that help ensure the safety of responders and the general public

Page 7, Section 4.0

Description of Additional Information: Revised reference so that it incorporates the 2017 version of Oregon Department of Forestry rules rather than the 2015 version.

Text Edits Shown in Red:

ODF (Oregon Department of Forestry). 2015 2017. Fire Prevention Rules. Available online at: http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_629/629_043.html

Fire Prevention and Suppression Plan

Boardman to Hemingway Transmission Line Project



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September 2018

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ACRONYMS AND ABBREVIATIONS

Bureau of Land Management
Idaho Power Company
kilovolt
Oregon Department of Forestry
Oregon Revised Statute
Fire Prevention and Suppression Plan
Boardman to Hemingway Transmission Line Project
Rural Fire Protection Association
Rural Fire Protection District
right-of-way
Underwriters Laboratories
United States Forest Service

1.0 INTRODUCTION

Idaho Power Company (IPC) is proposing to construct, operate, and maintain a high-voltage transmission line between Boardman, Oregon, and the Hemingway Station in southwestern Idaho, known as the Boardman to Hemingway Transmission Line Project (Project) as an extension of IPC's electrical system. The Project includes 270.8 miles of new single-circuit 500-kilovolt (kV) transmission line, removal of 12 miles of existing 69-kV transmission line, rebuilding of 0.9 mile of a 230-kV transmission line, and rebuilding of 1.1 miles of an existing 138-kV transmission line into a new right-of-way (ROW). The Project includes ground-disturbing activities associated with construction of transmission support structures; their associated construction work areas; pulling sites for tensioning conductors; access roads to each structure; multi-use areas; light-duty fly yards; communications stations; and stations. The Project crosses private land and public lands administered by the Bureau of Land Management (BLM), United States Forest Service (USFS), Bureau of Reclamation, Department of Defense, and the states of Idaho and Oregon.

This preliminary Fire Prevention and Suppression Plan (Plan) describes the framework for measures to be taken by IPC and its contractors (Contractor) to ensure fire prevention and suppression measures are carried out in accordance with federal, state, and local regulations. Measures identified in this Plan apply to work within the project area defined as the ROW; access roads; all work and storage areas, whether temporary or permanent; and other areas used during construction and operation of the Project.

1.1 Purpose

The risk of fire danger during transmission line construction is related to smoking, refueling activities, operating vehicles and other equipment off roadways, welding activities, and the use of explosive materials and flammable liquids. During operation, the risk of fire is primarily from vehicles and maintenance activities that require welding. Additionally, weather events that affect the transmission line could result in the transmission line igniting a fire.

This Plan establishes standards and practices to minimize risk of fire ignition and, in case of fire, provide for immediate suppression.

1.2 Oregon's Wildfire Protection System

The prevention and suppression of wildfires in eastern Oregon is carried out by the BLM, USFS, Oregon Department of Forestry (ODF) in conjunction with the Rangeland Fire Protection Associations (RFPA) and Rural Fire Protection Districts (RFPD), and local fire districts and agencies (Table 1). The agencies' activities are closely coordinated, primarily through the Pacific Northwest Wildfire Coordinating Group. Coordination of firefighting resources also occurs under Oregon's *Emergency Conflagration Act* that allows the state fire marshal to mobilize and dispatch structural firefighting personnel and equipment when a significant number of structures are threatened by fire and local structural fire-suppression capability is exhausted (ODEQ 2003).

Who	Where	Miles of Proposed Route
Bureau of Land Management	National System of Public Lands	67.7
Department of Defense	Naval Weapons Systems Training Facility Boardman	10.5
U.S. Forest Service	National Forest (NF) and National Grasslands	5.9
City fire departments and rural and rangeland fire protection districts in mutual aid with Oregon Department of Forestry	Structures in Oregon's wildland interface areas covered by mutual-aid agreements. Rangeland fire protection associations on rangeland areas of eastern Oregon outside of both a forest protection district and a rural fire district.	187

Table 1. Fire Suppression Responsibilities in Oregon

Source: ODEQ 2003; GIS Ownership_Analysis_20110804.xlsx.

1.3 Responsibilities and Coordination

This Plan will be implemented by IPC and the Contractor on the Project. IPC and the Contractor are responsible for providing all necessary fire-fighting equipment on the project site to their respective employees and operating under the requirements of this Plan. Prior to construction, the Contractor and IPC will contact the appropriate fire-control authorities to establish communications (including radio frequencies), obtain any required permits (such as burning or fire waiver permits prior to conducting any heavy equipment or burning activities), and/or fulfill other obligations as directed by fire-control authorities. The Contractor and IPC will also do the following:

- Ensure prevention, detection, pre-suppression, and suppression activities are in accordance with this Plan and federal, ODF, and county laws; ordinances; and regulations pertaining to fire.
- Accompany agency representatives on fire tool and equipment inspections and take corrective action upon notification of any fire-protection requirements not in compliance.
- Restrict operations on federal lands during conditions of high fire danger as described in Section 2.2, Restricted Operations.

As per Oregon Administrative Rule 345-022-0110, construction and operation of the Project and related mitigation are not likely to result in significant adverse impact to the ability of public and private providers to provide fire protection. Fire risk is anticipated to be low during Project operations, and therefore the fire prevention and suppression measures described in this Plan will be in effect from pre-construction to the end of restoration. These restrictions may change by advance written notice by fire-control authorities. However, required tools and equipment will be kept in serviceable condition and will be immediately available at all times.

2.0 FIRE PREVENTION MEASURES

2.1 **Preconstruction and Construction**

Methods and procedures to be implemented prior to and during construction, operation, maintenance, and termination of the Project to minimize the risk of fire are described in the following sections. The methods and procedures outlined below follow guidance in ODF's *Fire Prevention Rules*, OAR Chapter 629, Division 43 (ODF 2015).

2.1.1 Training

The Contractor and IPC will train all personnel on the measures to take in the event of a fire. The Contractor and IPC will immediately proceed to control and extinguish any fire started resulting from their activity. The Contractor and IPC will also inform crew member of fire dangers, locations of extinguishers and equipment, and individual responsibilities for fire prevention and suppression during regular safety briefings. Smoking and fire rules also will be discussed with all field personnel during the Project's environmental training.

2.1.2 Smoking

Smoking is prohibited except in areas a minimum of 10 feet in diameter that have been cleared and graded to bare soil. All burning tobacco and matches will be extinguished before discarding. Smoking is also prohibited while operating equipment or vehicles, except in enclosed cabs or vehicles.

Smoking is never permitted in any area designated by DANGER or NO SMOKING signs. Smoking is not permitted in these areas regardless of any other factor. Smoking is not permitted on the transmission line ROW. Smoking is only permitted on access roads, within vehicles, and in approved smoking areas as described previously.

2.1.3 Spark Arresters

During construction, operation, maintenance, and decommissioning of the ROW, all equipment operating with an internal combustion engine will be equipped with federally-approved spark arresters. Spark arresters are not required on trucks, buses, and passenger vehicles (excluding motorcycles) equipped with an unaltered muffler or on diesel engines equipped with a turbocharger. Agency fire-inspection officers will have full authority to inspect spark arresters on Project equipment prior to its use on the Project on federal lands and periodically during construction.

2.1.4 Parking, Vehicle Operation, and Storage Areas

In no case will motorized equipment, including worker transportation vehicles, be driven or parked outside the designated and approved work limits. Equipment parking areas, the ROW, staging areas, designated vehicle-parking areas, and small stationary engine sites— where permitted—will be cleared of all flammable material. Clearing will extend a minimum of 2 feet beyond the edge of the area to be occupied but not beyond the boundaries of the approved ROW, extra workspace, or ancillary site. Glass containers will not be used to store gasoline or other flammables.

2.1.5 Equipment

All motor vehicles and equipment will carry at least 1 long-handled (48-inch minimum), round-point shovel with a blade no less than 8 inches wide; a double-bit ax or Pulaski (3.5 pounds or larger) with a handle of not less than 26 inches long; one 16–20 pound dry chemical fire extinguisher (with an Underwriters Laboratories [UL] rating of at least 5B or C); and 20–50 gallons of water with a mechanism to effectively spray the water. Individuals using power saws and grinders will have a shovel as described above, and an 8-pound capacity fire extinguisher immediately available. All equipment will be kept in a serviceable condition, stored in a clearly identified tool box, and readily available. Larger water supplies of 300 gallons or larger (self-propelled) or 500 gallons (not self-propelled) with a pump capable of providing 20 gallons or more discharge when pumping through 50 feet of hose and a ¼-inch-diameter nozzle will be made available as conditions warrant, as required by ODF. In some situations, ODF district may allow alternate methods that my provide equal or better suppression of fire.

All power saws will be equipped with an exhaust system which retains at least 90 percent of carbon particles as required by spark arrester guidance, be stopped while fueling, and moved at least 20 feet from the place of fueling before being restarted. Each power saw must have an 8-ounce or larger fire extinguisher and a route pointed shovel (8-inch-wide face and more than 26-inch handle) nearby for immediate use.

A watchman, with adequate facilities for transportation and communications to summon needed assistance, will conduct a continual observation of the area where power-driven machinery has been operated for up to 3 hours after power-driven machinery has been shut down for the day. If any fire is detected, the watchman must safely try to control and extinguish the fire and summon assistance as necessary. All power-driven machinery will be kept free of excess flammable material that could create a fire risk.

The Contractor and IPC shall maintain a list, to be provided to local fire-protection agencies, of all equipment that is either specifically designed for, or capable of, being adapted to fighting fires. The Contractor and IPC shall provide basic fire-fighting equipment on-site during construction, including fire extinguishers, shovels, axes, and other tools in sufficient numbers so each employee on-site can assist in the event of a fire-fighting operation.

2.1.6 Road Closures

The Contractor and IPC will notify the appropriate fire-suppression agency of the scheduled closures prior to the open-cut crossing of a road. If required, the Contractor and IPC will construct a bypass prior to the open-cut installation of a road crossing, unless a convenient detour can be established on existing project-approved roads or within project-approved work limits. All bypasses will be clearly marked by the Contractor and IPC. During road closures, the Contractor and IPC will designate one person who knows the bypass to direct traffic. The Contractor and IPC will minimize, to the extent possible, the duration of road closures.

2.1.7 Refueling

Fuel trucks will have a large fire extinguisher charged with the appropriate chemical to control electrical and gas fires. The extinguisher will be a minimum size 35-pound capacity with a minimum 30 BC rating. Power-saw refueling will be done in an area that has first been cleared of material that could catch fire.

2.1.8 Burning

Contractor and IPC personnel are prohibited from burning slash, brush, stumps, trash, explosives storage boxes, or other Project debris unless specifically contracted to do so. No cooking or warming fires or barbecue grills will be allowed. Burn permits are required for all burning except camp fires during closed fire season on lands protected by ODF (Oregon Revised Statute [ORS] 447.515) and, once Regulated Use Closure has been executed, burning of any type is banned with no exceptions (ORS 447.535) (ODF 2015).

2.1.9 Flammable Liquids and Explosives

The handling and use of explosives shall be conducted in strict conformance with all local, state, and federal regulations as detailed in IPC's Construction Specification on Blasting.

2.1.10 Communications

The Contractor and IPC will be responsible for maintaining contact with fire-control agencies and will be equipped with a radio or cellular telephone so immediate contact with local firecontrol agencies can be made. If cellular telephone coverage is not available, the Contractor and IPC will use the radio to contact their base, who will telephone emergency dispatch.

2.1.11 Welding

One 5-gallon back-up pump will be required with each welding unit in addition to the standard fire equipment required in all vehicles. All equipment will be kept in a serviceable condition and readily available. Individuals using power saws and grinders will have a shovel as described above, and an 8-pound capacity fire extinguisher immediately available. During fire season, a spotter equipped with a shovel and a fire extinguisher will be required to be present if wildland fuels are present where work is being performed.

2.1.12 Fire Suppression

The Contractor and IPC will take the following actions should a fire occur within the Project area during construction:

- Site personnel will aid in extinguishing a fire ignition before it gets out of control and take action that a prudent person would take to control the fire while still accounting for their own and others safety.
- Immediately notify the nearest fire-suppression agency of the fire location, action taken, and status (see Section 4.0).
- Immediately notify the Contractor and IPC of the fire location and action taken.
- Relinquish fire-suppression activities to agency fire-management officers upon their arrival.

If a reported fire is controlled, the Contractor and IPC will note the location and monitor the progress in extinguishing the fire. A Contractor's or IPC's employee will remain at the fire scene until it is fully extinguished. The extinguished fire will be monitored in accordance with procedures described in Section 2.3 of this document.

IPC acknowledges and understands the responsibilities of the landowner and operator for fire suppression on lands protected by ODF as referenced in ORS 477.064 through 477.125.

2.2 Restricted Operations

The Contractor and IPC will restrict or cease operations in specified locations during periods of high fire danger at the direction of the land-management agency's closure order. Restrictions may vary from stopping certain operations at a given time to stopping all operations. IPC may obtain approval to continue some or all operations if acceptable precautions are implemented. A written waiver must be issued to the Contractor and IPC.

During periods of high fire danger, the Contractor and IPC will monitor daily for local restrictions. Restrictions are unique to each agency and are triggered by federal and state agency administration. As discussed in Section 1.2, the agencies' activities (including restrictions) are closely coordinated, primarily through the Pacific Northwest Wildfire Coordinating Group. It is the Contractor's and IPC's responsibility to ensure personnel are aware of and following area fire orders.

Notifications

Construction crew members will report all fires, whether extinguished or controlled. If the fire is uncontrolled, the Contractor will call the nearest fire-suppression agency (911) and the IPC inspector. Information regarding the location of the fire, property ownership, and closest access roads should be reported to 911 and IPC.

If a reported fire is controlled but not extinguished, the Contractor or IPC inspector will call to notify the nearest police/fire authorities using the non-emergency telephone line to alert them of the situation.

IPC will maintain and provide the Contractor with an up-to-date list of landowner and land management agency contacts along the transmission line ROW.

2.3 Monitoring

The contractor will be responsible for compliance with all provisions of this Plan. In addition, federal, state, and local fire-control agencies may perform inspections in areas under their jurisdiction at their discretion.

3.0 OPERATION AND MAINTENANCE

3.1 Operation

During transmission line operation, the risk of fire danger is minimal. The primary causes of fire on the ROW result from unauthorized entry by individuals for recreational purposes and from fires started outside the ROW. In the latter case, authorities can use the ROW as a potential firebreak or point of attack. During transmission line operation, access to the ROW will be restricted in accordance with jurisdictional agency or landowner requirements to minimize recreational use of the ROW.

Emergency response entities concerned about overhead lines may contact IPC to discuss deenergizing the line by calling the IPC outage hotline at 1-800-488-6151. IPC also offers a free on line training course for emergency reponders, *Responding to Utility Emergencies,* https://idaho-power.rtueonline.com/, which will help emergency responders learn how to recognize potential hazards involving electricity. This training will also address necessary guidelines that help ensure the safety of responders and the general public.

3.2 Maintenance

During maintenance operations, IPC or its Contractor will equip personnel with basic fire-fighting equipment, including fire extinguishers and shovels as described in Section 2.1.5, Equipment. Maintenance crews will also carry emergency response/fire control phone numbers.

IPC and/or a Contractor will implement the following measures during maintenance activities:

- Conduct inspections of the vehicle undercarriage before entering or exiting the project area to clear vegetation that may have accumulated near the vehicle's exhaust system.
- During BLM's Stage II Fire Restrictions, obtain an appropriate waiver and take appropriate precautions when conducting routine maintenance activities that involve an internal combustion engine, involve generating a flame, involve driving over or parking on dry grass, involve the possibility of dropping a line to the ground, or involve explosives. Precautions include a Fire Prevention Watch Person who will remain in the area for one hour following the cessation of that activity.

Vegetation Management

Trees growing into or near power lines are a concern for IPC because they can create safety and service reliability risks. Branches touching power lines can spark and start fires and cause interruptions in electric supply. Therefore, IPC will conduct vegetation management within the Project ROW to reduce the potential for vegetation to come into contact with the transmission line. Vegetation management will be conducted in accordance with the Project's vegetation management plan (Exhibit P1, Attachment P1-4). In addition, transmission line protection and control systems will be incorporated into the system and are designed to detect faults (such as arcing from debris contacting the line) and will rapidly shut off power flow (in 1/60th to 3/60th of a second) if arcing is detected.

4.0 LITERATURE CITED

- ODEQ (Oregon Department of Environmental Quality). 2003. Oregon Natural Hazards Mitigation Plan. Revised August 19. Available online at: http://www.deq.state.or.us/aq/burning/wildfires/neap/appendixD.pdf
- ODF (Oregon Department of Forestry). 2015. Fire Prevention Rules. Available online at: http://arcweb.sos.state.or.us/pages/rules/oars_600/oar_629/629_043.html

OregonLaws.org. 2013. Available online at: http://www.oregonlaws.org/ors/477.064