

Amendment to FSH 2709.11, Chapter 50, Section 52.3

Final Clauses C-25, C-26, C-27, and C-28 Implementing Section 512 of the Federal Land Policy and Management Act, 43 U.S.C. 1772

October 29, 2021

C-25. Operating Plans and Agreements and Vegetation Management for Powerline Facilities Authorized by a Permit Issued to a Non-Federal Entity. In all existing Electric Transmission Line Permits for Non-Federal Entities, form FS-2700-4j, and in all existing Special Use Permits, form FS-2700-4, for powerline facilities operated by non-federal entities that were issued before [insert date 512 directive and revised powerline facility forms are implemented]:

- Substitute without modification clauses III.A and III.B in clause C-25 for clauses III.A and III.B in the existing permit;
- Add Appendix E in clause C-25 to the existing permit; and
- Add the phrase “and MVCD for Each Powerline Facility” to the title of Appendix A on the first page and in Appendix A of the existing permit, and include the minimum vegetation clearance distance (MVCD) for each authorized powerline facility in Appendix A.

<USER NOTES FOR CLAUSE III.A>

<Accept an operating agreement from the holder only if the holder meets at least one of the eligibility criteria in clause III.A.>

A. OPERATING PLAN OR AGREEMENT

1. Preparation. The holder shall prepare an operating plan or agreement independently or in consultation with the authorized officer or the authorized officer’s designated representative. The operating plan or agreement shall be submitted by the holder and approved by the authorized officer or the authorized officer’s designated representative prior to commencement of operations and shall be attached to this permit as Appendix C. At least every 10 years from the approval date of the operating plan or agreement in Appendix C, the holder shall review and, as necessary or appropriate, propose updates to the operating plan or agreement to address changed conditions. Proposed updates to the operating plan or agreement that are deemed significant by the authorized officer shall be treated as proposed modifications and shall be submitted by the holder for review and approval by the authorized officer. Proposed updates that are deemed non-significant by the authorized officer may be made by written agreement of the holder and the authorized officer.

2. Contents. The operating plan or agreement in Appendix C shall cover all operations authorized by this permit. The operating plan or agreement shall outline steps the holder will take to protect public health and safety and the environment and shall include sufficient detail and standards to enable the Forest Service to monitor the holder’s operations for compliance with the terms of this permit. The contents of the operating plan or agreement shall meet all the requirements enumerated in 36 CFR 251.56(h)(5) and Forest Service Handbook 2709.11, Chapter 80, section 84.

B. VEGETATION MANAGEMENT

1. Vegetation Management Activities. The holder shall describe vegetation management activities as part of the operating plan or agreement in Appendix C. The vegetation management activities shall specify best management practices for felling, pruning, and destruction of trees, brush, shrubs, and other plants (hereinafter “vegetation”); the applicable MVCD for the powerline facilities; and procedures for designating, marking, and felling or pruning hazard trees and other vegetation. The vegetation management activities shall also address provide for prevention and control of invasive species, including invasive plants, within the permit area. For purposes of this clause, invasive plants include non-native species recognized as such by the Forest Service, which are generally, but are not limited to, state-listed noxious weeds. The holder shall follow invasive species prevention and control measures prescribed by the operating plan or agreement in Appendix C. In addition, the vegetation management activities shall provide for integration of native, non-invasive, low-growing vegetation that does not interfere with the powerline facilities and that promotes powerline facility reliability, reduces powerline facility maintenance costs, and is compatible with the aesthetics and health of the native plant and animal life in the permit area.

2. Routine and Emergency Vegetation Management and Planting of Vegetation. Routine and emergency vegetation management and planting of vegetation, both inside the linear right-of-way for a powerline facility and outside the linear right-of-way for a powerline facility to fell or prune hazard trees, must be conducted in accordance with Appendix C and clause III.B. For purposes of vegetation management per Appendix C and clause III.B, the MVCD for each powerline facility is enumerated in Appendix A, and vegetation management outside the linear right-of-way for a powerline facility shall be limited to felling and pruning of hazard trees.

(a) Routine Vegetation Management. Routine vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, requires prior written approval from the authorized officer, unless:

(1) The holder has submitted an email or letter to the authorized officer requesting approval of a single routine vegetation management project or an annual schedule of work for routine vegetation management in accordance with the specified timeframe in Appendix C;

(2) The proposed routine vegetation management is covered by approval of the operating plan or agreement in Appendix C or by subsequent case-by-case environmental analysis and consultation; and

(3) The authorized officer has not responded to the request in accordance with the specified timeframe in Appendix C.

In conducting routine vegetation management, regardless of whether prior written approval is required, the holder shall mark or otherwise identify the vegetation to be felled or pruned.

(b) Emergency Vegetation Management. Emergency vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, does not require prior written approval from the authorized officer or marking or other identification of the vegetation to be felled or pruned. The holder shall notify the authorized officer by email of the location and type of emergency vegetation management as soon as practicable, but no later than 24 hours after completion. Within 30 days of completion, the holder shall submit to the authorized officer a written report detailing at a minimum the location, type, and scope of the emergency vegetation management conducted, the reason it was conducted, the methods used to conduct it, and the resulting benefit.

3. Disposal of Felled Trees and Planting of Vegetation. The holder shall notify the authorized officer when approved felling, pruning, or destruction of vegetation has been completed. The Forest Service shall determine in advance of felling the method of disposal of trees felled in the permit area that meet utilization standards. Disposal may be by sale or without charge per 36 CFR Part 223, as may be most advantageous to the United States. Debris from felling that does not meet utilization standards shall also be disposed of according to methods determined by the Forest Service. Planting of vegetation in the permit area must have prior written approval from the authorized officer.

APPENDIX E

DEFINITIONS

The following definitions apply to this permit and all its appendices.

A. Powerline Facility Infrastructure

1. Conductor. Cable or wire that transmits electricity.
2. Linear Right-of-Way. An authorized right-of-way for a linear facility such as a road, trail, pipeline, powerline facility, fence, water transmission facility, or fiber optic cable, whose linear boundary is delineated by its legal description.
3. Powerline Facility. One or more electric distribution or transmission lines authorized by a special use authorization, and all appurtenances to those lines supporting conductors of one or more electric circuits of any voltage for the transmission of electric energy, overhead ground wires, and communications equipment that is owned by the holder; that solely supports operation and maintenance of the electric distribution or transmission lines; and that is not leased to other parties for communications uses that serve other purposes.

B. Powerline Facility Maintenance

1. Emergency Maintenance. Immediate repair or replacement of any component of a powerline facility that is necessary to prevent imminent loss, or to redress the loss, of electric

service due to equipment failure in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

2. Non-Routine Maintenance. Realigning, upgrading, rebuilding, or replacing an entire powerline facility or any segment thereof, including reconductoring, as identified in an approved operating plan or agreement.

(a) Realignment. Moving structures and associated supported cables outside the linear alignment for a powerline facility due to environmental conditions (see clause II.C of the permit).

(b) Rebuild. Replacement of existing cables as well as the majority of structures typically in the same linear alignment.

(c) Re-conductor. Replacement of existing conductor and other cables as applicable, where only very few structures are replaced, moved, or raised.

(d) Upgrade. Increasing the transfer capability of an existing powerline facility, which may also include a few structure replacements, adding intermediate structures or raising one or more structures, or ground removal to ensure conductor clearance.

3. Routine Maintenance. Repair or replacement of any component of a powerline facility due to ordinary wear and tear, such as repair of broken strands of conductors and overhead ground wire; replacement of hardware (e.g., insulator assembly) and accessories; maintenance of counterpoise, vibration dampers, and grading rings; scheduled replacement of decayed and deteriorated wood poles; and aerial or ground patrols to perform observations, conduct inspections, correct problems, and document conditions to provide for operation in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

C. Vegetation Management

1. Emergency Vegetation Management. Unplanned pruning or felling of vegetation on National Forest System lands within the linear right-of-way for a powerline facility and unplanned pruning or felling of hazard trees on National Forest System lands adjacent to either side of the linear right-of-way that have contacted or present an imminent danger of contacting the powerline facility to avoid the disruption of electric service or to eliminate an immediate fire or safety hazard.

2. Flashover. An electric discharge over or around the surface of an insulated conductor that may result in fire through the ignition of surrounding objects.

3. Hazard Tree. For purposes of vegetation management for a powerline facility, any tree, brush, shrub, other plant, or part thereof, hereinafter “vegetation” (whether located on National Forest System lands inside or outside the linear right-of-way for the powerline facility), that has been designated, prior to failure, by a certified or licensed arborist, qualified vegetation management specialist, or forester under the supervision of the holder to be:

(a) Dead; likely to die or fail before the next routine vegetation management cycle; or in a position that, under geographical or atmospheric conditions, could cause the vegetation to fall, sway, or grow into the powerline facility before the next routine vegetation management cycle; and

(b) Likely to cause substantial damage to the powerline facility; disrupt powerline facility service; come within 10 feet of the powerline facility; or come within the MVCD as determined in accordance with applicable reliability and safety standards and as identified in the special use authorization for the powerline facility and the associated approved operating plan or agreement.

4. Maximum Operating Sag. The theoretical position of a conductor when operating at 100 degrees Celsius, which must be accounted for when determining the MVCD.

5. Minimum Vegetation Clearance Distance (MVCD). A calculated minimum distance that is stated in feet or meters to prevent flashover between conductors and vegetation for various altitudes and operating voltages and that is measured from a conductor at maximum operating sag to vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility for purposes of felling or pruning hazard trees, which the holder uses to determine whether vegetation poses a system reliability hazard to the powerline facility.

6. Non-Emergency (Routine) Vegetation Management. Planned actions as described in an approved operating plan or agreement periodically taken to fell or prune vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility to fell or prune hazard trees to ensure normal powerline facility operations and to prevent wildfire in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

D. Roads and Trails

1. Access Road or Trail. For purposes of this permit, a road or trail constructed, operated, and maintained by the holder that is necessary to access a powerline facility or its linear right-of-way.

2. Road or Trail Construction. Building a road or trail where no road or trail has previously existed.

3. Road or Trail Reconstruction. Rebuilding an existing road or trail to increase its capacity, upgrade drainage crossings, or provide improved access, which may involve increasing the road or trail prism.

4. Road or Trail Maintenance. The upkeep of an entire road or trail within the existing road or trail prism, including surface and shoulders, parking and side areas, structures, and traffic

control devices, that is necessary to maintain or restore the road or trail in accordance with its original design standards.

C-26. Operating Plans and Agreements and Vegetation Management for Powerline Facilities Authorized by an Easement. In all existing Electric Transmission Line Easements, form FS-2700-31, that were issued before **insert date 512 directive and revised powerline facility forms are implemented**:

- Substitute without modification clauses III.A and III.B in clause C-26 for clauses III.A and III.B in the existing easement;
- Add Appendix E in clause C-26 to the existing easement; and
- Add the phrase “and MVCD for Each Powerline Facility” to the title of Appendix A on the first page and in Appendix A of the existing easement, and include the MVCD for each authorized powerline facility in Appendix A.

<USER NOTES FOR CLAUSE III.A>

<Accept an operating agreement from the grantee only if the grantee meets at least one of the eligibility criteria in clause III.A.>

A. OPERATING PLAN OR AGREEMENT

1. Preparation. The grantee shall prepare an operating plan or agreement independently or in consultation with the authorized officer or the authorized officer’s designated representative. To qualify for an operating agreement, the grantee must not be subject to the mandatory reliability standards established by the Electric Reliability Organization or must have sold less than or equal to 1,000,000 megawatt hours of electric energy for purposes other than resale during each of the 3 calendar years immediately preceding March 23, 2018. The operating plan or agreement shall be submitted by the grantee and shall be approved by the authorized officer or the authorized officer’s designated representative prior to commencement of operations and shall be attached to this easement as Appendix C. At least every 10 years from the approval date of the operating plan or agreement in Appendix C, the grantee shall review and, as necessary or appropriate, propose updates to the operating plan or agreement to address changed conditions. Proposed updates to the operating plan or agreement that are deemed significant by the authorized officer shall be treated as proposed modifications and shall be submitted by the grantee for review and approval by the authorized officer. Proposed updates that are deemed non-significant by the authorized officer may be made by written agreement of the grantee and the authorized officer.

2. Contents. The operating plan or agreement shall cover all operations authorized by this easement. The operating plan or agreement shall outline steps the grantee will take to protect public health and safety and the environment and shall include sufficient detail and standards to enable the Forest Service to monitor the grantee’s operations for compliance with the terms of this easement. The contents of the operating plan or agreement shall meet all the requirements enumerated in 36 CFR 251.56(h)(5) and Forest Service Handbook 2709.11, Chapter 80, section 84.

B. VEGETATION MANAGEMENT

1. Vegetation Management Activities. The grantee shall describe vegetation management activities as part of the operating plan or agreement in Appendix C. The vegetation management activities shall specify best management practices for felling, pruning, and destruction of trees, brush, shrubs, and other plants (hereinafter “vegetation”); the applicable MVCD for the powerline facilities; and procedures for designating, marking, and felling or pruning hazard trees and other vegetation. The vegetation management activities shall also provide for prevention and control of invasive species, including invasive plants, within the easement area. For purposes of this clause, invasive plants include non-native species recognized as such by the Forest Service, which are generally, but are not limited to, state-listed noxious weeds. The grantee shall follow invasive species prevention and control measures prescribed by the operating plan or agreement in Appendix C. In addition, the description of vegetation management activities shall provide for integration of native, non-invasive, low-growing vegetation that does not interfere with the powerline facilities and that promotes powerline facility reliability, reduces powerline facility maintenance costs, and is compatible with the aesthetics and health of the native plant and animal life in the easement area.

2. Routine and Emergency Vegetation Management and Planting of Vegetation. Routine and emergency vegetation management and planting of vegetation, both inside the linear right-of-way for a powerline facility and outside the linear right-of-way for a powerline facility to fell or prune hazard trees, must be conducted in accordance with Appendix C and clause III.B. For purposes of vegetation management per Appendix C and clause III.B, the MVCD for each powerline facility is enumerated in Appendix A, and vegetation management outside the linear right-of-way for a powerline facility shall be limited to felling and pruning of hazard trees.

(a) Routine Vegetation Management. Routine vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, requires prior written approval from the authorized officer, unless:

(1) The grantee has submitted an email or letter to the authorized officer requesting approval of a single routine vegetation management project or an annual schedule of work for routine vegetation management in accordance with the specified timeframe in Appendix C;

(2) The proposed routine vegetation management is covered by approval of the operating plan or agreement in Appendix C or by subsequent case-by-case environmental analysis and consultation; and

(3) The authorized officer has not responded to the request in accordance with the specified timeframe in Appendix C.

In conducting routine vegetation management, regardless of whether prior written approval is required, the grantee shall mark or otherwise identify the vegetation to be felled or pruned.

(b) Emergency Vegetation Management. Emergency vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, does not require prior written approval from the authorized officer or marking or other identification of the vegetation to be felled or pruned. The grantee shall notify the authorized officer by email of the location and type of emergency vegetation management as soon as practicable, but no later than 24 hours after completion. Within 30 days of completion, the grantee shall submit to the authorized officer a written report detailing at a minimum the location, type, and scope of the emergency vegetation management conducted, the reason it was conducted, the methods used to conduct it, and the resulting benefit.

3. Disposal of Felled Trees and Planting of Vegetation. The grantee shall notify the authorized officer when approved felling, pruning, or destruction of vegetation has been completed. The Forest Service shall determine in advance of felling the method of disposal of trees felled in the easement area that meet utilization standards. Disposal may be by sale or without charge per 36 CFR Part 223, as may be most advantageous to the United States. Debris from felling that does not meet utilization standards shall also be disposed of according to methods determined by the Forest Service. Planting of vegetation in the easement area must have prior written approval from the authorized officer.

APPENDIX E

DEFINITIONS

The following definitions apply to this easement and all its appendices.

A. Powerline Facility Infrastructure

1. Conductor. Cable or wire that transmits electricity.
2. Linear Right-of-Way. An authorized right-of-way for a linear facility such as a road, trail, pipeline, powerline facility, fence, water transmission facility, or fiber optic cable, whose linear boundary is delineated by its legal description.
3. Powerline Facility. One or more electric distribution or transmission lines authorized by a special use authorization, and all appurtenances to those lines supporting conductors of one or more electric circuits of any voltage for the transmission of electric energy, overhead ground wires, and communications equipment that is owned by the grantee; that solely supports operation and maintenance of the electric distribution or transmission lines; and that is not leased to other parties for communications uses that serve other purposes.

B. Powerline Facility Maintenance

1. Emergency Maintenance. Immediate repair or replacement of any component of a powerline facility that is necessary to prevent imminent loss, or to redress the loss, of electric

service due to equipment failure in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

2. Non-Routine Maintenance. Realigning, upgrading, rebuilding, or replacing an entire powerline facility or any segment thereof, including reconductoring, as identified in an approved operating plan or agreement.

(a) Realignment. Moving structures and associated supported cables outside the linear alignment for a powerline facility due to environmental conditions (see clause II.C of the easement).

(b) Rebuild. Replacement of existing cables as well as the majority of structures typically in the same linear alignment.

(c) Re-conductor. Replacement of existing conductor and other cables as applicable, where only very few structures are replaced, moved, or raised.

(d) Upgrade. Increasing the transfer capability of an existing powerline facility, which may also include a few structure replacements, adding intermediate structures or raising one or more structures, or ground removal to ensure conductor clearance.

3. Routine Maintenance. Repair or replacement of any component of a powerline facility due to ordinary wear and tear, such as repair of broken strands of conductors and overhead ground wire; replacement of hardware (e.g., insulator assembly) and accessories; maintenance of counterpoise, vibration dampers, and grading rings; scheduled replacement of decayed and deteriorated wood poles; and aerial or ground patrols to perform observations, conduct inspections, correct problems, and document conditions to provide for operation in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

C. Vegetation Management

1. Emergency Vegetation Management. Unplanned pruning or felling of vegetation on National Forest System lands within the linear right-of-way for a powerline facility and unplanned pruning or felling of hazard trees on National Forest System lands adjacent to either side of the linear right-of-way that have contacted or present an imminent danger of contacting the powerline facility to avoid the disruption of electric service or to eliminate an immediate fire or safety hazard.

2. Flashover. An electric discharge over or around the surface of an insulated conductor that may result in fire through the ignition of surrounding objects.

3. Hazard Tree. For purposes of vegetation management for a powerline facility, any tree, brush, shrub, other plant, or part thereof, hereinafter “vegetation” (whether located on National Forest System lands inside or outside the linear right-of-way for the powerline facility), that has been designated, prior to failure, by a certified or licensed arborist, qualified vegetation management specialist, or forester under the supervision of the grantee to be:

(a) Dead; likely to die or fail before the next routine vegetation management cycle; or in a position that, under geographical or atmospheric conditions, could cause the vegetation to fall, sway, or grow into the powerline facility before the next routine vegetation management cycle; and

(b) Likely to cause substantial damage to the powerline facility; disrupt powerline facility service; come within 10 feet of the powerline facility; or come within the MVCD as determined in accordance with applicable reliability and safety standards and as identified in the special use authorization for the powerline facility and the associated approved operating plan or agreement.

4. Maximum Operating Sag. The theoretical position of a conductor when operating at 100 degrees Celsius, which must be accounted for when determining the MVCD.

5. Minimum Vegetation Clearance Distance (MVCD). A calculated minimum distance that is stated in feet or meters to prevent flashover between conductors and vegetation for various altitudes and operating voltages and that is measured from a conductor at maximum operating sag to vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way of a powerline facility for purposes of felling or pruning hazard trees, which the grantee uses to determine whether vegetation poses a system reliability hazard to the powerline facility.

6. Non-Emergency (Routine) Vegetation Management. Planned actions as described in an operating plan or agreement periodically taken to fell or prune vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility to fell or prune hazard trees to ensure normal powerline facility operations and to prevent wildfire in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

D. Roads and Trails

1. Access Road or Trail. For purposes of this easement, a road or trail constructed, operated, and maintained by the grantee that is necessary to access a powerline facility or its linear right-of-way.

2. Road or Trail Construction. Building a road or trail where no road or trail has previously existed.

3. Road or Trail Reconstruction. Rebuilding an existing road or trail to increase its capacity, upgrade drainage crossings, or provide improved access, which may involve increasing the road or trail prism.

4. Road or Trail Maintenance. The upkeep of an entire road or trail within the existing road or trail prism, including surface and shoulders, parking and side areas, structures, and traffic

control devices, that is necessary to maintain or restore the road or trail in accordance with its original design standards.

C-27. Operating Plans and Vegetation Management for Powerline Facilities Authorized by Form FS-2700-4k Issued to a Federal Entity. In all existing Electric Transmission Line Permits for a Right-of-Way for Federal Entities, form FS-2700-4k, for powerline facilities operated by federal entities that were issued before [insert date 512 directive and revised powerline facility forms are implemented]:

- Substitute without modification clauses III.A and III.B in clause C-27 for clauses III.A and III.B in the existing permit;
- Substitute Appendix A in clause C-27 for Appendix A in the existing permit;
- Delete existing Appendix B, and re-letter the remaining appendices on the first page and in the appendices of the existing permit;
- Add the phrase “and MVCD for Each Powerline Facility” to the title of re-lettered Appendix B on the first page and in the appendices of the existing permit; and
- Include the MVCD for each authorized powerline facility in re-lettered Appendix B.

A. OPERATING PLAN

1. Preparation. The federal holder shall prepare an operating plan independently or in consultation with the authorized officer or the authorized officer’s designated representative. The operating plan shall be submitted by the federal holder and approved by the authorized officer or the authorized officer’s designated representative, consistent with the Forest Service’s authorities, prior to use and occupancy of the permit area pursuant to this permit and shall be attached to this permit as Appendix E. At least every 10 years from the approval date of the operating plan in Appendix E, the federal holder shall review and, as necessary or appropriate, propose updates to the operating plan to address changed conditions. Proposed updates to the operating plan that are deemed significant by the authorized officer shall be treated as proposed modifications and shall be submitted by the federal holder for review and approval by the authorized officer. Proposed updates that are deemed non-significant by the authorized officer may be made by written agreement of the federal holder and the authorized officer.

2. Contents. The operating plan in Appendix E shall apply to permit area management for the powerline facilities and access roads and trails. The operating plan shall outline steps the federal holder will take to protect public health and safety and the environment and shall include sufficient detail and standards to enable the Forest Service to monitor the federal holder’s operations for compliance with the terms and conditions of this permit. The operating plan shall also outline the roles and responsibilities of the federal holder and the Forest Service with regard to management of the permit area. The contents of the operating plan shall meet all the requirements enumerated in 36 CFR 251.56(h)(5) and Forest Service Handbook 2709.11, Chapter 80, section 84.

B. VEGETATION MANAGEMENT

1. Vegetation Management Activities. The federal holder shall describe vegetation management activities as part of the operating plan in Appendix E. The description of vegetation management activities shall specify best management practices for felling, pruning, and destruction of trees, brush, shrubs, and other plants (hereinafter “vegetation”) that are consistent with the federal holder’s North American Electric Reliability Corporation (NERC)-compliant powerline facility vegetation management program and its associated environmental analyses. The description of vegetation management activities shall also identify the applicable MVCD for the powerline facilities and procedures for designating, marking, and felling or pruning hazard trees and other vegetation. The description of vegetation management activities shall also provide for prevention and control of invasive species, including invasive plants, within the permit area. For purposes of this clause, invasive plants include non-native species recognized as such by the Forest Service, which are generally, but are not limited to, state-listed noxious weeds. The federal holder shall follow prevention and control measures prescribed by the operating plan. In addition, the description of vegetation management activities shall provide for integration of native, non-invasive, low-growing vegetation that does not interfere with the powerline facilities and that promotes powerline facility reliability, reduces powerline facility maintenance costs, is compatible with the aesthetics and health of the native plant and animal life in the permit area, and is consistent with the federal holder’s NERC-compliant powerline facility vegetation management program and other vegetation management documents. The federal holder shall provide the Forest Service with a paper or electronic copy of the federal holder’s programmatic and supplemental environmental analysis for the powerline facilities and documentation of the federal holder’s powerline facility vegetation management program.

2. Routine and Emergency Vegetation Management and Planting of Vegetation. Routine and emergency vegetation management and planting of vegetation, both inside the linear right-of-way for a powerline facility and outside the linear right-of-way for a powerline facility to fell or prune hazard trees, must be conducted in accordance with Appendix E and clause III.B. For purposes of vegetation management per Appendix E and clause III.B, the MVCD for each powerline facility is enumerated in Appendix B, and vegetation management outside the linear right-of-way for a powerline facility shall be limited to felling and pruning of hazard trees.

(a) Routine Vegetation Management. Routine vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, requires prior written approval from the authorized officer, unless:

(1) The federal holder has submitted an email or letter to the authorized officer requesting approval of a single routine vegetation management project or an annual schedule of work for routine vegetation management in accordance with the specified timeframe in Appendix E;

(2) The proposed routine vegetation management is covered by approval of the operating plan in Appendix E or by subsequent case-by-case environmental analysis and consultation; and

(3) The authorized officer has not responded to the request in accordance with the specified timeframe in Appendix E.

In conducting routine vegetation management, regardless of whether prior written approval is required, the federal holder shall mark or otherwise identify the vegetation to be felled or pruned.

(b) Emergency Vegetation Management. Emergency vegetation management, either inside the linear right-of-way for a powerline facility or linear outside the right-of-way for a powerline facility to fell or prune hazard trees, does not require prior written approval from the authorized officer or marking or other identification of the vegetation to be felled or pruned. The federal holder shall notify the authorized officer by email of the location and type of emergency vegetation management as soon as practicable, but no later than 24 hours after completion. Within 30 days of completion, the federal holder shall submit to the authorized officer a written report detailing at a minimum the location, type, and scope of the emergency vegetation management conducted, the reason it was conducted, the methods used to conduct it, and the resulting benefit.

3. Disposal of Felled Trees and Planting of Vegetation. The federal holder shall notify the authorized officer when approved felling, pruning, or destruction of vegetation has been completed. The Forest Service shall determine in advance of felling the method of disposal of trees felled in the permit area that meet utilization standards. Disposal may be by sale or without charge per 36 CFR Part 223, as may be most advantageous to the United States. Debris from felling that does not meet utilization standards shall also be disposed of according to methods determined by the Forest Service. Planting of vegetation in the permit area must have prior written approval from the authorized officer.

APPENDIX A

DEFINITIONS

The following definitions apply to this permit and all its appendices.

<USER NOTES FOR SECTION A>

<Include Section A in permits issued to Bonneville Power Administration (Bonneville). Delete Section A in permits issued to other federal entities, and re-letter the remaining sections in this appendix.>

A. General References

1. Conversion or Convert. The process of replacing the authorization for existing powerline facilities and federal holder access roads under an historical MOU and supplement or under a LUGI with a special use authorization for a federal entity issued under FLPMA.

2. Coordinate. To work together to seek and consider input from the other party to the FLPMA permit, including discussing and considering incorporation of that input in

implementing the 2016 MOU, permit, and operating plan for the federal holder's permits for powerline facilities.

3. Historical Memorandum of Understanding (MOU). The 1960, 1966, 1967, or 1974 MOU between Bonneville Power Administration (Bonneville) and the Forest Service that provides for authorization of the federal holder's powerline facilities (referred to in these MOUs as "transmission lines") and access roads on NFS lands.

4. Land Use Grant Instrument (LUGI). A valid but outdated special use authorization issued under the 1974 historical MOU.

5. Special Use Authorization. A written permit, term permit, lease, or easement that authorizes use or occupancy of NFS lands and specifies the terms and conditions under which the use or occupancy may occur. See 36 CFR 251.51.

6. Supplement. A document which, in combination with an historical MOU, authorizes the use and occupancy of NFS lands for the federal holder's powerline facilities and access roads and which iterates the location of the federal holder's powerline facilities and access roads on NFS lands; specifications regarding vegetation management, including felling of hazard trees; the reference numbers for associated drawings; the acreage involved; and the requirement for a right-of-way management plan.

B. Abbreviations

CE or CX – Categorical Exclusion

FLPMA – Federal Land Policy and Management Act

NFS – National Forest System lands

POC – Point of Contact

SA – Supplement Analysis

C. Environmental Resources

1. National Environmental Policy Act (NEPA)

(a) Categorical Exclusion (referred to as a CX by the federal holder and a CE by the Forest Service). A category of actions which do not individually or cumulatively have a significant effect on the human environment and which are therefore exempt from requirements to prepare an environmental impact statement (Council on Environmental Quality's regulations at 40 CFR1508.4). The federal holder and the Forest Service have different NEPA implementing regulations that define their applicable categorical exclusions. See 36 CFR 220.6 for the Forest Service's categorical exclusions and 10 CFR 1021.410 for the United States Department of Energy's categorical exclusions.

(b) Supplement Analysis. A NEPA document prepared by the federal holder pursuant to 10 CFR 1021.314(c) to determine whether (i) an existing EIS should be supplemented pursuant to 40 CFR 1502.9(c); (ii) a new EIS should be prepared; or (iii) no further NEPA documentation is required.

<USER NOTES FOR DEFINITION C.1(b)>

<Include the following paragraph in definition C.1.b in permits issued to BPA. Delete the following paragraph in definition C.1(b) in permits issued to other federal entities.>

This term is referenced for informational purposes because the federal holder typically uses supplement analyses tiered to its transmission system vegetation management program environmental impact statement (EIS) for routine vegetation management actions. See the federal holder's Transmission System Vegetation Management Program Final Environmental Impact Statement (FEIS) (June 2000) (DOE/EIS-0285), https://www.bpa.gov/efw/Analysis/NEPADocuments/Pages/Vegetation_Management.aspx. The EIS established a framework for addressing site-specific environmental analysis of the federal holder's vegetation management actions by (1) using the EIS planning steps to ensure consideration of all potential issues, (2) consulting the EIS to determine whether impacts had been previously considered, (3) applying the appropriate established mitigation measures, and (4) documenting the analysis in a supplement analysis as appropriate. 10 CFR 1021.314.

D. Powerline Facility Infrastructure

1. Conductor. Cable or wire that transmits electricity.
2. Fiber Optic Cable. An all-dielectric, self-supporting, non-conducting cable consisting of a central core surrounded by buffer tubes containing optical fibers and covered with a protective polyethylene jacket; an optical ground wire; or an overhead ground wire with optical fibers integrated into the design of the cable to provide telecommunications capability as well as lightning protection.
3. Overhead Ground Wire. Grounded wire typically installed above powerline facility phase conductors or substations to intercept lightning strikes.
4. Linear Right-of-Way. An authorized right-of-way for a linear facility such as a road, trail, pipeline, powerline facility, fence, water transmission facility, or fiber optic cable, whose linear boundary is delineated by its legal description.
5. Powerline Facility. One or more electric distribution or transmission lines authorized by a special use authorization, and all appurtenances to those lines supporting conductors of one or more electric circuits of any voltage for the transmission of electric energy, overhead ground wires, and communications equipment that is owned by the federal holder; that solely supports operation and maintenance of the electric distribution or transmission lines; and that is not leased to other parties for communications uses that serve other purposes.

6. Structure. A type of support for powerline facilities, overhead ground wires, and fiber optic cable consisting of wood (such as poles), concrete, or steel (such as lattice steel towers), depending on the size of the powerline facility.

7. Tower. A type of structure consisting of lattice steel.

E. Powerline Facility Activities and Projects

1. New Construction. A project that adds a new powerline facility at any voltage to the federal holder's electric transmission system where no powerline facilities have previously existed, and no special use authorization has been issued.

2. Construction or Construction Activity or Project. An activity or project involving any of the terms defined in paragraphs E.4 and E.5 and not including new construction.

3. Maintenance. An activity or project performed on the powerline facilities (including replacement of or addition of parts and structural components and other activities such as wood pole replacements, hardware replacements, re-conductoring, electrical impairment removal, wood pole rebuilding, and moving structures) that is needed to ensure the powerline facilities continue to provide safe and reliable service.

4. Routine Maintenance. Repair or replacement of any component of a powerline facility due to ordinary wear and tear, such as repair of broken strands of conductors and overhead ground wire; replacement of hardware (e.g., insulator assembly) and accessories; maintenance of counterpoise, vibration dampers, and grading rings; scheduled replacement of decayed and deteriorated wood poles; and aerial or ground patrols to perform observations, conduct inspections, correct problems, and document conditions to provide for operation in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

5. Non-Routine Maintenance. Realigning, upgrading, rebuilding, or replacing an entire powerline facility or any segment thereof, including reconductoring, as identified in an approved operating plan or agreement.

(a) Electrical Impairment Removal. An activity needed to achieve the regulatory requirements for electrical clearance between a conductor and the ground or other objects, which may include raising or adding structures, ground excavation, or requesting third parties to move or remove buildings or other improvements under their control.

(b) Realignment. Moving structures and associated supported cables outside the linear alignment for a powerline facility due to environmental conditions (*see* clause I.I.C of the FLPMA permit).

(c) Rebuild. Replacement of existing cables as well as the majority of structures typically in the same linear alignment.

(d) Re-conductor. Replacement of existing conductor and other cables as applicable, where only very few structures are replaced, moved, or raised.

(e) Refurbishment. Replacement of powerline facility components as needed, such as conductors, ground wire, fiber optic cable, assemblies, structures, or hardware due to age or condition.

(f) Upgrade. Increasing the transfer capability of an existing powerline facility, which may also include a few structure replacements, adding intermediate structures or raising one or more structures, or ground removal to ensure conductor clearance.

(g) Emergency Maintenance. Immediate repair or replacement of any component of a powerline facility that is necessary to prevent imminent loss, or to redress the loss, of electric service due to equipment failure in accordance with applicable reliability and safety standards and as identified in an approved operating plan.

F. Operation and Maintenance of the Federal Holder's Fiber Optic Cable Attached to the Federal Holder's Powerline Facilities or Buried in the Permit Area Below or Near the Federal Holder's Powerline Facilities

1. Fiber Optic Cable Installation. Installation of fiber optic cable on an existing powerline facility or buried in the permit area below or near an existing powerline facility that is required to improve the federal holder's communications capability and that is needed to support the safe and reliable operation and maintenance of the federal holder's electric transmission system.

2. Fiber Optic Cable Maintenance and Replacement. Maintenance or replacement of fiber optic cable that is installed as defined in paragraph F.1.

G. Vegetation Management

1. Emergency Vegetation Management. Unplanned pruning or felling of vegetation on National Forest System lands within the linear right-of-way for a powerline facility and unplanned pruning or felling of hazard trees on National Forest System lands adjacent to either side of the linear right-of-way that have contacted or present an imminent danger of contacting the powerline facility to avoid the disruption of electric service or to eliminate an immediate fire or safety hazard.

2. Flashover. An electric discharge over or around the surface of an insulated conductor that may result in fire through the ignition of surrounding objects.

3. Hazard Tree. For purposes of vegetation management for a powerline facility, any tree, brush, shrub, other plant, or part thereof, hereinafter "vegetation" (whether located on National Forest System lands inside or outside the linear right-of-way for a powerline facility), that has been designated, prior to failure, by a certified or licensed arborist, qualified vegetation management specialist, or forester under the supervision of the federal holder to be:

(a) Dead; likely to die or fail before the next routine vegetation management cycle; or in a position that, under geographical or atmospheric conditions, could cause the vegetation to fall, sway, or grow into the powerline facility before the next routine vegetation management cycle; and

(b) Likely to cause substantial damage to the powerline facility; disrupt powerline facility service; come within 10 feet of the powerline facility; or come within the MVCD as determined in accordance with applicable reliability and safety standards and as identified in the special use authorization for the powerline facility and the associated approved operating plan.

4. Iso-Clearance Map. A graphic depiction using contour lines to portray the maximum permitted vegetation height above ground that does not violate the minimum clearance distance or other minimum prescribed clearance limits from conductors.

5. Maximum Operating Sag. The theoretical position of a conductor when operating at 100 degrees Celsius, which must be accounted for when determining the MVCD.

6. Minimum Vegetation Clearance Distance (MVCD). A calculated minimum distance that is stated in feet or meters to prevent flashover between conductors and vegetation for various altitudes and operating voltages and that is measured from a conductor at maximum operating sag to vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility for purposes of felling or pruning hazard trees, which the federal holder uses to determine whether vegetation poses a system reliability hazard to the powerline facility.

7. Non-Emergency (Routine) Vegetation Management. Planned actions as described in an approved operating plan periodically taken to fell or prune vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility to fell or prune hazard trees to ensure normal powerline facility operations and to prevent wildfire in accordance with applicable reliability and safety standards and as identified in an approved operating plan.

8. Slash. All vegetative debris resulting from the federal holder's vegetation management, including but not limited to limbs, tops, unmerchantable logs, bark, wood chunks, pushed out stumps, damaged brush, and damaged residual trees.

9. Swing. Horizontal conductor position with six pounds per square foot of wind and 15.5 degrees Celsius.

10. Timber. Any tree that has commercial value from lumber, chip, pulp, or veneer.

11. Tree. A woody, stemmed, perennial plant species, typically having a single stem or

trunk with the potential to grow to a height greater than ten feet and bearing lateral branches at some distance from the ground.

H. Roads and Trails

1. Access Road or Trail. For purposes of this permit, a road or trail constructed, operated, and maintained by the federal holder that is necessary to access a powerline facility or its linear right-of-way.
2. Road. A motor vehicle route over 50 inches wide, unless identified and managed as a trail (36 CFR 212.1).
3. Trail. A route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail (36 CFR 212.1).
4. Forest Road or Trail. A road or trail wholly or partly within or adjacent to and serving the NFS that the Forest Service determines is necessary for the protection, administration, and utilization of the NFS and the use and development of its resources (36 CFR 212.1).
5. National Forest System Road. A forest road other than a road which has been authorized by a legally documented right-of-way held by a state, county, or other local public road authority (36 CFR 212.1).
6. National Forest System Trail. A forest trail other than a trail which has been authorized by a legally documented right-of-way held by a state, county, or other local public road authority (36 CFR 212.1).
7. Road or Trail Construction. Building a road or trail where no road or trail has previously existed.
8. Road or Trail Reconstruction. Rebuilding an existing road or trail to increase its capacity, upgrade drainage crossings, or provide improved access, which may involve increasing the road or trail prism.

<USER NOTES FOR DEFINITION H.9>

<In the title of definition H.9, include the phrases “Road or Trail Improvement (Federal Holder)” and “(Forest Service)” in permits issued to Bonneville. Delete the phrases “Road or Trail Improvement (Federal Holder)” and “(Forest Service)” in permits issued to other federal entities.>

9. Road or Trail Improvement (Federal Holder)/Road or Trail Maintenance (Forest Service). The upkeep of an entire road or trail within the existing road or trail prism, including surface and shoulders, parking and side areas, structures, and traffic control devices, that is necessary to maintain or restore the road or trail in accordance with its original design standards.

C-28. Operating Plans and Vegetation Management for Powerline Facilities Authorized by a Special Use Permit or Other Type of Special Use Authorization Issued to a Federal Entity. In all Special Use Permits, form FS-2700-4, and in all other types of special use authorizations (such as a memorandum of understanding between the Forest Service and Bonneville Power Administration plus a supplement or land use grant instrument) for powerline facilities operated by federal entities that were issued before [insert date 512 directive and revised powerline facility forms are implemented]:

- Add without modification clauses III.A and III.B in clause C-28 to the existing authorization;
- Add Appendix A in clause C-28 to the existing authorization; and
- Include the MVCD for each authorized powerline facility in an appendix to the existing authorization.

A. OPERATING PLAN

1. Preparation. The federal holder shall prepare an operating plan independently or in consultation with the authorized officer or the authorized officer's designated representative. The operating plan shall be submitted by the federal holder and approved by the authorized officer or the authorized officer's designated representative, consistent with the Forest Service's authorities, prior to use and occupancy of the permit area pursuant to this permit and shall be attached to this permit as an appendix. At least every 10 years from the approval date of the operating plan, the federal holder shall review and, as necessary or appropriate, propose updates to the operating plan to address changed conditions. Proposed updates to the operating plan that are deemed significant by the authorized officer shall be treated as proposed modifications and shall be submitted by the federal holder for review and approval by the authorized officer. Proposed updates that are deemed non-significant by the authorized officer may be made by written agreement of the federal holder and the authorized officer.

2. Contents. The operating plan shall apply to permit area management for the powerline facilities and access roads and trails. The operating plan shall outline steps the federal holder will take to protect public health and safety and the environment and shall include sufficient detail and standards to enable the Forest Service to monitor the federal holder's operations for compliance with the terms and conditions of this permit. The operating plan shall also outline the roles and responsibilities of the federal holder and the Forest Service with regard to management of the permit area. The contents of the operating plan shall meet all the requirements enumerated in 36 CFR 251.56(h)(5) and Forest Service Handbook 2709.11, Chapter 80, section 84.

B. VEGETATION MANAGEMENT

1. Vegetation Management Activities. The federal holder shall describe vegetation management activities as part of the operating plan. The description of vegetation management activities shall specify best management practices for felling, pruning, and destruction of trees, brush, shrubs, and other plants (hereinafter "vegetation") that are

consistent with the federal holder's North American Electric Reliability Corporation (NERC)-compliant powerline facility vegetation management program and its associated environmental analyses. The description of vegetation management activities shall also identify the applicable MVCD for the powerline facilities and procedures for designating, marking, and felling or pruning hazard trees and other vegetation. The description of vegetation management activities shall also provide for prevention and control of invasive species, including invasive plants, within the permit area. For purposes of this clause, invasive plants include non-native species recognized as such by the Forest Service, which are generally, but are not limited to, state-listed noxious weeds. The federal holder shall follow prevention and control measures prescribed by the operating plan. In addition, the description of vegetation management activities shall provide for integration of native, non-invasive, low-growing vegetation that does not interfere with the powerline facilities and that promotes powerline facility reliability, reduces powerline facility maintenance costs, is compatible with the aesthetics and health of the native plant and animal life in the permit area, and is consistent with the federal holder's NERC-compliant powerline facility vegetation management program and other vegetation management documents. The federal holder shall provide the Forest Service with a paper or electronic copy of the federal holder's programmatic and supplemental environmental analysis for the powerline facilities and documentation of the federal holder's powerline facility vegetation management program.

2. Routine and Emergency Vegetation Management and Planting of Vegetation. Routine and emergency vegetation management and planting of vegetation, both inside the linear right-of-way for a powerline facility and outside the linear right-of-way for a powerline facility to fell or prune hazard trees, must be conducted in accordance with the operating plan attached as an appendix to this permit and clause III.B. For purposes of vegetation management per the operating plan and clause III.B, the MVCD for each powerline facility is enumerated in an appendix, and vegetation management outside the linear right-of-way for a powerline facility shall be limited to felling and pruning of hazard trees.

(a) Routine Vegetation Management. Routine vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, requires prior written approval from the authorized officer, unless:

(1) The federal holder has submitted an email or letter to the authorized officer requesting approval of a single routine vegetation management project or an annual schedule of work for routine vegetation management in accordance with the specified timeframe in the operating plan attached as an appendix to this permit;

(2) The proposed routine vegetation management is covered by approval of the operating plan or agreement attached as an appendix or by subsequent case-by-case environmental analysis and consultation; and

(3) The authorized officer has not responded to the request in accordance with the specified timeframe in the operating plan attached as an appendix to this permit.

In conducting routine vegetation management, regardless of whether prior written approval is required, the federal holder shall mark or otherwise identify the vegetation to be felled or pruned.

(b) Emergency Vegetation Management. Emergency vegetation management, either inside the linear right-of-way for a powerline facility or outside the linear right-of-way for a powerline facility to fell or prune hazard trees, does not require prior written approval from the authorized officer or marking or other identification of the vegetation to be felled or pruned. The federal holder shall notify the authorized officer by email of the location and type of emergency vegetation management as soon as practicable, but no later than 24 hours after completion. Within 30 days of completion, the federal holder shall submit to the authorized officer a written report detailing at a minimum the location, type, and scope of the emergency vegetation management conducted, the reason it was conducted, the methods used to conduct it, and the resulting benefit.

3. Disposal of Felled Trees and Planting of Vegetation. The federal holder shall notify the authorized officer when approved felling, pruning, or destruction of vegetation has been completed. The Forest Service shall determine in advance of felling the method of disposal of trees felled in the permit area that meet utilization standards. Disposal may be by sale or without charge per 36 CFR Part 223, as may be most advantageous to the United States. Debris from felling that does not meet utilization standards shall also be disposed of according to methods determined by the Forest Service. Planting of vegetation in the permit area must have prior written approval from the authorized officer.

APPENDIX A

DEFINITIONS

The following definitions apply to this permit and all its appendices.

<USER NOTES FOR SECTION A>

<Include Section A in permits issued to Bonneville Power Administration (Bonneville). Delete Section A in permits issued to other federal entities, and re-letter the remaining sections in this appendix.>

A. General References

1. Conversion or Convert. The process of replacing the authorization for existing powerline facilities and federal holder access roads under an historical MOU and supplement or under a LUGI with a special use authorization for a federal entity issued under FLPMA.
2. Coordinate. To work together to seek and consider input from the other party to the FLPMA permit, including discussing and considering incorporation of that input in implementing the 2016 MOU, permit, and operating plan for the federal holder's permits for powerline facilities.

3. Historical Memorandum of Understanding (MOU). The 1960, 1966, 1967, or 1974 MOU between Bonneville Power Administration and the Forest Service that provides for authorization of the federal holder's powerline facilities (referred to in these MOUs as "transmission lines") and access roads on NFS lands.
4. Land Use Grant Instrument (LUGI). A valid but outdated special use authorization issued under the 1974 historical MOU.
5. Special Use Authorization. A written permit, term permit, lease, or easement that authorizes use or occupancy of NFS lands and specifies the terms and conditions under which the use or occupancy may occur. See 36 CFR 251.51.
6. Supplement. A document which, in combination with an historical MOU, authorizes the use and occupancy of NFS lands for the federal holder's powerline facilities and access roads and which iterates the location of the federal holder's powerline facilities and access roads on NFS lands; specifications regarding vegetation management, including felling of hazard trees; the reference numbers for associated drawings; the acreage involved; and the requirement for a right-of-way management plan.

B. Abbreviations

CE or CX – Categorical Exclusion

FLPMA – Federal Land Policy and Management Act

NFS – National Forest System lands

POC – Point of Contact

SA – Supplement Analysis

C. Environmental Resources

1. National Environmental Policy Act (NEPA)

(a) Categorical Exclusion (referred to as a CX by the federal holder and a CE by the Forest Service). A category of actions which do not individually or cumulatively have a significant effect on the human environment and which are therefore exempt from requirements to prepare an environmental impact statement (Council on Environmental Quality's regulations at 40 CFR1508.4). The federal holder and the Forest Service have different NEPA implementing regulations that define their applicable categorical exclusions. See 36 CFR 220.6 for the Forest Service's categorical exclusions and 10 CFR 1021.410 for the United States Department of Energy's categorical exclusions.

(b) Supplement Analysis. A NEPA document prepared by the federal holder pursuant to 10 CFR 1021.314(c) to determine whether (i) an existing EIS should be supplemented

pursuant to 40 CFR 1502.9(c); (ii) a new EIS should be prepared; or (iii) no further NEPA documentation is required.

<USER NOTES FOR DEFINITION C.1(b)>

<Include the following paragraph in definition C.1.b in permits issued to Bonneville. Delete the following paragraph in definition C.1(b) in permits issued to other federal entities.>

This term is referenced for informational purposes because the federal holder typically uses supplement analyses tiered to its transmission system vegetation management program environmental impact statement (EIS) for routine vegetation management actions. See the federal holder's Transmission System Vegetation Management Program Final Environmental Impact Statement (FEIS) (June 2000) (DOE/EIS-0285), https://www.bpa.gov/efw/Analysis/NEPADocuments/Pages/Vegetation_Management.aspx. The EIS established a framework for addressing site-specific environmental analysis of the federal holder's vegetation management actions by (1) using the EIS planning steps to ensure consideration of all potential issues, (2) consulting the EIS to determine whether impacts had been previously considered, (3) applying the appropriate established mitigation measures, and (4) documenting the analysis in a supplement analysis as appropriate. 10 CFR 1021.314.

D. Powerline Facility Infrastructure

1. Conductor. Cable or wire that transmits electricity.
2. Fiber Optic Cable. An all-dielectric, self-supporting, non-conducting cable consisting of a central core surrounded by buffer tubes containing optical fibers and covered with a protective polyethylene jacket; an optical ground wire; or an overhead ground wire with optical fibers integrated into the design of the cable to provide telecommunications capability as well as lightning protection.
3. Overhead Ground Wire. Grounded wire typically installed above powerline facility phase conductors or substations to intercept lightning strikes.
4. Linear Right-of-Way. An authorized right-of-way for a linear facility such as a road, trail, pipeline, powerline facility, fence, water transmission facility, or fiber optic cable, whose linear boundary is delineated by its legal description.
5. Powerline Facility. One or more electric distribution or transmission lines authorized by a special use authorization, and all appurtenances to those lines supporting conductors of one or more electric circuits of any voltage for the transmission of electric energy, overhead ground wires, and communications equipment that is owned by the federal holder; that solely supports operation and maintenance of the electric distribution or transmission lines; and that is not leased to other parties for communications uses that serve other purposes.
6. Structure. A type of support for powerline facilities, overhead ground wires, and fiber optic cable consisting of wood (such as poles), concrete, or steel (such as lattice steel towers), depending on the size of the powerline facility.

7. Tower. A type of structure consisting of lattice steel.

E. Powerline Facility Activities and Projects

1. New Construction. A project that adds a new powerline facility at any voltage to the federal holder's electric transmission system where no powerline facilities have previously existed, and no special use authorization has been issued.

2. Construction or Construction Activity or Project. An activity or project involving any of the terms defined in paragraphs E.4 and E.5 and not including new construction.

3. Maintenance. An activity or project performed on the powerline facilities (including replacement of or addition of parts and structural components and other activities such as wood pole replacements, hardware replacements, re-conductoring, electrical impairment removal, wood pole rebuilding, and moving structures) that is needed to ensure the powerline facilities continue to provide safe and reliable service.

4. Routine Maintenance. Repair or replacement of any component of a powerline facility due to ordinary wear and tear, such as repair of broken strands of conductors and overhead ground wire; replacement of hardware (e.g., insulator assembly) and accessories; maintenance of counterpoise, vibration dampers, and grading rings; scheduled replacement of decayed and deteriorated wood poles; and aerial or ground patrols to perform observations, conduct inspections, correct problems, and document conditions to provide for operation in accordance with applicable reliability and safety standards and as identified in an approved operating plan or agreement.

5. Non-Routine Maintenance. Realigning, upgrading, rebuilding, or replacing an entire powerline facility or any segment thereof, including reconductoring, as identified in an approved operating plan or agreement.

(a) Electrical Impairment Removal. An activity needed to achieve the regulatory requirements for electrical clearance between a conductor and the ground or other objects, which may include raising or adding structures, ground excavation, or requesting third parties to move or remove buildings or other improvements under their control.

(b) Realignment. Moving structures and associated supported cables outside the linear alignment for a powerline facility due to environmental conditions (*see* clause II.C of the FLPMA permit).

(c) Rebuild. Replacement of existing cables as well as the majority of structures typically in the same linear alignment.

(d) Re-conductor. Replacement of existing conductor and other cables as applicable, where only very few structures are replaced, moved, or raised.

(e) Refurbishment. Replacement of powerline facility components as needed, such as conductors, ground wire, fiber optic cable, assemblies, structures, or hardware due to age or condition.

(f) Upgrade. Increasing the transfer capability of an existing powerline facility, which may also include a few structure replacements, adding intermediate structures or raising one or more structures, or ground removal to ensure conductor clearance.

(g) Emergency Maintenance. Immediate repair or replacement of any component of a powerline facility that is necessary to prevent imminent loss, or to redress the loss, of electric service due to equipment failure in accordance with applicable reliability and safety standards and as identified in an approved operating plan.

F. Operation and Maintenance of the Federal Holder's Fiber Optic Cable Attached to the Federal Holder's Powerline Facilities or Buried in the Permit Area Below or Near the Federal Holder's Powerline Facilities

1. Fiber Optic Cable Installation. Installation of fiber optic cable on an existing powerline facility or buried in the permit area below or near an existing powerline facility that is required to improve the federal holder's communications capability and that is needed to support the safe and reliable operation and maintenance of the federal holder's electric transmission system.

2. Fiber Optic Cable Maintenance and Replacement. Maintenance or replacement of fiber optic cable that is installed as defined in paragraph F.1.

G. Vegetation Management

1. Emergency Vegetation Management. Unplanned pruning or felling of vegetation on National Forest System lands within the linear right-of-way for a powerline facility and unplanned pruning or felling of hazard trees on National Forest System lands adjacent to either side of the linear right-of-way that have contacted or present an imminent danger of contacting the powerline facility to avoid the disruption of electric service or to eliminate an immediate fire or safety hazard.

2. Flashover. An electric discharge over or around the surface of an insulated conductor that may result in fire through the ignition of surrounding objects.

3. Hazard Tree. For purposes of vegetation management for a powerline facility, any tree, brush, shrub, other plant, or part thereof, hereinafter "vegetation" (whether located on National Forest System lands inside or outside the linear right-of-way for a powerline facility), that has been designated, prior to failure, by a certified or licensed arborist, qualified vegetation management specialist, or forester under the supervision of the federal holder to be:

(a) Dead; likely to die or fail before the next routine vegetation management cycle; or in a position that, under geographical or atmospheric conditions, could cause the vegetation to

fall, sway, or grow into the powerline facility before the next routine vegetation management cycle; and

(b) Likely to cause substantial damage to the powerline facility; disrupt powerline facility service; come within 10 feet of the powerline facility; or come within the MVCD as determined in accordance with applicable reliability and safety standards and as identified in the special use authorization for the powerline facility and the associated approved operating plan.

4. Iso-Clearance Map. A graphic depiction using contour lines to portray the maximum permitted vegetation height above ground that does not violate the minimum clearance distance or other minimum prescribed clearance limits from conductors.

5. Maximum Operating Sag. The theoretical position of a conductor when operating at 100 degrees Celsius, which must be accounted for when determining the MVCD.

6. Minimum Vegetation Clearance Distance (MVCD). A calculated minimum distance that is stated in feet or meters to prevent flashover between conductors and vegetation for various altitudes and operating voltages and that is measured from a conductor at maximum operating sag to vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility for purposes of felling or pruning hazard trees, which the federal holder uses to determine whether vegetation poses a system reliability hazard to the powerline facility.

7. Non-Emergency (Routine) Vegetation Management. Planned actions as described in an approved operating plan periodically taken to fell or prune vegetation on National Forest System lands within the linear right-of-way for a powerline facility and on National Forest System lands adjacent to either side of the linear right-of-way for a powerline facility to fell or prune hazard trees to ensure normal powerline facility operations and to prevent wildfire in accordance with applicable reliability and safety standards and as identified in an approved operating plan.

8. Slash. All vegetative debris resulting from the federal holder's vegetation management, including but not limited to limbs, tops, unmerchantable logs, bark, wood chunks, pushed out stumps, damaged brush, and damaged residual trees.

9. Swing. Horizontal conductor position with six pounds per square foot of wind and 15.5 degrees Celsius.

10. Timber. Any tree that has commercial value from lumber, chip, pulp, or veneer.

11. Tree. A woody, stemmed, perennial plant species, typically having a single stem or trunk with the potential to grow to a height greater than ten feet and bearing lateral branches at some distance from the ground.

H. Roads and Trails

1. Access Road or Trail. For purposes of this permit, a road or trail constructed, operated, and maintained by the federal holder that is necessary to access a powerline facility or its linear right-of-way.
2. Road. A motor vehicle route over 50 inches wide, unless identified and managed as a trail (36 CFR 212.1).
3. Trail. A route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail (36 CFR 212.1).
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7. Road or Trail Construction. Building a road or trail where no road or trail has previously existed.
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<USER NOTES FOR DEFINITION H.9>

<In the title of definition H.9, include the phrases “Road or Trail Improvement (Federal Holder)” and “(Forest Service)” in permits issued to Bonneville. Delete the phrases “Road or Trail Improvement (Federal Holder)” and “(Forest Service)” in permits issued to other federal entities.>

9. Road or Trail Improvement (Federal Holder)/Road or Trail Maintenance (Forest Service). The upkeep of an entire road or trail within the existing road or trail prism, including surface and shoulders, parking and side areas, structures, and traffic control devices, that is necessary to maintain or restore the road or trail in accordance with its original design standards.