

APPENDIX C
DRAFT OFF-SITE COMPENSATORY MITIGATION TO OFFSET
PROJECT IMPACTS TO GREATER SAGE-GROUSE

DRAFT (September 6, 2013)

**OFF-SITE COMPENSATORY MITIGATION
TO OFFSET PROJECT IMPACTS
TO GREATER SAGE-GROUSE**

Gateway West Transmission Line Project

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September 6, 2013

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ACRONYMS AND ABBREVIATIONS

BLM	Bureau of Land Management
Companies	PacifiCorp (doing business as Rocky Mountain Power) and Idaho Power Company
EPM	environmental protection measure
ESA	Endangered Species Act
FRPP	Farm and Ranch Protection Program
HEA	Habitat Equivalency Analysis
IDFG	Idaho Department of Fish and Game
kV	kilovolt
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NGO	non-governmental organization
NRCS	Natural Resources Conservation Service
NTP	Notice to Proceed
POD	Plan of Development
Project	Gateway West Transmission Line Project
SAC	Sage-grouse Advisory Committee
USFWS	U.S. Fish and Wildlife Service
WAFWA	Western Association of Fish and Wildlife Agencies
WGFD	Wyoming Game and Fish Department
WWNRT	Wyoming Wildlife and Natural Resource Trust

1.0 INTRODUCTION

This Gateway West Sage-grouse Compensatory Mitigation Plan (Plan) contains the compensatory mitigation approach for impacts to Greater Sage-grouse (sage-grouse) due to the construction and operation of the proposed Gateway West Transmission Line Project (Project).

This Plan comprises the following information:

- Section 1 – Introduction
- Section 2 – Compensatory Mitigation Approach
- Section 3 – Compensatory Mitigation Plan
- Section 4 – Maintenance
- Attachment A – Proposed Compensatory Mitigation for Wyoming Portion of the Project—
Segment D
- Attachment B-1 – Proposed Compensatory Mitigation for Idaho Portion of the Project—
Segment D
- Attachment B-2 – Proposed Compensatory Mitigation for Idaho Portion of the Project—
Segment E

Attachments A, B-1, and B-2 contain additional detail regarding implementation of the compensatory mitigation approach described herein. For purposes of this Plan, compensatory mitigation for impacts is presented by state. Attachment A consists of the Wyoming portion of the Project from the Windstar Substation to the State line (Segments 1 through 4). Attachment B-1 consists of the Idaho portion of the Project from the State line to Populus Substation (Segment 4). Attachment B-2 addresses Segment E, which consists of the Populus to Midpoint to Cedar Hill Substations (Segments 5, 7, and 10); and the Midpoint to Hemingway to Cedar Hill Substations (Segments 8 and 9).

1.1 Project Overview

PacifiCorp (doing business as Rocky Mountain Power) and Idaho Power Company (Companies) propose to construct and operate approximately 990 miles of new 230-kilovolt (kV), 345-kV, and 500-kV alternating current electric transmission system consisting of 10 segments between the Windstar Substation at Glenrock, Wyoming, and the Hemingway Substation approximately 30 miles southwest of Boise, Idaho. The Project includes ground-disturbing activities associated with the construction of above-ground, single-circuit transmission lines, access roads, multi-purpose yards, fly yards, pulling sites as well as associated substations, communication sites (regeneration stations), and electrical supply distribution lines.

A more detailed description of the Project is provided in the Plan of Development (POD), the most recent version of which was submitted to the Bureau of Land Management (BLM) by the Companies August 15, 2013, and is incorporated herein by reference. The POD provides more detailed information on the purpose and need; proposed route; project-related facilities; details associated with construction, operation, and maintenance of the Project; and applicant-proposed environmental protection measures (EPMs). Table 1 provides a brief summary of the segments and their lengths, both Proposed and BLM-Preferred, as presented in the Final Environmental Impact Statement (FEIS).

1 **Table 1. Segment Summary**

Segment Number	Proposed Length	BLM-Preferred Length	Originating Substation	Terminating Substation
1W(a)	73.8	73.8	Windstar	Aeolus
1W(c)	73.6	73.6	Dave Johnston 230 kV	Aeolus
2	91.9	91.9	Aeolus	Creston
3	45.9	45.9	Creston 1/	Anticline
3A	5.1	5.1	Anticline	Jim Bridger 345-kV
4	197.6	197.6	Anticline	Populus
5	55.7	73.3	Populus	Borah
6 2/	0.5	0.5	Borah	Midpoint
7	118.2	130.2	Populus	Cedar Hill
8 3/	145.0	132.0	Midpoint	Hemingway
9 4/	162.8	171.4	Cedar Hill	Hemingway
10	34.4	34.4	Cedar Hill	Midpoint
TOTALS	990.4	1,029.7		

1/ Creston Substation has been eliminated from the Project but its location still serves as the terminus for Segments 2 and 3

2/ Segment 6 disturbance limited to substations and approaching structures only

3/ Segment 8 as proposed includes the Proposed Route with Alternatives 8D and 8E

4/ Segment 9 as proposed includes the Proposed Route with Alternative 9G

2

3 The BLM-Preferred Route coincides with the Proposed Route in Segments 1 through 4, 6, and
4 10. The BLM has chosen different alternatives for portions of Segments 5, 7, 8, and 9 (see
5 Figures 1 and 2). The BLM's Preferred Route totals about 1,040 miles. This Plan is presented
6 for the 1,000-mile Proposed Route but will be modified to apply to the route finally approved by
7 the BLM and other permitting agencies as needed.

8 The Project is designed/sited to avoid and minimize impacts to greater sage-grouse
9 (*Centrocercus urophasianus*) habitat (including avoidance of leks) to the extent practicable and
10 utilize designated energy corridors. The Companies recognize that residual unavoidable impacts
11 to sage-grouse habitat remain after the implementation of the avoidance and minimization
12 measures. Through coordination with the BLM, U.S. Fish and Wildlife Service (USFWS),
13 Wyoming Governor's Office, Wyoming Game and Fish Department (WGFD), Idaho Governor's
14 Office, and with the technical expertise and advice of the Idaho Department of Fish and Game
15 (IDFG), the Companies have developed this mitigation strategy to compensate for the
16 unavoidable residual impacts to sage-grouse habitat that may occur as a result of Project
17 construction and operation.

18 **1.2 Companies' Mitigation Goals**

19 The Companies' mitigation goals include:

- 20 • Identify mitigation opportunities that reduce or remove threats under the five listing
21 factors used by the USFWS to assess the status of Endangered Species Act- (ESA-) listed
22 and candidate species (USFWS 2010),

- 1 • Compliance with Wyoming Executive Order 2011-5 and other state regulatory
- 2 mechanisms, and
- 3 • Address primary and secondary threats identified in Idaho Executive Order 2012-02.

4 **1.3 Components of Mitigation**

5 Federal and State agency personnel developed a *Framework for Sage-grouse Impacts Analysis*
6 *for Interstate Transmission Lines* (Framework) dated November 22, 2010, and last revised
7 October 22, 2011. Refer to Appendix J-1 of the FEIS (BLM 2013). This Framework consists of
8 three steps or parts as follows: 1) Evaluation of Direct and Indirect Impacts; 2) Addressing
9 Direct Loss of Birds; and 3) Mitigation.

10 The FEIS provides the evaluation of direct and indirect impacts (known impacts and unknown
11 effects, respectively), which is considered in the development of this Plan. The Framework
12 specifies the use of a Habitat Equivalency Analysis (HEA), an economics model, as an approach
13 to scale mitigation for the loss of habitat services. Habitat services include those ecosystem
14 features (i.e., physical site-specific characteristics of an ecosystem) and ecosystem functions
15 (i.e., biophysical processes that occur within an ecosystem) that support, in this case, greater
16 sage-grouse populations. The HEA is not to be construed as the National Environmental Policy
17 Act (NEPA) analysis and evaluation of known impacts and unknown effects, but rather provides
18 the Companies with additional quantitative data from which to base mitigation decisions upon.

19 In accordance with the Framework, this Plan consists of the following mitigation elements:

- 20 1. Mitigation of known impacts.
- 21 2. Mitigation of potential unknown effects.
- 22 3. Mitigation of the potential for direct loss of birds.

23 **1.3.1 Mitigation Strategy for Known Impacts**

24 Current literature identifies that habitat loss/fragmentation (e.g., fire in Idaho) poses the greatest
25 threat to sage-grouse however, the literature also indicates that habitat conversion, noise, and
26 human activity may also pose impacts to sage-grouse (refer to the Final HEA report in Appendix
27 J-2 of the FEIS (BLM 2013)). Knowledge of the impacts of transmission structures and other
28 tall structures on the landscape is currently lacking (UWIN 2010). The Companies' mitigation
29 strategy is designed to compensate for known impacts to greater sage-grouse that could occur as
30 a result of Project construction and operation as modeled in the HEA. This mitigation strategy is
31 guided by the following:

- 32 • Sage-grouse habitat quality and quantity varies across the landscape. To ensure that
33 habitat variability is fully captured, the HEA used a quantitative habitat metric to model
34 the loss of habitat that would result from construction and operation of the Project.
- 35 • Sage-grouse habitat services lost or impacted due to the construction and operations of the
36 Project will be offset and replaced by either preserving at-risk habitat services or
37 enhancing degraded habitat services.
- 38 • Off-site compensatory mitigation projects will be identified, by the Oversight Committee,
39 in suitable locations as close to the Project area as possible in order to benefit the sage-
40 grouse populations being impacted by Project construction and operations but may also be

1 directed to habitats, locations, or projects by the Oversight Committee where mitigation
2 has greater value in providing long term benefit to sage-grouse.

- 3 • Mitigation projects that are approved and funded will result in:
 - 4 - Habitat conservation or protection in at-risk areas
 - 5 - an increase in long-term habitat availability, and/or
 - 6 - an increase in habitat quality
- 7 • Funding for maintenance and monitoring of mitigation projects has been incorporated in
8 the HEA and is therefore inherently part of the compensatory mitigation funding to be
9 proposed.

10 **1.3.2 Mitigation Strategy for Potential Unknown (Indirect) Effects**

11 The Companies have asserted that there is a lack of scientific literature and data to support the
12 assumption that there are adverse indirect effects to sage-grouse due to construction and
13 operation of the Project, including avoidance of tall structures. The interagency HEA Technical
14 Advisory Team also came to the conclusion that any possible indirect effects of operating
15 transmission lines on sage-grouse habitat use are not documented in the literature or in available
16 data in a consistent and quantifiable manner, which led this team to not include indirect effects in
17 the HEA model.

18 In spite of the lack of data or literature and in spite of the interagency team's decision to retain
19 only defensible variables in the HEA model, federal and state agency representatives have
20 insisted that some compensatory mitigation for these unknown effects must be provided.
21 Therefore the Companies through collaboration with the federal and state agencies will address
22 the potential for unknown effects of the Project through compensatory mitigation. The
23 Companies propose that compensatory mitigation for unknown effects will be addressed in a
24 similar manner as the known impacts (e.g., the compensatory mitigation for known impacts may
25 be incrementally increased to address unknown effects and similar mitigation projects may be
26 implemented). The language and effects assessment provided in the FEIS would be utilized in
27 determining what level of increase is needed in the compensatory mitigation for the unknown
28 effects.

29 The Companies also acknowledge the possibility of research to be considered as mitigation given
30 the lack of data regarding the unknown effects to sage-grouse and the recognized need for such
31 research to develop appropriate siting criteria and best management practices for future projects
32 (Stiver et al. 2006; UWIN 2011). The applicability of research as mitigation has been discussed
33 and accepted within agencies and other groups, including the Western Association of Fish and
34 Wildlife Agencies (WAFWA) as a valid approach or component of compensatory mitigation
35 (receives mitigation credit) (UWIN 2012). In the event that research is used as a component of
36 the compensatory mitigation to address and better understand the unknown effects of
37 transmission projects on sage-grouse, research methodology would be developed in accordance
38 with the guidance document, *Protocol for Investigating the Effects of Tall Structures on Sage-*
39 *grouse (Centrocercus spp.) within Designated or Proposed Energy Corridors* (UWIN 2011).
40 Through coordination with the Oversight Committee and other stakeholders, the Companies
41 would evaluate the use of research to investigate the indirect impacts of transmission lines on
42 greater sage-grouse.

1 **1.3.3 Mitigation Strategy for the Potential of Direct Loss of Birds**

2 The Companies have developed through agency collaboration, a suite of environmental
3 protection plans, which include several hundred environmental protection measures directed at
4 avoiding and minimizing impacts to biological resources, including sage-grouse, and other
5 resources. These plans and measures are contained within the POD, which has been submitted to
6 BLM and will be updated and finalized as a condition to receiving any Notices to Proceed
7 (NTPs) for construction. Implementation of these measures has and will minimize any potential
8 for direct loss of birds due to the construction and operation of the Project. Consistent with the
9 Framework, the Companies will contribute financially to available research projects that have
10 been designed specifically to address the issue of direct loss of birds.

11

2.0 COMPENSATORY MITIGATION APPROACH

2.1 Approach to Determine Mitigation Obligation

2.1.1 Framework for Sage-grouse Impacts Analysis for Interstate Transmission Lines

The Companies have actively worked with agency personnel to satisfy the requirements of the *Framework for Sage-grouse Impacts Analysis for Interstate Transmission Lines* (BLM 2013). The HEA for the Project produced an estimate of the permanent and interim loss of sage-grouse habitat services as a result of vegetation loss, noise, and human presence anticipated with project construction and operation (known impacts). The HEA also modeled feasible mitigation project types and incorporated their typical costs as provided by state and federal agencies, which included monitoring and NEPA-related costs. The Companies have used the HEA-generated sum of modeled habitat services lost and developed a proposed set of mitigation projects (project mix), whose total habitat services gained can also be modeled and summed. The Companies have used the estimated mitigation project cost for each project type to develop the proposed compensatory mitigation for the Project (see Section 3.0). The Companies' proposed project mix and sum of habitat services provided by the mitigation project types offset the sum of modeled habitat services lost, as specified in the HEA. The proposed project mix for each state also addresses pertinent threats to sage grouse within each state.

2.1.2 U.S. Fish and Wildlife Service Mitigation Recommendations

The USFWS Wyoming Office provided the Companies with recommendations regarding the development and implementation of a mitigation plan to address Project impacts on sage-grouse and its habitat. Per these recommendations, the Companies have:

- Used the HEA's estimation of permanent and interim loss of habitat services to determine how many habitat services must be gained and herein have provided proposed compensatory mitigation.
- Selected and submitted to BLM a proposed project mix, the sum of whose habitat services gained equal the sum of the habitat services modeled as lost due to the Project construction and operations.
- Focused the majority of mitigation (project mix) on conservation of habitat, specifically on projects that protect habitat, enhance or maintain quality of habitat, and reduce fragmentation. Components of habitat conservation include preservation through easements, enhancements (such as juniper removal), and restoration. These habitat conservation projects, where opportunity exists, may be supplemented by a smaller portion of projects such as fence-marking or others.

Per these recommendations, the Companies through coordination with the applicable agencies will, as described herein:

- Develop an approach to ensure mitigation is implemented in a collaborative manner by establishing an "Oversight Committee" (see Section 2.4) composed of a representatives from the BLM, USFWS, IDFG, and WGFD as appropriate to the state (Wyoming or Idaho). The role of this committee is to select projects to be funded by the compensatory mitigation provided by the Companies and provide guidance concerning implementation of said projects.

1 Additionally, the USFWS provided specific recommendations to ensure successful completion of
2 mitigation projects that contribute to sage-grouse habitat conservation. Within these
3 recommendations, the USFWS emphasized the need to consider each mitigation site individually
4 and provide a clear justification regarding the value of the treatment at that site and the
5 applicability for project mitigation. Each proposed project to be funded by the compensatory
6 mitigation provided by the Companies must meet the intent of the mitigation as outlined herein,
7 which is to protect, enhance, or maintain habitat quality for sage-grouse in order to receive
8 approval of funding by the Oversight Committee.

9 **2.1.3 Changes to the Plan**

10 This Plan will be revised by the Companies as new and applicable information becomes
11 available during the federal review of the proposed Project and will be finalized as a condition to
12 receiving a NTP for construction.

13 **2.2 Siting Compensatory Mitigation Projects**

14 Compensatory mitigation projects will be sited in the same state where the impact occurs and
15 will be located using the following priorities:

16 **First Priority:** Mitigation projects will be located in the same polygons of Core Areas
17 (Wyoming) and Core, Important, and/or General Management Zones (Idaho) as the Project.

18 **Second Priority:** Mitigation projects may be located in polygons of Core Areas (Wyoming) and
19 Core, Important, and/or General Management Zones (Idaho) that are *not* the same as those in
20 which the Project is located but are within a region (e.g., WAFWA management zones)
21 acceptable to the Oversight Committee.

22 **Third Priority:** Projects may be located in areas outside of Core Areas (Wyoming) and Core,
23 Important and/or General Management Zones (Idaho) where the Oversight Committee agrees
24 that habitat connectivity may be restored.

25 **Overarching Priority:** The overarching priority for siting mitigation projects is to locate
26 projects where the greatest benefit to sage-grouse will be realized. The priorities stated above
27 are a general rule for mitigation project siting, however, projects may be located elsewhere if the
28 Oversight Committee (see Section 2.4) identifies specific opportunities that will provide a
29 benefit to sage-grouse, while satisfying the goals of this Plan.

30 **2.3 Timing for Financing of Mitigation Projects**

31 Through development of this Plan, the Companies commit to providing compensatory mitigation
32 commensurate with unavoidable residual Project impacts to sage-grouse habitat. Compensatory
33 mitigation funds will be provided by the Companies when Project impacts (ground disturbance
34 within sage-grouse habitat) occur as a condition to the segmented NTPs unless otherwise agreed
35 to.

36 **2.3.1 Wyoming**

37 Through coordination with the BLM, USFWS, WGFD, and Wyoming Governor's Office, a
38 Memorandum of Agreement (MOA) is being developed which would establish a mechanism
39 allowing the Companies to provide a portion of the funds used for compensatory mitigation in
40 advance of actual Project impacts in the state of Wyoming in order to provide matching dollars

1 to assist with efforts to stave off the potential for sage-grouse to be listed as either threatened or
2 endangered, and to maximize the benefits to and long-term protection and enhancement of sage-
3 grouse and sage-grouse habitat. PacifiCorp views these efforts as a beneficial and prudent use of
4 compensatory mitigation funds in attempt to minimize risk and impact to Rocky Mountain
5 Power operations within sage-grouse habitat. Upon successful completion of such an MOA, the
6 Companies would provide a portion of the compensatory mitigation in accordance with the
7 MOA. This MOA would not be finalized or executed until this Plan is agreed upon by the
8 agencies and Companies.

9 **2.4 Oversight Committee**

10 As described in the USFWS recommendations for the mitigation approach, an Oversight
11 Committee consisting of a representative from each stakeholder agency (e.g. BLM, USFWS,
12 IDFG, and WGFD), will be created to provide guidance on the utilization of mitigation funds
13 provided by the Companies. The Companies expect that both local and landscape level
14 perspectives will be considered by the Oversight Committee. Agency representatives serving on
15 the Oversight Committee will provide recommendations and input for their respective
16 organization. These representatives will be responsible for seeking guidance or feedback from
17 others within their organization as needed, and will provide consolidated recommendations from
18 their organization. Committee members should have the authority to make decisions for their
19 organization regarding projects proposed and be familiar with the Project area to help facilitate
20 selection and approval of projects proposed for use of mitigation funds.

21 The purposes of the Oversight Committee are to:

- 22 • Provide guidance to the mitigation fund administering entity (if utilized) ;
- 23 • Identify and select mitigation projects;
- 24 • Review and approve projects proposed by other entities (proposals for use of mitigation
25 funds);
 - 26 - Applicants for funding would as applicable be required to provide:
 - 27 • Maps and descriptions of the geographic area of the mitigation project, including
28 baseline habitat quality for sage-grouse and surrounding land uses. Maps should
29 identify whether the project will be in a state-identified greater sage-grouse
30 habitat (Core Areas in Wyoming and Core, Important and General Management
31 Zones in Idaho).
 - 32 • Detailed written specifications and work descriptions, including: timing and
33 sequence, methods for establishing or enhancing vegetation, plans to control
34 invasive plant species, erosion control measures, long-term maintenance,
35 monitoring and reporting requirements.
- 36 • Seek expert guidance as needed (e.g. to determine the habitat services replacement value
37 of project types not modeled in the HEA, if selected);
- 38 • Review proposed projects for compliance with the intent of the Framework, this Plan and
39 existing regulation and policy regarding compensatory mitigation;
- 40 • Track the success of mitigation projects and their effectiveness at the local or landscape
41 level;

- 1 • Provide oversight of project implementation and participate in review of project
- 2 monitoring results, where implemented; and
- 3 • Provide annual reporting to the Companies and state wildlife agency describing projects
- 4 funded.

5 A selected committee member will be identified who will be responsible for facilitating
6 communications among Oversight Committee members and scheduling necessary review
7 meetings to discuss any proposal for use of mitigation funds and implemented projects. The
8 roles and responsibilities of Oversight Committee members may vary by mitigation project type
9 and proposed project location.

10 The benefit of potential mitigation projects to sage-grouse will vary by type and location. When
11 selecting projects for implementation the Oversight Committee will consider the priorities,
12 criteria and strategy set forth in this Plan, which include but are not limited to the following:

- 13 • Implement activities to conserve, protect, and/or enhance existing occupied habitats and
14 address identified threats.
 - 15 a. Conserve and or protect existing occupied habitats.
 - 16 b. Enhance existing occupied habitats.
- 17 • Implement activities to conserve potential habitat and populations
 - 18 a. Enhance potential habitat that adjoins known habitat so that it can support sage-
19 grouse, thereby increasing habitat patch size and overall habitat availability.
 - 20 b. Create vegetative corridors to reconnect occupied habitats and decrease habitat
21 fragmentation.
 - 22 c. Restore degraded habitats that could support sage-grouse use.
- 23 • Evaluate potential mitigation sites to determine their current state and the type of
24 mitigation project that would be most beneficial. Proposed mitigation projects that confer
25 the greatest potential benefit to sage-grouse and have a high probability of success will be
26 given priority.

27
28 Refer to Attachments A and B for further discussion regarding the makeup of the Oversight
29 Committee for Wyoming and Idaho respectively.

3.0 COMPENSATORY MITIGATION PLAN

3.1 Loss of Habitat Services Modeled in HEA

The avoidance (routing and siting criteria) and minimization measures (environmental protection measures and plans) undertaken by the Companies, discussed in the FEIS, and presented in the POD for the Project substantially avoid impacts to sage-grouse and minimize impacts to their habitat. However, the Companies recognize that after implementing avoidance and minimization measures, there are residual unavoidable impacts to habitat from the construction and operation of the Project. This Plan describes the Companies' approach to compensate for those impacts (known impacts as modeled in the HEA, unknown effects, and direct loss of birds) by providing funding for one or more projects that replace habitat services lost due to the Project and offset the described impacts and effects within the FEIS.

3.1.1 Mitigation Scaling

The HEA quantified the permanent and interim loss of habitat services resulting from ground-disturbing activities, construction related traffic and noise, and the footprint of the physical structures as defined by a habitat services metric (Table 7, Final HEA Report [Appendix J-2 of the FEIS]). The HEA used the same habitat services metric to quantify the habitat services to be gained by implementing different types of habitat improvement or conservation measures (measured in service-acre-years).¹ The habitat improvement or conservation measures, summarized in Table 8 of the Final HEA Report, that were selected by the interagency HEA Technical Advisory Team to model in the HEA are:

- fence marking or removal;
- sagebrush restoration and enhancement;
- juniper removal;
- seeding of a forb and bunchgrass understory; and
- purchase of conservation easements.

Important conservative factors that are considered when scaling mitigation include the following (refer to the Final HEA Report):

- Avoidance and minimization measures implemented.
- The HEA analysis is applied to all potential habitat (project-wide), includes unoccupied habitat.

¹ The HEA for the Project was developed in a manner that scales or ensures mitigation for impacts in high quality habitats (i.e., those that support lekking, nesting, and brood-rearing activities) is greater than the mitigation in lesser quality habitats. The mitigation burden in high quality habitats is greater than in lesser quality habitats. This was accomplished through the development of the HEA metric, which comprises variables defined by agency biologists to be indicators of the highest quality lekking, nesting, and brood-rearing habitats for sage-grouse. The metric included numerous sagebrush-centric variables and distance to lek measurements that ensure that impacts in the highest quality habitats are mitigated in a manner commensurate to the importance of those habitats to the sage-grouse population. A fundamental tenet of the HEA process is the use of a 1:1 mitigation ratio scaled to the habitat-services that are lost as a result of project impacts (the ratio is a habitat services to habitat services ratio rather than an acre to acre ratio as the currency used in the HEA are habitat services). As such, services lost will be replaced with services gained through mitigation projects at a 1:1 level. However, due to the metric (sagebrush-centric variables), high quality habitats are intrinsically "weighted" within the HEA and the mitigation ratio for high quality habitats is already greater than 1:1 if standardized by area rather than by service-acres.

- 1 • The HEA utilizes conservative vegetation recovery rates (e.g. 100 years for all
2 sagebrush).
- 3 - This accounts for potential for project failure.
- 4 • The HEA accounts for the lag time before a mitigation project effectively improves
5 habitat.
- 6 • The HEA produced a cost per service-acre-year gained for each habitat improvement or
7 conservation measure based on the average cost of project implementation.
- 8 - This average cost was marked up by 50 percent to including monitoring and NEPA-
9 related costs in Wyoming and Idaho.

10 The compensatory mitigation will provide funding to implement mitigation projects with
11 sufficient habitat services gained through conservation or enhancement to offset the modeled
12 sage-grouse habitat service losses and offset the unknown effects and direct loss of birds. Per the
13 recommendations of the USFWS, the majority of conservation focuses on the conservation of
14 habitat, specifically on projects that enhance or maintain quality of habitat and reduce
15 fragmentation. The majority of the mitigation package consists of habitat conservation
16 easements, sagebrush restoration and enhancement, which includes juniper removal, and to a
17 lesser degree fence marking or removal.

18 Based on the BLM-Preferred Alternative in Wyoming and, due to the uncertainty in Idaho, a
19 combination of the Preferred Alternative and Companies' Proposed Route, the Companies have
20 provided a project mix that replaces the habitat services lost (refer to Attachment A for
21 Wyoming and Attachment B for Idaho). Upon identification of the final permitted routes, any
22 discrepancies will be remodeled or extrapolated using the HEA. The project mixes for each state
23 are identified as percentages of the overall mitigation package and have been applied to the total
24 habitat services lost and multiplied by the cost per service acre gained by each conservation
25 measure to calculate the proposed compensatory mitigation dollars allocated to each measure.
26 These mitigation dollars have been summed and are presented as the proposed total
27 compensatory mitigation obligations (mitigation funding to be provided by the Companies to
28 compensate for unavoidable impacts within each state) in Attachments A and B for Wyoming
29 and Idaho respectively. When finalized by scaling to the finally approved routes, the amount of
30 compensatory mitigation funding provided will be fixed and will satisfy mitigation requirements.

31 **3.1.2 Mitigation Project Types**

32 Descriptions of the mitigation project types modeled in the HEA are provided below. These
33 projects are consistent with recommendations provided by the USFWS. The Companies have
34 utilized these projects in order to determine the proposed compensatory mitigation funding. The
35 Companies are not limited to these project types for mitigation; other project types may be
36 considered by the Oversight Committee if they meet the mitigation goals and are compatible
37 with this Plan. The Oversight Committee is also not limited to selection of these project types
38 when funding projects using the Companies-provided compensatory mitigation. It is to the
39 Oversight Committees discretion to maximize benefit to sage grouse and their habitat through
40 the use of the Companies-provided compensatory mitigation.

41 Table 7 in the Final HEA Report presents total habitat services lost which can be replaced by the
42 following mitigation project types. The Oversight Committee will review any proposed projects
43 and approve those which provide value to the local sage-grouse populations.

3.1.2.1 Fence Marking and Removal

Based on Christiansen (2009) it has been demonstrated that each mile of fence within 2 miles of leks can kill up to 53 sage-grouse per year. This threat can be eliminated by removing fences or significantly reduced by increasing the visibility of fences. Christiansen (2009) estimated a 70 percent reduction in mortalities could be expected along marked sections of fence. Stevens (2011) similarly predicted that marking fences with vinyl reflectors (flight diverters) reduced collision rates by up to 74 percent.

To eliminate the threat of collisions, fences would be removed or marked with flight diverters similar to those used in the Christiansen (2009), Wolfe (2009), and Stevens (2011) studies to increase fence visibility to sage-grouse. Fences will be removed where possible. Where removal is not possible, two flight diverters would be installed between each fence span (4 meters post-to-post). Priority areas for fence removal and/or marking would be:

- Sections of fence known to cause sage-grouse collisions,
- Fences within 2 kilometers (1.2 miles) of leks (Braun 2006; Stevens 2011) or other high risk area,
- Fences in areas with low slope and terrain ruggedness (Stevens 2011), and
- Fence segments bounded by steel t-posts with spans greater than 4 meters (Stevens 2011).

Once fences have been removed or marked, local annual mortality due to fence collisions will likely be substantially reduced. As described in Section 2.2, all mitigation projects will be sited in the same state where the impact occurred and in a manner consistent with the priorities identified in the BLM's IM-2008-204.

The HEA calculated that 51,634 service-acre-years would be created for every mile of fence marked (with annual maintenance) or fence removed over the lifetime of the project.

3.1.2.2 Sagebrush Restoration and Enhancement

Sagebrush restoration and enhancement creates new habitat for sage-grouse and can be used to create corridors between existing patches of sagebrush patches to produce larger patches of contiguous habitat. As described in Section 1.3, habitat for sage-grouse consists of a mosaic of plant communities dominated by sagebrush and a diverse grass and forb understory across the landscape (Wyoming Sage-Grouse Working Group 2003). This conservation measure increases the quality and quantity of habitat within the landscape, contributing to the long-term survival and success of the greater sage-grouse. Where possible, projects will be placed strategically to decrease habitat fragmentation by connecting existing occupied habitats.

New habitat for sage-grouse would be created by establishing sagebrush and understory grasses and forbs in disturbed areas (e.g., abandoned and unreclaimed roads, pipeline corridors, or well pads, or burned areas, etc.). Treatment for mitigation credit is not planned for areas of Project disturbance, which will be restored as described in the POD, but in other pre-existing areas of disturbance. Sagebrush can be seeded, planted as seedlings, or transplanted (i.e., containerized stems). Sagebrush restoration and enhancement projects will include understory (grass and forb) treatments.

Stripping of topsoil will be avoided in potential restoration areas, as it decreases the likelihood of treatment success. Any topsoil that is stripped will be stored properly in order to maintain biological viability of soil microbes that are necessary for sagebrush survival and growth. Soil

1 structure should be maintained if it is stripped, and should be maintained when placed back
2 within restoration areas prior to seeding or planting.

3 The value of sagebrush restoration depends on the method used; methods that result in faster
4 plant establishment have higher value. The HEA calculated that for every acre of disturbance
5 seeded with sagebrush and bunchgrass, 1,751 service-acre-years would be created over the
6 lifetime of the project. For every acre of disturbance planted with containerized sagebrush stems
7 and seeded with bunchgrass, 4,556 service-acre-years would be created. For every acre of
8 disturbance planted with sagebrush seedlings and seeded with bunchgrass, 1,935 service-acre-
9 years would be created.

10 3.1.2.3 *Juniper Removal*

11 Fire suppression and other post-settlement conditions have allowed western juniper to spread
12 into areas previously dominated by grasses, forbs, and shrubs. Miller et al. (2005) reports that
13 many areas have experienced an estimated ten-fold increase in juniper over the last 130 years.
14 The expansion of juniper and other conifer species reduces habitat for sage-grouse and other
15 sagebrush obligate species that depend on large patches of sagebrush-dominated vegetation.
16 Sagebrush cover decreases with juniper encroachment as the vegetation transitions into
17 woodland.

18 Most juniper communities are still in a state of transition. Miller et al. (2005) characterized
19 three stages of woodland succession:

- 20 • Phase I (early) – juniper trees are present but shrubs and herbs are the dominant vegetation
21 that influence ecological processes (hydrologic, nutrient, and energy cycles) on the site;
- 22 • Phase II (mid) – juniper trees are co-dominant with shrubs and herbs and all three
23 vegetation layers influence ecological processes on the site;
- 24 • Phase III (late) – juniper trees are the dominant vegetation and the primary plant layer
25 influencing ecological processes on the site.

26 Sites in Phase I or II successional stages often retain a significant understory of sagebrush (i.e.,
27 grasses and forbs), so removal of junipers in Phase I or II can produce immediate habitat benefits
28 for sage-grouse (NRCS 2010; USFWS recommendations).

29 Juniper/conifer removal projects used for mitigation will focus primarily on the early successive
30 stages of conifer/juniper stands (i.e., Phase I or Phase II juniper) with no cheatgrass component.
31 Removal of juniper/conifer will be done by mechanical means without the use of fire or
32 chemicals:

- 33 • Phase I juniper/conifer will be treated by having a field crew walk from tree-to-tree,
34 cutting them into pieces and scattering them on-site (lop and scatter).
- 35 • Phase II juniper/conifer will be treated by using a masticator, a large mechanical device
36 that goes from tree-to-tree and demolishes the tree with whirling blades; debris is then left
37 on site (mastication).

38 Juniper/conifer removal projects would be conducted at times of year when potential impacts to
39 sage-grouse or other birds (e.g., nesting) would be minimized.

40 The value of juniper/conifer removal in the HEA depended on the successional stage of juniper
41 removed (i.e., Phase I, Phase II, or Phase III juniper). The HEA calculated that 1,108 service-
42 acre-years are created for every acre of Phase I juniper treated, 1,481 service-acre-years for every

1 acre of Phase II juniper treated, and 1,751 service-acre-years for every acre of Phase III juniper
2 treated with understory seeding over the lifetime of the project.

3 **3.1.2.4 Seeding of a Forb and Bunchgrass Understory**

4 Bunchgrasses, as opposed to rhizomatous grasses, are recognized as an important component of
5 sage-grouse nesting and brood-rearing habitats (Connelly et al. 2000; Crawford et al. 2004). The
6 structure and abundance of bunchgrasses influence the quality of a sagebrush/bunchgrass
7 community site for nesting sage-grouse. Tall, dense, residual grass in nesting habitat improves
8 hatching success by providing cover for incubating females (Cagney et al. 2009). Herbaceous
9 cover may provide scent, visual, and physical barriers to potential predators (DeLong et al. 1995,
10 as cited in Connelly et al. 2000). In addition to providing cover from predators, forbs are an
11 important food source for sage-grouse broods.

12 Sage-grouse nesting and brood-rearing habitat is improved by seeding native bunchgrasses and
13 forbs into existing sagebrush stands or into adjacent disturbance, increasing nest and brood
14 success.

15 The HEA calculated that 56 service-acre-years are created for every acre of sage-brush
16 vegetation that is overseeded with bunchgrass over the lifetime of the project. A greater number
17 of service-acre-years are created when areas of disturbance (i.e., no vegetation) are seeded with
18 bunchgrass: 282 per acre seeded over the lifetime of the project. Because of the low habitat
19 services gained, the uncertain and delayed success rate, the Companies' proposed project mixes
20 do not include a significant proportion of forb and bunchgrass understory seeding projects.

21 **3.1.2.5 Purchase of Conservation Easements**

22 Conservation easements may be purchased and managed to remove the threats of specific land
23 uses to sage-grouse. The purchase of easements can prevent future sage-grouse habitat
24 destruction or degradation near residential areas or oil and gas development. With appropriate
25 management, conservation easements can reduce fragmentation in species core areas and key
26 habitats.

27 Conservation easements purchased with mitigation funding provided by the Companies will be
28 used in a strategic way with focus on areas/locations of highest demonstrable need leading to a
29 reduction in habitat fragmentation. Conservation easements will be identified by the Oversight
30 Committee. Specific locations of conservation easements will depend on availability of
31 easements for purchase and applicability of easements to meet sage-grouse conservation goals.

32 The HEA calculated that, on average, 747 service-acre-years would be created per acre of
33 conservation easement purchased, assuming the easement is maintained over the life of the
34 project and the easement is implemented at the time the impact occurs. This total does not
35 include the value of any subsequent habitat improvements to the property and assumes the
36 Companies receive 100 percent credit for the baseline habitat-service level (specific to sage-
37 grouse) of the property.

38 **3.1.3 Specific Mitigation Projects**

39 Specific projects will be selected and approved by the Oversight Committee as project
40 applications/proposals are received. Approved/selected mitigation projects may be located on
41 either public or private land.

1 **3.1.4 Administration of Compensatory Mitigation Funding**

2 The State of Wyoming, the State of Idaho, and the BLM provide a potential option for the
3 Oversight Committee to employ an in-lieu fee approach to mitigation. The Companies have
4 identified additional funds to account for these administrative overheads (costs for an in-lieu fee
5 administrator/third party), if needed (refer to Attachments A and B).

6 **3.1.4.1 In-lieu Fee Administration**

7 The Idaho Sage-grouse Advisory Committee (SAC) framework describes a general outline for a
8 sage-grouse compensatory mitigation program in Idaho. The SAC framework includes an “in-
9 lieu fee” approach to compensatory mitigation through which a project developer would pay
10 funds into an account managed by the mitigation program for performance of mitigation actions
11 that provide measureable benefits for sage-grouse and their habitats within Idaho. The SAC
12 framework is currently under development and would be considered as a modification of this
13 proposed Plan if completed prior to finalization of this Plan for those portions of the Project in
14 Idaho. Other entities such as the Idaho Department of Fish and Game and the Office of Species
15 Conservation, will be explored as potential organizations that could receive and manage in-lieu
16 fees for the Project. In Wyoming, entities such as the Wyoming Wildlife and Natural Resource
17 Trust (WWNRT) have been identified as a potential organization that could receive and manage
18 in-lieu fees for the Project. The WWNRT is an independent state agency governed by a nine-
19 member citizen board appointed by the Governor and works closely with the WGFD and
20 Wyoming state government.

21 Other entities that will be explored as potential organizations that could receive and manage in-
22 lieu fees for the Project include the National Fish and Wildlife Foundation, the Intermountain
23 West Joint Venture and nongovernmental organizations (NGOs).

24 One or more in lieu fee administrator(s) could be used as appropriate.

25

1 **4.0 MAINTENANCE**

2 Maintaining each mitigation project to ensure continued success is an important element of the
3 Companies' mitigation strategy. The HEA incorporated monitoring, maintenance and NEPA-
4 related costs and therefore the Companies' proposed compensatory mitigation also includes such
5 additional costs. Each project that is selected for mitigation may require a monitoring and
6 mitigation entity. This role could be filled by agencies, private landowners, NGOs, managers of
7 conservation easements, environmental or reclamation contractors, the entity applying for
8 funding or other appropriate monitoring entities and is at the discretion of the Oversight
9 Committee.

10

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**ATTACHMENT A
PROPOSED COMPENSATORY MITIGATION FOR WYOMING
PORTION OF THE PROJECT**

1 HABITAT SERVICES LOST

Based on the HEA, the following habitat services would be lost project-wide and within the state of Wyoming due to construction and operation of the Project and therefore will be offset through compensatory mitigation.

Area	Habitat Services Lost
Project wide	4,754,643
Wyoming Total	2,294,352

2 PROJECT MIX

The project mix proposed to offset impacts in Wyoming is designed to address threats (e.g., habitat fragmentation due to development) as identified in the USFWS listing decision while considering available compensatory mitigation opportunities. The proposed project mix for Wyoming is as follows and has been supported through coordination with BLM, WGFD, USFWS, and Governor’s Office representatives):

Wyoming	
Mitigation Project Type	Percent of Project Type
Conservation Easements	80
Sagebrush Restoration	10
Juniper Removal	5
Bunchgrass Seeding	5
Fence Marking/Removal	0

The proposed project mix for the Wyoming portion of the Project is focused on conservation easements as an appropriate approach to address the identified threat of development and resulting habitat fragmentation. There are also opportunities to assist with efforts to stave off the potential for sage-grouse to be listed as either threatened or endangered, and to maximize the benefits to and long-term protection and enhancement of sage-grouse and sage-grouse habitat through the procurement of conservation easements. Potential conservation easements have already been identified based on risk of development. In some cases federal (such as the Natural Resource Conservation Service (NRCS) Farm and Ranch Protection Program (FRPP) funding) and state funding has or will be allocated with the caveat that private matching funds would be secured. The proposed compensatory mitigation may be utilized by the Oversight Committee as private matching funds to release the federal funds and secure conservation easements, which benefit sage-grouse. These conservation easements will be managed in-perpetuity by the landowner and involved land trusts.

The proposed project mix has been vetted through professional judgment and discussed during coordination meetings between the agencies and Companies to be an appropriate mix to address threats (i.e. habitat fragmentation) to sage-grouse in Wyoming as identified in the USFWS listing decision. The project mix is further affirmed through letter correspondence between the State of Wyoming and the USFWS dated December 8, 2011 which states that the USFWS “considers easements not only biologically effective in preventing and reducing habitat fragmentation that negatively affect sage-grouse, but also as providing a regulatory mechanism [the USFWS] can fully consider in [their] listing decision.” The USFWS further references the opportunities to pursue conservation easements provided by the NRCS through their FRPP and Sage-grouse Initiative.

1 **3 ADMINISTRATION OF COMPENSATORY MITIGATION FUNDING**

2 The Companies anticipate that the Oversight Committee will determine that an in-lieu fee
3 administrator/third party is required to manage the compensatory mitigation funds or a portion
4 thereof. As such, the Companies include additional funding to address administrative costs as
5 part of the overall compensatory mitigation. The additional funding is not to exceed 5 percent of
6 the total funding provided. This additional funding shall also be available for Oversight
7 Committee administrative costs and potential implementation of the HEA model to determine
8 habitat services gained through proposed mitigation projects.

9 **4 OVERSIGHT COMMITTEE**

10 Through coordination with the BLM and applicable agencies, an Oversight Committee for
11 Wyoming will be established to coordinate compensatory mitigation efforts for impacts within
12 Wyoming. This Oversight Committee is proposed to be comprised of the following:

- 13 • BLM: State Office Wildlife Biologist
- 14 • USFWS: Ecological Services Staff – Energy Program
- 15 • WWNRT Fund: Executive Director
- 16 • Governor’s Office: Energy Policy Analyst
- 17 • WGFD: Staff Terrestrial/Sage-grouse Biologist

18 This Oversight Committee will through Memorandum of Agreement (to be developed) ensure
19 that the compensatory mitigation offsets project impacts as modeled in the HEA and further
20 establish roles and responsibilities. This Oversight Committee is based on the fundamental roles
21 and responsibilities of the Companies to provide a means to mitigate the Project impacts
22 (compensatory mitigation funding), the BLM to ensure that the mitigation will be implemented
23 and the State of Wyoming to implement the selected and approved projects in the manner in
24 which is deemed appropriate as managers of sage grouse within Wyoming.

25 **5 COMPENSATORY MITIGATION**

26 Although several aspects and concepts within this Attachment and within the main body of this
27 Plan have been agreed to or have varying levels of agreement between the agencies and
28 Companies, the compensatory mitigation funding presented herein has not been finalized or
29 agreed to at this time and represents a reasonable approach for offsetting impacts.

30 **Compensatory Mitigation for Known Impacts**

31 The proposed compensatory mitigation for unavoidable residual impacts in Wyoming offsets the
32 loss of habitat services due to construction and operation of the Project as determined through
33 the HEA and is based upon the proposed project mix. Monitoring and maintenance costs were
34 included in the HEA calculation and are therefore part of the compensatory mitigation funding
35 proposed.

1 The proposed compensatory mitigation for impacts in Wyoming is as follows:

Proposed Compensatory Mitigation Wyoming	
80% - Conservation Easements	\$1,722,390
10% - Sagebrush Restoration	\$346,447
5% - Juniper Removal	\$50,476
5% - Bunchgrass Seeding	\$488,697
0% - Fence Marking/Removal	\$0
Administrative Fee (5% of mitigation total not to exceed \$130,401)	\$130,401
Total	\$2,738,411

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3 **Compensatory Mitigation of Potential Unknown Effects**

4 Compensatory mitigation for unknown effects is proposed to be addressed in a similar manner as
5 compensatory mitigation for known impacts through collaboration with the federal and state
6 agencies and will be provided as a component of this Plan once finalized.

7 **Compensatory Mitigation of the Potential for Direct Loss of Birds**

8 Compensatory mitigation of the potential for direct loss of birds will be provided and addressed
9 consistent with the Framework and will be provided as a component of this Plan once finalized.

10 **6 ASSUMPTIONS**

11 The following assumptions are accounted for within the proposed compensatory mitigation and
12 are expected to be discussed further with the Oversight Committee.

- 13 1. Conservation easements will receive 100 percent credit and no habitat restoration and /or
14 enhancement will be required. If restoration or juniper removal is implemented on a
15 conservation easement parcel, the Companies will receive full credit for both activities.

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**ATTACHMENT B-1
PROPOSED COMPENSATORY MITIGATION FOR IDAHO PORTION
OF THE PROJECT—SEGMENT D**

1 HABITAT SERVICES LOST

For purposes of this Plan, impacts in Idaho have been segmented as follows:

- Segment D
 - State line to Populus Substation
- Segment E
 - Populus Substation to Midpoint Substation to Cedar Hill Substation (Segments 5, 6, 7, and 10)
 - Midpoint Substation to Hemingway Substation to Cedar Hill Substation (Segments 8 and 9)

Based on the HEA, the following habitat services would be lost project-wide and within the state of Idaho due to construction and operation of the Project and therefore will be offset through compensatory mitigation.

Area	Habitat Services Lost
Project wide	4,754,643
State line to Populus Substation	390,153
Populus to Midpoint to Cedar Hill substations	813,972
Midpoint to Hemingway to Cedar Hill substations	1,256,166
Idaho Total	2,460,291

2 PROJECT MIX

The project mix proposed to offset impacts in Idaho is designed to address threats (e.g., habitat degradation due to juniper encroachment and habitat loss due to fire) as identified in the USFWS listing decision.

The proposed project mix for the Idaho portion of Segment D is as follows (the Companies will seek concurrence of the project mix through coordination with the applicable agencies):

Idaho	
Mitigation Project Type	Percent of Project Type
Conservation Easements	30
Sagebrush Restoration	30
Juniper Removal	30
Bunchgrass Seeding	5
Fence Marking/Removal	5

3 IN-LIEU FEE ADMINISTRATOR

The Companies anticipate that the Oversight Committee will determine that an in-lieu fee administrator is required to manage the compensatory mitigation funds or a portion thereof. As such, the Companies have included additional funding to address administrative costs. The additional funding is not to exceed 5 percent of the total funding provided.

4 OVERSIGHT COMMITTEE

Through coordination with the BLM, an Oversight Committee will be established to coordinate compensatory mitigation efforts for impacts within Idaho. This Oversight Committee is anticipated to be comprised of the following:

- BLM: State Office Wildlife Biologist
- USFWS: Alternative Energy Program Lead
- Governor’s Office of Energy Resources: Energy Specialist
- Idaho Department of Fish and Game: Sage-grouse Biologist

This Oversight Committee will through Memorandum of Agreement (to be developed) ensure that the compensatory mitigation offsets project impacts as modeled in the HEA and further establish roles and responsibilities.

5 COMPENSATORY MITIGATION

Although several aspects and concepts within this Attachment and within the main body of this Plan have been agreed to or have varying levels of agreement between the agencies and Companies, the compensatory mitigation funding presented herein has not been finalized or agreed to at this time and represents a reasonable approach for offsetting impacts.

Compensatory Mitigation for Known Impacts

The proposed compensatory mitigation for unavoidable impacts in Idaho will offset the loss of habitat services due to construction and operation of the Project as determined through the HEA and is based upon the proposed project mix. Monitoring and maintenance costs were included in the HEA calculation and are therefore part of the compensatory mitigation funding proposed.

Mitigation may include, but is not limited to, funding BLM restoration of burned habitat; funding BLM’s implementation of the Paradigm Project; and funding Local Working Group projects.

The proposed compensatory mitigation required to offset impacts in Idaho utilizing the HEA is as follows:

Proposed Compensatory Mitigation Idaho—Segment D	
State line to Populus Substation	
30% - Conservation Easements	\$110,023
30% - Sagebrush Restoration	\$176,739
30% - Juniper Removal	\$51,500
5% - Bunchgrass Seeding	\$83,103
5% - Fence Marking/Removal	\$2,341
Administrative Fee (5% of mitigation total not to exceed \$18,610)	\$18,610
Total	\$390,816

The compensatory mitigation values are derived from the HEA, which utilizes best available data including agency input and provides an estimate of habitat services lost based on Project impacts to the sagebrush Steppe ecosystem regardless of it being occupied or unoccupied by sage-grouse. The HEA therefore does not recognize administrative or management boundaries specific to sage-grouse but rather applies the same analysis and methodologies at landscape level and assumes presence of sage-grouse throughout the sagebrush steppe ecosystem. As such, there is

1 an inherent over evaluation or conservative evaluation of HEA modeled Project impacts to sage-
2 grouse. In addition the compensatory mitigation accounts for the time required to realize
3 mitigation success (i.e., growth time required for sagebrush and full habitat recovery) as the
4 HEA extrapolated recovery of Project impacts out to 100 years.

5 **Compensatory Mitigation of Potential Unknown Effects**

6 Compensatory mitigation for unknown effects is proposed to be addressed in a similar manner as
7 compensatory mitigation for known impacts through collaboration with the federal and state
8 agencies and will be provided as a component of this Plan once finalized.

9 **Compensatory Mitigation of the Potential for Direct Loss of Birds**

10 Compensatory mitigation of the potential for direct loss of birds will be provided and addressed
11 consistent with the Framework and will be provided as a component of this Plan once finalized.

12 **6 ASSUMPTIONS**

13 The following assumptions are accounted for within the proposed compensatory mitigation.

- 14 1. Conservation easements will receive 100 percent credit and no habitat restoration and
15 /or enhancement will be required. If restoration or juniper removal is implemented on a
16 conservation easement parcel, the Companies will receive full credit for both activities.

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**ATTACHMENT B-2
PROPOSED COMPENSATORY MITIGATION FOR IDAHO PORTION
OF THE PROJECT—SEGMENT E**

1 HABITAT SERVICES LOST

For purposes of this Plan, impacts in Idaho have been segmented as follows:

- State line to Populus Substation
- Populus Substation to Midpoint Substation to Cedar Hill Substation (Segments 5,6,7,10)
- Midpoint Substation to Hemingway Substation to Cedar Hill Substation (Segments 8 and 9)

Based on the HEA, the following habitat services would be lost project-wide and within the state of Idaho due to construction and operation of the Project and therefore will be offset through compensatory mitigation.

Area	Habitat Services Lost
Project wide	4,754,643
State line to Populus Substation	390,153
Populus to Midpoint to Cedar Hill substations	813,972
Midpoint to Hemingway to Cedar Hill substations	1,256,166
Idaho Total	2,460,291

2 PROJECT MIX

The project mix proposed to offset impacts in Idaho, Segment E is designed to address threats (e.g., habitat degradation due to juniper encroachment and habitat loss due to fire) as identified in the USFWS listing decision.

The proposed project mix for Segment E is as follows (the Companies will seek concurrence of the project mix through coordination with the applicable agencies):

Idaho	
Mitigation Project Type	Percent of Project Type
Conservation Easements	30
Sagebrush Restoration	30
Juniper Removal	30
Bunchgrass Seeding	5
Fence Marking/Removal	5

3 IN-LIEU FEE ADMINISTRATOR

The Companies anticipate that the Oversight Committee will determine that an in-lieu fee administrator is required to manage the compensatory mitigation funds or a portion thereof. As such, the Companies have included additional funding to address administrative costs. The additional funding is not to exceed 5 percent of the total funding provided.

4 OVERSIGHT COMMITTEE

Through coordination with the BLM, an Oversight Committee will be established to coordinate compensatory mitigation efforts for impacts within Idaho. This Oversight Committee is anticipated to be comprised of the following:

- BLM: State Office Wildlife Biologist
- USFWS: Alternative Energy Program Lead
- Governor's Office of Energy Resources: Energy Specialist

- IDFG: Sage-grouse Biologist

This Oversight Committee will ensure through Memorandum of Agreement (to be developed) that the compensatory mitigation offsets Project impacts as modeled in the HEA.

5 COMPENSATORY MITIGATION

Although several aspects and concepts within this Attachment and within the main body of this Plan have been agreed to or have varying levels of agreement between the agencies and Companies, the compensatory mitigation funding presented herein has not been finalized or agreed to at this time and represents a reasonable approach to offsetting impacts.

Compensatory Mitigation for Known Impacts

The proposed compensatory mitigation for unavoidable impacts in Idaho will offset the loss of habitat services due to construction and operation of the Project as determined through the HEA and is based upon the proposed project mix. Monitoring and maintenance costs were included in the HEA calculation and are therefore part of the compensatory mitigation funding proposed.

Mitigation may include, but is not limited to, funding BLM restoration of burned habitat; funding BLM’s implementation of the Paradigm Project; and funding Local Working Group projects.

The compensatory mitigation required to offset impacts in Idaho utilizing the HEA is as follows:

Proposed Compensatory Mitigation Idaho—Segment E	
Populus to Midpoint to Cedar Hill substations	
30% - Conservation Easements	\$229,540
30% - Sagebrush Restoration	\$368,729
30% - Juniper Removal	\$107,444
5% - Bunchgrass Seeding	\$173,376
5% - Fence Marking/Removal	\$4,884
Administrative Fee (5% of mitigation total not to exceed \$44,199)	\$44,199
Total	\$928,172
Midpoint to Hemingway to Cedar Hill substations	
30% - Conservation Easements	\$354,239
30% - Sagebrush Restoration	\$569,043
30% - Juniper Removal	\$165,814
5% - Bunchgrass Seeding	\$267,563
5% - Fence Marking/Removal	\$7,537
Administrative Fee (5% of mitigation total not to exceed \$68,210)	\$68,210
Total	\$1,432,406

The compensatory mitigation values are derived from the HEA, which utilizes best available data including agency input and provides an estimate of habitat services lost based on Project impacts to the sagebrush Steppe ecosystem regardless of it being occupied or unoccupied by sage-grouse. The HEA therefore does not recognize administrative or management boundaries specific to sage-grouse but rather applies the same analysis and methodologies at landscape level and assumes presence of sage-grouse throughout the sagebrush steppe ecosystem. As such, there is an inherent over-evaluation or conservative evaluation of HEA modeled Project impacts to sage-grouse. In addition the compensatory mitigation accounts for the time required to realize mitigation success (i.e., growth time required for sagebrush and full habitat recovery) as the HEA extrapolated recovery of Project impacts out to 100 years.

Compensatory Mitigation of Potential Unknown Effects

Compensatory mitigation for unknown effects is proposed to be addressed in a similar manner as compensatory mitigation for known impacts through collaboration with the federal and state agencies and will be provided as a component of this Plan once finalized.

Compensatory Mitigation of the Potential for Direct Loss of Birds

Compensatory mitigation of the potential for direct loss of birds will be provided and addressed consistent with the Framework and will be provided as a component of this Plan once finalized.

6 ASSUMPTIONS

The following assumptions are accounted for within the proposed compensatory mitigation.

1. Conservation easements will receive 100 percent credit and no habitat restoration and/or enhancement will be required. If restoration or juniper removal is implemented on a conservation easement parcel, the Companies will receive full credit for both activities.