



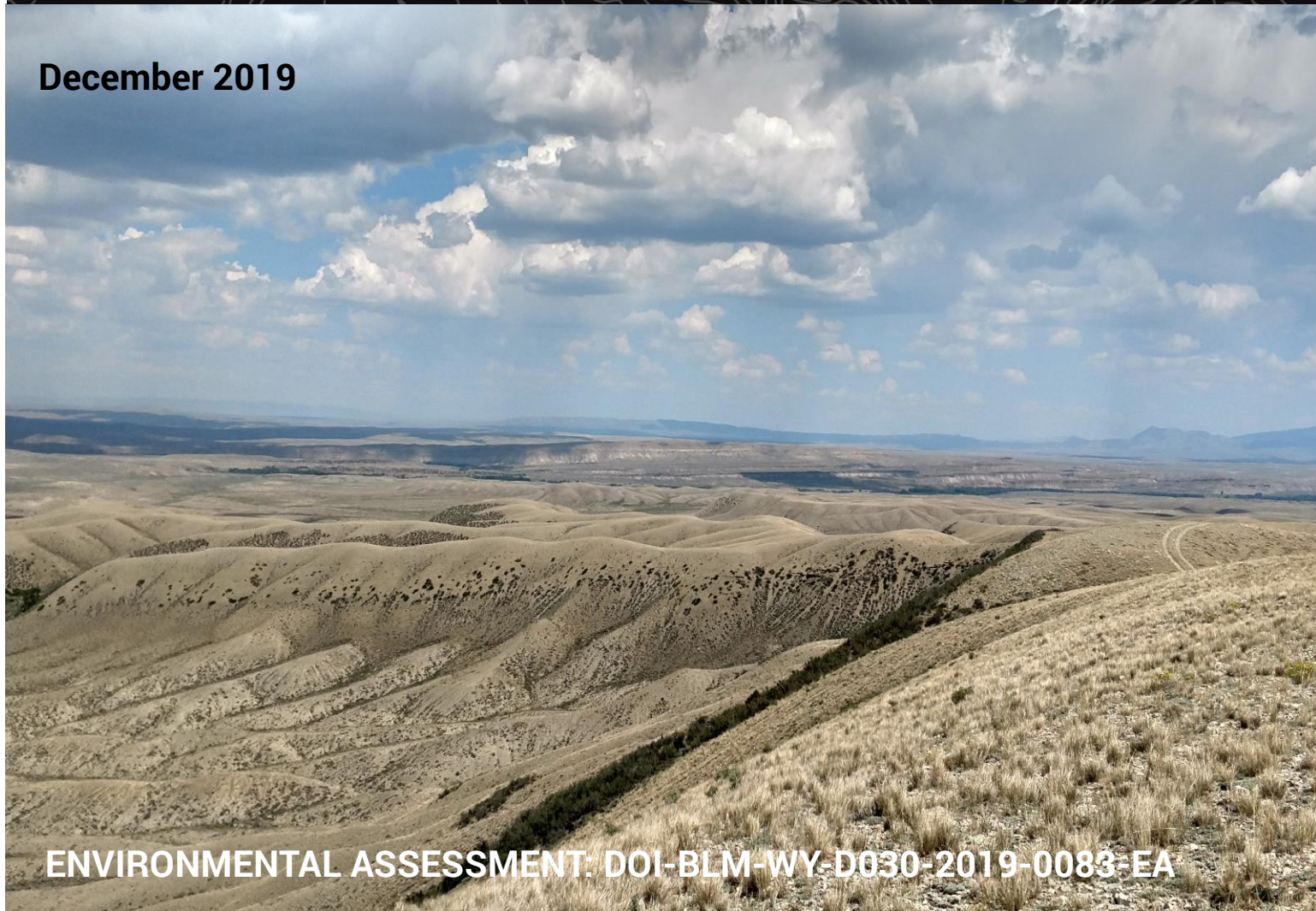
U.S. Department of the Interior
Bureau of Land Management

Chokecherry and Sierra Madre Wind Energy Project

Phase II Wind Turbine Development

Rawlins Field Office

December 2019



ENVIRONMENTAL ASSESSMENT: DOI-BLM-WY-D030-2019-0083-EA

Mission Statement

To sustain the health, diversity, and productivity of the public lands
for the use and enjoyment of present and future generations.

DOI-BLM-WY-D030-2019-0083-EA

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ACRONYMS & ABBREVIATIONS

ARMPA	Approved Resource Management Plan Amendment
AUM	Animal unit month
BBCS	Bird and Bat Conservation Strategy
BLM	Bureau of Land Management
CCSM Project	Chokecherry and Sierra Madre Wind Energy Project
CCSM Project FEIS	Chokecherry and Sierra Madre Wind Energy Project Final Environmental Impact Statement
CCSM Project ROD	Chokecherry and Sierra Madre Wind Energy Project Record of Decision
CFR	Code of Federal Regulations
CWR	Crucial winter range
DOI	Department of the Interior
EA	Environmental Assessment
ECP	Eagle Conservation Plan
EO	Executive Order
ESA	Endangered Species Act
ETP	Eagle take permit
FEIS	Final Environmental Impact Statement
FLPMA	Federal Land Policy and Management Act
GHMA	General Habitat Management Area
ID Team	Interdisciplinary Team
MW	Megawatt
NEPA	National Environmental Policy Act
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
PCW	Power Company of Wyoming LLC
PFC	Proper functioning condition
PHMA	Priority Habitat Management Area
Ranch	Overland Trail Ranch
RFO	Rawlins Field Office

RMP	Resource Management Plan
ROD	Record of Decision
ROW	Right-of-way
SHPO	State Historic Preservation Office
SPOD	Site-specific plan of development
TLS	Timing limitation stipulation
U.S.	United States
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WDA	Wind Development Area
WGFD	Wyoming Game and Fish Department

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1.0 INTRODUCTION

This Environmental Assessment (EA) analyzes the Site Specific Plan of Development (SPOD) for construction, operation, maintenance, and decommissioning of the Phase II Wind Turbine Development for the Chokecherry and Sierra Madre Wind Energy Project (CCSM Project or Project). As required by the CCSM Project Record of Decision (ROD) (BLM 2012a), this EA is tiered to the Project's Final Environmental Impact Statement (FEIS) (BLM 2012b), as well as to two EAs analyzing the impacts of other Project SPODs (BLM 2014a, BLM 2017a). Consistent with the Tiering Procedures specified in the ROD, this EA only analyzes those effects of the Phase II Wind Turbine Development that were not previously analyzed in the FEIS or the related EAs.¹

1.1 Background

1.1.1 The Chokecherry and Sierra Madre Wind Energy Project

The CCSM Project is an up to 1,000 turbine wind energy project located in the checkerboard area of private and public land in Carbon County, Wyoming. In January 2008, the Project's proponent, Power Company of Wyoming LLC (PCW), applied to the Bureau of Land Management (BLM) for right-of-way (ROW) grants to construct, operate, maintain, and decommission the Project. In response, BLM completed a project-level FEIS on June 29, 2012 (BLM 2012b). Based on the FEIS, BLM issued its ROD approving the Project on September 28, 2012 (BLM 2012a).

The CCSM ROD determined that wind energy development was appropriate within a portion of a 219,707-acre conceptual area of development (Project Area) (see Figure 3-1 in the ROD). The ROD did not authorize site-specific construction of individual Project components. Instead, the ROD provided that PCW must describe the proposed Project components in a series of SPODs that BLM would analyze using the ROD's Tiering Procedures.

PCW has already submitted, and BLM has already analyzed and approved, the following SPODs:

- In April 2014, PCW submitted SPODs for (1) Phase I Haul Road and Facilities; (2) West Sinclair Rail Facility; and (3) Road Rock Quarry. The BLM analyzed these SPODs in an EA for Infrastructure Components (BLM 2014a) that was

¹ Capitalized terms used in this EA but not defined in this document have the same meaning as used in the CCSM Project FEIS (BLM 2012b). The CCSM Project FEIS (BLM 2012b) and the CCSM Project ROD (BLM 2012a) are available on the BLM Rawlins Field Office website (<https://eplanning.blm.gov/epl-front-office/eplanning/legacyProjectSite.do?methodName=renderLegacyProjectSite&projectId=70695>).

publicly released on August 11, 2014, and approved the SPODs in a Decision Record signed on December 23, 2014 (BLM 2014b).

- In January 2015, PCW submitted a SPOD for Phase I Wind Turbine Development (PCW 2015a). Phase I Wind Turbine Development consists of 500 turbines with an installed capacity of approximately 1,500 megawatts (MWs), generally located in the western portion of the Project Area. BLM analyzed this SPOD in an EA for Phase I Wind Turbine Development released on March 9, 2016 (BLM 2017a), and approved the SPOD in a Decision Record signed on January 17, 2017 (BLM 2017b).
- In October 2017, PCW submitted a SPOD for the Phase II Haul Road and Facilities (PCW 2017). The BLM completed a Determination of National Environmental Policy Act (NEPA) Adequacy (DNA) (BLM 2017c) and approved the SPOD in a Decision Record signed on March 9, 2018 (BLM 2018).

PCW is actively engaged in the construction of those Project components that BLM has already approved.

1.1.2 Phase II Wind Turbine Development (SPOD 6)

On May 24, 2019, PCW submitted its final SPOD (SPOD 6), for the Phase II Wind Turbine Development, to BLM for analysis and approval. With SPOD 6, PCW seeks a BLM ROW grant for a term of 30 years, to allow the construction, operation, maintenance, and decommissioning of up to 396 wind turbines with an installed capacity of approximately 1,500 MWs (see Map E-1 in Appendix E). The Phase II Wind Turbine Development would occur in the eastern portions of the Chokecherry and Sierra Madre Wind Development Areas (WDAs) and would provide approximately half of the electricity (about 1,500 MWs) needed to meet the objectives of the CCSM Project.

Construction, operation, maintenance, and decommissioning of the Phase II Wind Turbine Development would rely on infrastructure previously approved by BLM (the Phase I Haul Road and Facilities, Phase II Haul Road and Facilities, West Sinclair Rail Facility, and Road Rock Quarry). The Phase II Wind Turbine Development Site is defined as the 2,399-acre initial disturbance area and the 373 acres of activity areas as that term is defined in SPOD 6. In general, “activity areas” are those areas where project activities occur but do not require surface disturbance. The 2,399-acre initial disturbance area includes 370 acres of long-term disturbance.

1.1.3 Purpose and Scope of this EA

This EA identifies and analyzes those aspects of the Phase II Wind Turbine Development that have not already been fully analyzed in the CCSM Project FEIS and/or earlier Project EAs. In compliance with the Tiering Procedures provided in the Project ROD and BLM's NEPA Handbook (H-1790-1), this EA follows a concise issue-based format.

For convenience, the Tiering Procedures are attached to this EA as Appendix A. The Phase II Wind Turbine Development SPOD is attached as Appendix B and is available electronically on the BLM website. In addition, printed copies are available for review in the BLM Rawlins Field Office (RFO). As allowed by 40 Code of Federal Regulations (CFR) § 1502.21, the CCSM Project FEIS and the subsequent EAs and DNA are incorporated by reference.

1.2 Purpose and Need

The Proposed Action is BLM approval of the Phase II Wind Turbine Development (SPOD 6). The purpose of the Proposed Action is the construction, operation, maintenance, and decommissioning of 396 wind turbine generators and associated facilities designated as Phase II of the CCSM Project. The BLM's purpose and need for the Proposed Action is to respond to PCW's ROW application in accordance with the Federal Land Policy and Management Act (FLPMA) and other applicable laws, and to comply with the procedures set out by the BLM in the CCSM Project ROD (BLM 2012a).

The objectives for the CCSM Project itself are described in Chapter 1 of the CCSM Project FEIS (BLM 2012b) and are incorporated herein by reference. The objectives for the Phase II Wind Turbine Development, as described in SPOD 6, are to extract the maximum potential wind energy from the Phase II Wind Turbine Development Site while avoiding resources of concern to the extent possible and complying with the requirements of the BLM's Selected Alternative in the CCSM Project ROD (BLM 2012a).

1.3 Identification of Issues

1.3.1 Scoping

An Interdisciplinary Team (ID Team) meeting was held on March 6, 2019. The ID Team reviewed the Phase II Wind Turbine Development SPOD, identified issues of concern for specific resources, and determined which resources required additional site-specific assessment in this EA. The ID Team analysis of resources and issues considered for this EA is found in Appendix C.

1.3.2 Issues Brought Forward for Analysis

The ID Team identified the following issues for analysis in this document:

Issue 1: Are impacts to range resources consistent with those disclosed in the CCSM Project FEIS, given current animal unit month (AUM) estimates?

Issue 2: Are impacts to sub-watersheds in the Project Area consistent with those disclosed in the CCSM Project FEIS, given the final layout of the Phase II Wind Turbine Development Site?

Issue 3: Are anticipated mortalities for bats, migratory birds, raptors, and/or eagles consistent with those disclosed in the CCSM Project FEIS, given that the Phase II Wind Turbine Development Site would include fewer wind turbines than analyzed in the FEIS but the individual turbines would be taller and would have a larger rotor-swept area?

Issue 4: Are anticipated impacts to mule deer crucial winter range consistent with those disclosed in the CCSM Project FEIS, given the final layout for the Phase II Wind Turbine Development?

1.3.3 Description of Alternatives

This EA analyzes two alternatives, the No Action Alternative (Alternative A) and the Applicant's Proposed Action (Alternative B). The No Action Alternative provides a baseline for comparison of the impacts of the Proposed Action. Additional alternatives that BLM previously considered but did not select are described in Chapter 2 of the CCSM Project FEIS (BLM 2012b).

1.4 Alternative A – No Action Alternative: Deny approval of a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW

Under the No Action Alternative, the BLM authorized officer would deny approval of a ROW grant for Phase II Wind Turbine Development, even though the CCSM Project ROD (BLM 2012a) contemplates the issuance of this ROW grant. Selecting the No Action Alternative would not meet one of the purposes of the CCSM Project, which is to support federal goals and objectives for the development of domestic renewable energy projects on public lands. If BLM selected the No Action Alternative and denied approval of this ROW grant, PCW would have the opportunity to submit a revised Phase II Wind Turbine Development SPOD to address the BLM's reasons for denial.

1.5 Alternative B – Proposed Action: Approve a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW and allow the construction of Phase II wind turbine generators and associated facilities

The Phase II Wind Turbine Development includes 396 wind turbine generators and associated facilities for the CCSM Project, such as turbine pad access roads, electrical lines, substations, operation and maintenance buildings, meteorological towers, utilities, and temporary construction features. The Phase II Wind Turbine Development relies on many of the infrastructure components and facilities that BLM has previously analyzed and approved in connection with the five SPODs described above, including the rail facility, quarry, haul roads, arterial roads, and many electrical facilities with Project-wide functionality. The location of the Phase II Wind Turbine Development is consistent with the Selected Alternative in the CCSM Project ROD (BLM 2012a). The wind turbine layout is shown in Map E-2 (see Appendix E) for the Chokecherry WDA and Map E-3 (see Appendix E) for the Sierra Madre WDA.

PCW developed the Phase II Wind Turbine Development layout in coordination with the BLM using detailed site-specific information. The Phase II wind turbine layout was developed using the U.S. Fish and Wildlife Service (USFWS) Region 6 Recommendations for Avoidance and Minimization of Impacts to Golden Eagles and Wind Energy Facilities, April 11, 2013 (USFWS 2013). Consistent with applicant committed measures outlined in Appendix D of the CCSM Project ROD (BLM 2012a) (provided as Appendix D of this EA), the BLM and PCW conducted on-site inspections for specific resources, and PCW incorporated the outcomes of the site-specific surveys by micro-siting the Phase II Wind Turbine Development so as to avoid or minimize impacts on aquatic resources, special-status wildlife species, sensitive vegetation communities, and cultural resources to the extent practicable. Refer to the CCSM Project FEIS (Chapter 2, pages 2-2 to 2-17, and Appendix A, Project Elements Common to All Action Alternatives) (BLM 2012a) and the Phase II Wind Turbine Development SPOD (Section 4, Phase II Wind Turbine Development Design) (PCW 2019) for more information about the micro-siting and design process.

The layout was designed not only to satisfy all requirements established by the CCSM Project ROD (BLM 2012a), but also to comply with USFWS recommendations set forth in its Eagle Conservation Plan (ECP) Guidance (USFWS 2013) and its 2012 Land-Based Wind Energy Guidelines (USFWS 2012). In particular, PCW has developed the Phase II wind turbine layout using the USFWS Region 6 Recommendations for Avoidance and Minimization of Impacts to Golden Eagles and Wind Energy Facilities, April 11, 2013 (USFWS 2013).

The Phase II Wind Turbine Development would complete the development of the CCSM Project's wind turbine generators and supporting facilities. Refer to the CCSM Project

FEIS (Appendix A, Project Elements Common to All Action Alternatives) and the Phase II Wind Turbine Development SPOD (Appendix B: Section 5, Construction; Section 6, Operations and Maintenance; and Section 7, Decommissioning) (PCW 2019) for more information about construction, operation, maintenance, and decommissioning of the Phase II Wind Turbine Development.

1.5.1 Requested Waivers and Authorizations

The Proposed Action would include the following waivers and authorizations:

1. **Wildlife – Raptor Nests:** The 2008 Rawlins Resource Management Plan (RMP) and ROD (BLM 2008a) precludes well locations, roads, ancillary facilities, and other surface structures requiring a repeated human presence within 825 feet of active raptor nests (1,200 feet of a ferruginous hawk nest). According to recent raptor surveys reported in Appendix L, Avian Resource Report of the SPOD (PCW 2019), eight raptor nests occur within 825 feet (1,200 feet for ferruginous hawks) of the Phase II Wind Turbine Development Site, of which one nest was active. Table 1 lists the species and locations of raptor nests identified during surveys conducted since 2008 that fall within 825 feet (1,200 feet for ferruginous hawks) of the Phase II Wind Turbine Development Site. The one active nest (used by a golden eagle during three of the eight years monitored) is located within 825 feet of initial disturbance and activity areas associated with a Phase II Wind Turbine Development transmission line. However, the same nest is also located within 825 feet of the Phase I Haul Road and a waiver was authorized with respect to that nest for the Phase I Haul Road and Facilities. PCW is requesting a waiver to this spatial stipulation for the nests listed in Table 1, based on activity during 2011–2018 monitoring.

Table 1: Raptor Nests Identified Since 2008 within 825 feet (1,200 feet for Ferruginous Hawks) of the Phase II Wind Turbine Development Site

Common Name	Scientific Name	BLM Nest ID	Northing (UTM NAD 83)	Easting (UTM NAD 83)	Distance to Edge of Disturbance (feet)	Years Active
Ferruginous hawk	<i>Buteo regalis</i>	FH20862302	4617385	328919	518	None
Ferruginous hawk	<i>Buteo regalis</i>	FH20862301	4617563	328950	793	None
Ferruginous hawk	<i>Buteo regalis</i>	FH20860901	4620733	327349	315	None
Ferruginous hawk	<i>Buteo regalis</i>	FH20852901	4615940	335189	850	None
Ferruginous hawk	<i>Buteo regalis</i>	FH20852803	4615203	335585	1,157	None
Ferruginous hawk	<i>Buteo regalis</i>	FH18870202	4603851	320037	33	None
Golden eagle	<i>Aquila chrysaetos</i>	GE20873601	4614839	321561	522	3
Unknown raptor			4615961	335223	728	None

Source: PCW 2019

2. Wildlife – High-Profile Structure Authorizations: Per the 2008 Rawlins RMP and ROD (BLM 2008a), high-profile structures would be authorized on a case-by-case basis from 0.25 to 1.0 mile of an occupied Greater Sage-Grouse lek. For the Phase II Wind Turbine Development Site, after eliminating any structures within 1.0 mile of 9 other leks, PCW is requesting authorization to locate wind turbines and transmission structures within 1.0 mile of 10 Greater Sage-Grouse leks: Deadman Creek, Hillside, Hugus Draw, Iron Springs Draw, Junction, Smith Draw, Smith Run, South Hugus, Upper Iron Springs, and West Junction. The CCSM Project ROD (BLM 2012a) determined that more than 200,000 acres of the CCSM Project area, including the Phase II Wind Turbine Development Site, were suitable for wind energy development; this area includes areas within 1.0 mile of a Greater Sage-Grouse lek. PCW has sited high-profile structures, including turbines and transmission structures, outside of the 0.25-mile buffer around occupied Greater Sage-Grouse lek locations and used natural project-specific topography to shield the lek locations and seasonal habitats from the Phase II turbines to the extent practicable. PCW, Wyoming Game and Fish Department (WGFD), and BLM have developed and implemented numerous conservation measures, and a detailed Sage-Grouse Conservation Plan is included in the CCSM Project Plan of Development (BLM 2012b). The CCSM Project, including the Phase II Wind Turbine Development Site, is located outside of BLM-designated Priority Habitat Management Areas (PHMAs) and Wyoming's Sage-Grouse Core Areas (collectively PHMA/Core), and the general habitat in the Phase II development areas is poor. PCW would protect Core Area Greater Sage-Grouse populations through the establishment of approximately 27,500 acres of conservation easements in the highest-quality nesting, brood-rearing, and wintering habitat near the Project Area to mitigate impacts on Greater Sage-Grouse and to conserve and enhance Greater Sage-Grouse populations.

Wildlife – Unoccupied and Undetermined Leks: As provided for in the CCSM Project ROD (BLM 2012a), PCW is requesting authorization from the BLM to apply the stipulations for unoccupied and undetermined leks, as described in the 2015 BLM RFO Approved Resource Management Plan Amendment (ARMPA) and Wyoming's Greater Sage-Grouse Core Area Protection Executive Order (EO) 2019-3, to the Phase II Wind Turbine Development.²

² On October 16, 2019, shortly before a draft of this EA was posted for public comment, the United States District Court for the District of Idaho issued an order enjoining BLM from implementing the 2019 Sage-Grouse Resource Management Plan Amendments in Wyoming (among other states), *Western Watersheds Project v. Schneider*, Case No. 1:16-CV-83-BLW. The court's order states that the 2015 Plan Amendments remain in effect until the court rules on the merits of the plaintiffs' claims in that case. For that reason, this EA refers to the 2015 BLM RFO Approved Resource Management Plan Amendment rather than the 2019 Plan Amendment. It should be noted, however, that both the 2015 Plan Amendment and the 2019

With respect to the Phase II Wind Turbine Development Site, the request is made for the following unoccupied and undetermined lek locations: Smith Draw and West Junction. The Smith Draw lek is unoccupied, and there has been no lek activity since 1982. The West Junction lek is undetermined, and there has been no lek activity since 1989. The 2015 ARMPA and EO 2019-3 apply a timing limitation stipulation (TLS) to surface-disturbing or disruptive activities that occur within a 2-mile buffer surrounding occupied leks that are outside of the PHMA/Core. The 2015 ARMPA and EO 2019-3 do not require application of this TLS for unoccupied or undetermined leks that are outside of the PHMA/Core. Consistent with the 2015 ARMPA and EO 2019-3, PCW is requesting that the 2-mile buffer TLS not be applied to the Smith Draw (unoccupied) and the West Junction (undetermined) leks.

Both the 2015 ARMPA and EO 2019-3 prohibit surface-disturbing and disruptive activities within a 0.25-mile buffer around occupied leks outside of the PHMA/Core. The 2015 ARMPA and EO 2019-3 do not prohibit surface-disturbing and disruptive activities within 0.25 mile of unoccupied or undetermined leks. Consistent with the 2015 ARMPA and EO 2019-3, PCW is requesting that surface-disturbing and disruptive activities be allowed within the 0.25-mile buffer around the Smith Draw (unoccupied) and West Junction (undetermined) leks.

3. **Soils – Steep Slopes:** Per the 2008 Rawlins RMP and ROD (BLM 2008a), surface disturbance is prohibited on steep slopes greater than 25 percent. PCW is requesting a waiver of the prohibition of surface disturbance on slopes greater than 25 percent, for wind turbine staging areas totaling 5.5 acres of initial disturbance (Appendix B of PCW 2019). No wind turbine generators would be located on slopes greater than 25 percent; however, the initial disturbance areas for some wind turbine sites would affect slopes greater than 25 percent because of the cut-and-fill requirements necessary to establish appropriate slopes. Generally, this disturbance would consist of leveling features or placing fill on steep slopes to establish the design grade for the staging area. PCW would apply the appropriate measures in the Erosion Control Plan, Stormwater Pollution Prevention Plan, and Reclamation Plan to stabilize these locations and minimize erosion.
4. **Lands and Realty – ROW Boundary Setbacks:** The CCSM Project ROD (BLM 2012a) requires a 5D ROW setback (i.e., a setback equal to five times the

Plan Amendment (currently enjoined) contain similar provisions with respect to unoccupied and undetermined leks so that PCW's request that the 2-mile buffer surrounding occupied leks outside of PHMA/Core areas not be applied to the Smith Draw unoccupied lek and the West Junction undetermined lek is consistent with both versions of the Sage-Grouse Plan Amendment.

diameter of the turbine rotor) from the ROW boundary and a setback from external property lines of $1.1 \times$ the total structure height for wind turbines. Based on the Phase II Wind Turbine Development SPOD (PCW 2019), all turbine models under consideration have rotor diameters of up to 541 feet (165 meters) and a maximum total structure height of 763 feet (232.5 meters). Therefore, the 5D ROW setback would be calculated as 2,705 feet (825 meters), and the external property line setback would be calculated as 839 feet (255.75 meters). Five wind turbine generators (SCB-A-17, SCB-A-18, SVF-G-13, SVF-F-23, and SVF-F-24) would be located within the 5D ROW setback, or less than the required 2,705 feet from the ROW boundary. Three turbines (SCB-A-18, SCR-A-02, and SVF-F-24) would also be located within the setback corresponding to $1.1 \times$ the total structure height, or less than the required 839 feet from external property lines. The 5D ROW setback was created to protect the wind energy development rights on adjacent parcels, thereby ensuring that wake effects from the CCSM Project wind turbine generators would not affect neighboring parcels. The external property line setback was created to ensure that wind turbine placement would not physically affect adjacent property owners. In the locations where PCW is requesting a waiver, the direction of the prevailing wind is generally parallel to the adjacent property line, including the land adjacent to the SCB-A-18 and SCR-A-02. The adjacent property is BLM-administered land located inside the Overland Trail Ranch (Ranch) boundary within the designated Greater Sage-Grouse PHMA/Core, which are avoidance areas for wind energy under the 2015 ARMPA. These lands do not have structures or residences located on them. Therefore, even with the waiver, the wind turbines would not physically affect the adjacent properties.

5. **Water – Wetlands:** The CCSM Project ROD (BLM 2012a) does not allow for disturbance in wetlands identified on the National Wetlands Inventory (NWI) or as proper functioning condition (PFC). The Phase II Wind Turbine Development Site includes approximately 10.9 acres of disturbance in areas identified as wetlands on NWI or PFC on federal lands. However, based on wetland delineations conducted for the Phase II Wind Turbine Development Site, less than 25-feet² (less than 0.0006 acres) of this area is actually wetland. The 25 feet² of NWI wetlands could not be avoided. PCW would work with the U.S. Army Corps of Engineers (USACE) to permit any disturbances within jurisdictional wetlands and waters. Because of the delineation information, demonstrating that the vast majority of the NWI and PFC wetlands do not meet wetland criteria, and PCW's commitment to obtaining a permit from the USACE for the 25 feet² of NWI or PFC wetlands that could not be avoided, PCW is requesting a waiver from the BLM for the 10.9 acres of disturbance in areas identified as wetlands on the NWI or PFC on federal lands.

6. Visual – Substation Fence Painting: Mitigation measure VR-5 in the CCSM Project ROD (BLM 2012a) requires fencing to be painted Shadow Gray or a similar dark gray color. PCW is requesting a waiver for mitigation measure VR-5 for the Phase II Wind Turbine Development as it relates to fencing. Fencing for the Phase II Wind Turbine Development is generally located far from public views; therefore, painting chain-link fencing is likely to be of little benefit to visual resources. Painting fences would also require near-constant maintenance in the conditions found on-site. In addition, painting fences may cause other unanticipated adverse effects (e.g., housekeeping issues related to paint chipping and deterioration).

The BLM will consider waivers to these restrictions. A stipulation shall be subject to waiver only if the authorized officer determines that the factors leading to its inclusion have changed enough to make the protection provided by the stipulation no longer justified or if proposed operations would not cause unacceptable impacts. If necessary, the BLM would apply other mitigation on a site-specific basis.

1.5.2 Surface Disturbance Summary

Table 2 identifies the estimated initial surface disturbance and long-term surface disturbance by project component, based on information provided in the Phase II Wind Turbine Development SPOD (PCW 2019), infrastructure component SPODs (PCW 2014a, 2014b, 2014c), Phase I Wind Turbine Development SPOD (PCW 2015a), and Phase II Haul Road and Facilities SPOD (PCW 2017). The CCSM Project FEIS (BLM 2012b) analyzes the entire CCSM Project; therefore, Table 2 compares the surface disturbance of the entire CCSM Project with the surface disturbance for the CCSM Project Infrastructure Components, Phase I Wind Turbine Development, Phase II Haul Road and Facilities, and Phase II Wind Turbine Development. In addition, Table 2 identifies the acres of activity areas by project component.

The initial surface disturbance analyzed in the CCSM Project FEIS (BLM 2012b) was 7,733 acres, with a long-term disturbance of 1,545 acres. The total surface disturbance for the CCSM Project, when combining all project phases, is 7,713 acres of initial disturbance and 1,400 acres of long-term disturbance, which is 18 acres less for initial and 145 acres less for long-term disturbance than the acreage analyzed in the CCSM Project FEIS (BLM 2012b).

Table 2: Surface Disturbance Acreage for the CCSM Project Compared to the CCSM Project FEIS

CCSM Project Component	Project Phase	EA Number	Initial Disturbance ¹ (acres)	Long-Term Disturbance ¹ (acres)	Activity Area ² (acres)
Phase I Haul Road and Facilities	I	1	875	225	0
West Sinclair Rail Facility			370	121	0
Road Rock Quarry			184	18	0
Phase I Wind Turbine Development	I	2	3,035	485	440
Phase II Haul Road and Facilities	II	N/A ³	852	181	18
Phase II Wind Turbine Development	II	3	2,399	370	373
Current Disturbance Estimate	N/A	N/A	7,715	1,400	N/A
CCSM Project FEIS Disturbance Estimate	N/A	N/A	7,733	1,545	N/A
Change	N/A	N/A	-18	-145	N/A

Sources: BLM 2012a, 2012b; PCW 2014a, 2014b, 2014c, 2015a, 2016, 2019

¹ Initial disturbance is defined as the total area of surface disturbance, including both the areas that would be reclaimed and the long-term disturbance. The initial disturbance areas would be reclaimed following construction, in accordance with the Master Reclamation Plan, included as Appendix D of the CCSM Project FEIS (BLM 2012b), and the Site-specific Reclamation Plan, included as Appendix L of the Phase II Wind Turbine Development SPOD (PCW 2019). Long-term disturbance is defined as areas that would be reclaimed in accordance with these plans following decommissioning.

² Activity areas are areas where project activities may occur that do not require ground disturbance (i.e., would not be cleared or graded); thick vegetation higher than one foot may be trimmed to allow for safe vehicle access and to minimize fire potential.

³ The Phase II Haul Road and Facilities were reviewed in a Determination of NEPA Adequacy (BLM 2017c).

CCSM Chokecherry and Sierra Madre

EA Environmental Assessment

FEIS Final Environmental Impact Statement

N/A not applicable

1.6 Alternatives Considered but Eliminated from Further Analysis

The CCSM Project ROD (BLM 2012a) provides an overview of alternatives considered but eliminated as part of the CCSM Project FEIS (BLM 2012b) as well as the alternatives considered in detail. Alternatives considered but eliminated from further analysis included the original project concept with and without constraints; no development in Greater Sage-Grouse core breeding areas, using the Version 2 map; various wind turbine designs and siting concepts; variations to power transmission; independent alternatives addressing resource protection; other renewable energy development concepts; alternate project sites; and turbine transport alternatives. As provided in BLM's NEPA Handbook (H-1790-1, p. 27), a tiered document such as this EA need not re-examine alternatives analyzed in the broader document. Instead, this EA focuses on those issues and mitigation measures specifically relevant to the Phase II Wind Turbine Development that were not analyzed in sufficient detail in the project-level CCSM Project FEIS (BLM 2012b).

1.7 Conformance with BLM Land Use Plan

The CCSM Project, including the Phase II Wind Turbine Development SPOD, is subject to the BLM's 2008 Rawlins RMP, approved on December 24, 2008 (BLM 2008a), as amended by the CCSM Project ROD (BLM 2012a), and the 2015 ARMPA.

The CCSM Project is located entirely in General Habitat Management Areas (GHMAs) and is not sited within any PHMAs for Greater Sage-Grouse in the 2015 ARMPA.³ Further, the CCSM Project complies with all other applicable requirements for development within GHMAs, including the best management practices outlined in the 2015 ARMPA.

1.8 Relationship to Applicable Statutes, Regulations, Policies, or Other Plans

In preparing this EA, the BLM complied with all applicable laws, regulations, and policies, including, but not limited to, (1) NEPA, 42 United States Code 4321 et seq.; (2) the regulations issued by the Council on Environmental Quality and the Department of the Interior (DOI), 40 CFR 1500–1508 and 43 CFR part 46; (3) guidance documents, including DOI requirements contained in Department Manual 516, Environmental Quality (BLM 1980); (4) guidelines listed in the BLM NEPA Handbook, H-1790-1 (BLM 2008b); (5) Guidelines for Assessing and Documenting Cumulative Impacts (BLM 1994); and (6) Secretarial Order No. 3355, Streamlining National Environmental Policy Act Reviews and Implementation of EO 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects (DOI 2017). This EA was developed in accordance with the Tiering Procedures outlined in the ROD (Tiering Procedures, CCSM Project ROD [BLM 2012a], Appendix C, p. C-6). Finally, Section 1.6.2 in the CCSM Project FEIS (BLM 2012b) contains additional information on the CCSM Project's relationship to other laws, ordinances, regulations, and statutes.

³ *Id.* In addition, the CCSM Project is located entirely in GHMAs and is not sited within any PHMAs for Greater Sage-Grouse in the 2019 Plan Amendment.

2.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes the affected environment and environmental consequences for the No Action Alternative and the Proposed Action. The four issues identified in Section 1.3, Identification of Issues, are included in this section.

2.1 Issue 1: Are impacts to range resources consistent with those disclosed in the CCSM Project FEIS, given current AUM estimates?

2.1.1 Impacts disclosed in CCSM Project FEIS

The CCSM Project FEIS defined a “potentially significant” impact to range resources as one that permanently reduces available AUMs in any given allotment by 10 percent or more, or that reduces or eliminates the opportunity to run the livestock of choice (BLM 2012b, § 4.6). The CCSM Project FEIS disclosed that the Project would result in the temporary loss of about 969 AUMs due to surface disturbance during construction, and up to an additional 2,000 AUMs due to dust deposition on vegetation associated with dirt roads. These impacts represent approximately 9 percent of the AUMs on the affected allotments and were not significant under this standard (BLM 2012b, § 4.6.2).

2.1.2 Alternative A – No Action Alternative: Deny approval of a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW

Under the No Action Alternative, there would be no impacts on range resources and AUMs because the BLM authorized officer would deny approval of a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW. Under the No Action Alternative, currently approved land uses, including livestock grazing and impacts from previous SPODs, in the CCSM Project Area would continue. The CCSM Project FEIS (BLM 2012b) addresses impacts of the No Action Alternative for Range Resources in Section 4.6.1 that are consistent with those anticipated from the No Action Alternative of this EA. However, if BLM selected the No Action Alternative and denied approval of this ROW grant, PCW would have the opportunity to submit a revised Phase II Wind Turbine Development SPOD to address the BLM’s reasons for denial.

2.1.3 Alternative B – Proposed Action: Approve a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW and allow the construction of Phase II wind turbine generators and associated facilities

2.1.3.1 *Grazing Allotments and Range Management*

The majority of the Phase II Wind Turbine Development Site (2,682 acres) is within the Pine Grove/Bolten allotment, which is permitted for use by cattle and horses. A smaller area (38 acres) occurs within the Cottonwood Draw allotment, and 35 acres occur in the Middlewood Hill allotment. Cattle can use the Pine Grove/Bolten allotment from March 1 until December 31, the Cottonwood Draw allotment from June 1 until

September 18, and the Middlewood Hill allotment from May 1 until October 31. Horses can use the Pine Grove/Bolten allotment from March 1 until February 28. The Phase II Wind Turbine Development Site includes land along the southern border of the Sierra Madre WDA that is outside of the Ranch and is leased by other parties (Section 36, T18N, R86W; Section 36 T18N, R87W) (see Map E-3 in Appendix E). Table 3 identifies the total AUMs within each of the three allotments (BLM 2019).

Table 3: Animal Unit Months by Allotment

Allotment	AUMs for Allotment ¹
Pine Grove/Bolten	32,000
Cottonwood Draw	376
Middlewood Hill	4,506

Source: BLM 2019

¹The total AUMs for each allotment were updated for this document based on best available data.

AUM animal unit month

2.1.3.2 Site-Specific AUM Estimates for the Phase II Wind Turbine Development Site

Based on surveys conducted subsequent to publication of the CCSM Project FEIS (BLM 2012b), ecological sites, parsed by precipitation zone, were mapped for portions of the CCSM Project Area to support reclamation planning (PCW 2019). The BLM has identified three primary precipitation zones within the CCSM Project Area, categorized by the total annual rainfall: (1) the 7- to 9-inch-per-year zone; (2) the 10- to 14-inch-per-year zone; and (3) the 15- to 19-inch-per-year zone. Ecological sites for each of these three precipitation zones are described by the Natural Resources Conservation Service (NRCS) (2014); included in those descriptions is an AUM estimate specific to each ecological site.

Based on these descriptions and the ecological site mapping for the CCSM Project Area, the BLM developed site-specific AUM estimates for the Phase II Wind Turbine Development Site. Table 4 summarizes these site-specific AUM estimates by ecological site. The Phase II Wind Turbine Development Site, comprising 2,399 acres plus 373 acres of activity areas, accounts for approximately 247 AUMs (0.8 percent of the total allotment AUMs) within the Pine Grove/Bolten allotment; 6 AUMs (1.6 percent of the total allotment AUMs) within the Cottonwood Draw allotment; and 3 AUMs (0.07 percent of the total allotment AUMs) within the Middlewood Hill allotment.

Table 4: AUM Estimates by Ecological Site for the Phase II Wind Turbine Development Site

Precipitation Zone	Ecological Site	Acre per AUM Estimate	AUMs in the Phase II Wind Turbine Development Site
Pine Grove/Bolten Allotment			
7–9	Clayey 7–9 Inch	14	20
	Clayey Overflow 7–9 Inch	10	2
	Deep Shale 7–9 Inch	17	31
	Loamy 7–9 Inch	9	7
	Saline Lowland 7–9 Inch	10	5
	Saline Upland 7–9 Inch	14	28
	Sandy 7–9 Inch	10	36
	Shale 7–9 Inch	20	0
	Shallow Loamy 7–9 Inch	13	24
	Very Shallow 7–9 Inch	20	1
10–14	Clayey 10–14 Inch	10	2
	Deep Shale 10–14 Inch	8	2
	Loamy 10–14 Inch	7	33
	Loamy Overflow 10–14 Inch	7	7
	Saline Upland 10–14 Inch	10	13
	Sandy 10–14 Inch	7	10
	Shale 10–14 Inch	17	1
	Shallow Loamy 10–14 Inch	8	8
	Shallow Sandy 10–14 Inch	9	1
	Wetland 10–14 Inch	2	2
15–19	Aspen 15–19 Inch	4	0
	Loamy 15–19 Inch	4	2
	Shallow Loamy 15–19 Inch	6	13
	Wet Fresh Meadow 15–19 Inch	1	0
Pine Grove/Bolten Allotment Total			247
Cottonwood Draw Allotment			
15–19	Loamy 15–19 Inch	4	0.3
	Shallow Loamy 15–19 Inch	6	6
Cottonwood Draw Allotment Total			6

Precipitation Zone	Ecological Site	Acre per AUM Estimate	AUMs in the Phase II Wind Turbine Development Site
Middlewood Hill Allotment			
7–9	Saline Lowland 7–9 Inch	10	0
10–14	Deep Shale 10–14 Inch	8	0
	Saline Upland 10–14 Inch	10	3
Middlewood Hill Allotment Total			3
GRAND TOTAL			257

AUM animal unit month

2.1.3.3 *Direct and Indirect Loss of AUMs*

Table 5 shows the total AUMs affected by surface disturbance associated with the Proposed Action within the Pine Grove/Bolten, Cottonwood Draw, and Middlewood Hill allotments. Approximately 2,329 acres of initial surface disturbance and 370 acres of activity areas are anticipated within the Pine Grove/Bolten allotment, resulting in the temporary loss of approximately 247 AUMs of forage until effective reclamation is achieved. Of the 2,329 acres of initial disturbance, 359 acres would be disturbed long-term within the Pine Grove/Bolten allotment resulting in a long-term loss of approximately 32 AUMs of forage. Within the Cottonwood Draw allotment, approximately 36 acres of initial surface disturbance and two acres of activity areas are anticipated, resulting in the temporary loss of six AUMs of forage until effective reclamation is achieved. Of the 36 acres of initial disturbance, five acres would be disturbed long-term within the Cottonwood Draw allotment resulting in a long-term loss of less than one AUM of forage. Of this, less than one AUM would be lost long-term in areas located outside of the Ranch in Section 36, T18N, R86W. Within the Middlewood Hill allotment, approximately 34 acres of initial disturbance and one acre of activity areas are anticipated, resulting in the temporary loss of three AUMs of forage until effective reclamation is achieved. Of the 34 acres of initial disturbance, five acres would be disturbed long-term within the Middlewood Hill allotment resulting in the loss of one AUM of forage. Of these, three AUMs would be lost temporarily and one AUM would be lost long-term in areas located outside of the Ranch in Section 36, T18N, R87W.

Consistent with the analysis in the CCSM Project FEIS (BLM 2012b), dust deposition on vegetation is expected to further reduce AUMs of forage due to the construction of unpaved roads on affected allotments. The Proposed Action would reduce AUMs of

forage due to dust deposition on approximately 4,793 acres,⁴ resulting in the loss of 444 AUMs of forage within the Pine Grove/Bolten allotment, 14 AUMs within the Cottonwood Draw allotment, and 6 AUMs within the Middlewood Hill allotment. The combined losses incurred as a result of indirect loss of forage (dust deposition), coupled with the direct loss of forage from surface disturbance, represents 1.49 percent of the currently available AUMs in the Pine Grove/Bolten allotment, 3.93 percent of the currently available AUMs in the Cottonwood Draw allotment, and 0.15 percent of the currently available AUMs in the Middlewood Hill allotment. The loss of AUMs associated with the initial disturbance would be returned once reclamation is achieved.

Table 5: Animal Unit Months Affected by the Proposed Action

Allotment	AUM Reduction from Initial Surface Disturbance ¹	Long-Term AUM Reduction from Surface Disturbance	AUM Reduction from Dust Deposition from Unpaved Roads	Long-Term AUM Reduction (Long-Term Surface Disturbance + Dust Deposition)	Percent Long-Term AUM Reduction (AUM Reduction/ Total AUMs in the Allotment) ²
Pine Grove/Bolten	247	32	444	476	1.49%
<i>On-Ranch</i>	247	32	443	475	1.48%
<i>Off-Ranch</i>	<1	<1	1	1	0.003%
Cottonwood Draw	6	<1	14	14	3.93%
<i>On-Ranch</i>	6	<1	14	14	3.93%
<i>Off-Ranch</i>	<1	<1	0	<1	0.00%
Middlewood Hill	3	1	6	7	0.15%
<i>On-Ranch</i>	0	0	0	0	0.00%
<i>Off-Ranch</i>	3	1	6	7	0.153%
Total	257	33	464	497	1.35%

¹This is inclusive of initial and long-term disturbance as well as activity areas.

²The total AUMs for each allotment were updated for this document based on best available data.

AUM animal unit month

Table 6 identifies the total loss of forage when all components of the CCSM Project are considered, including Phase I (Infrastructure Components [BLM 2014a] and Phase I Wind Turbine Development [BLM 2017a]) and Phase II (Phase II Haul Road and

⁴ To avoid double-counting the loss of AUMs, this figure includes only the area outside of the surface disturbance areas. Loss of AUMs associated with surface disturbance is calculated in the direct AUM loss analysis described in the paragraphs above.

Facilities [BLM 2017c] and the Phase II Wind Turbine Development [this Proposed Action]) of the CCSM Project, and compares these impacts to those disclosed in the CCSM FEIS. The indirect impact areas associated with the Phase II Haul Road and Facilities Site overlap portions of the indirect impact areas associated with the Phase II Wind Turbine Development Site; therefore, totals in Table 6 remove these areas of overlap.

For the Pine Grove/Bolton allotment, where the majority of grazing impacts occur, Table 6 shows that, for Phase I and Phase II combined, 1,171 acres would be subject to long-term surface disturbance and dust deposition, resulting in a 3.7 percent long-term AUM reduction. By comparison, the CCSM Project FEIS disclosed that 2,017 acres in the Pine Grove/Bolton allotment would be subject to long-term surface disturbance and dust deposition, which would result in a higher 6.3 percent long-term AUM reduction within the allotment.

Across all allotments, Table 6 shows that, for Phase I and Phase II combined, 1,232 acres would be subject to long-term surface disturbance and dust deposition, resulting in a 2.4 percent long-term AUM reduction across all allotments. By comparison, the CCSM FEIS disclosed that 2,198 acres would be subject to long-term surface disturbance and dust deposition, which would result in a total of 4.3 percent long-term AUM reduction across all allotments.

The significance criteria established in the CCSM Project FEIS for Range Resources (BLM 2012b, page 4.6-2) considered impacts potentially significant if project development and operational activities would cause a reduction in forage availability, resulting in a permanent (long-term) reduction in AUMs greater than 10 percent within any given allotment. The impacts on Range Resources would not be considered significant after applying this significance criterion to the updated AUMs affected by the Proposed Action, along with all past actions within the CCSM Project, because none of the combined impacts would result in a 10 percent long-term reduction in AUMs. The Pine Grove/Bolton allotment would receive the largest reduction of AUMs after combining all past project components, including the Proposed Action; however, this would result in a 3.7 percent reduction, which is well below the significance criteria and the impacts disclosed in the CCSM Project FEIS.

Table 6: Animal Unit Months Affected by Phase I and Phase II of the CCSM Project Compared to Animal Unit Months Affected in the CCSM FEIS

Allotment	Total AUMs in Allotment ¹	AUM Reduction from Infrastructure Components and Phase I Wind Turbine Development with Overlap Removed ²	AUM Reduction from Phase II Haul Road and Facilities and Phase II Wind Turbine Development with Overlap Removed	Total Long-Term AUM Reduction for Phase I and Phase II (Long-Term Surface Disturbance + Dust Deposition)	Percent Long-Term AUM Reduction (AUM Impact/ Total AUMs in Allotment)	CCSM FEIS AUM Reduction (Long-Term Surface Disturbance + Dust Deposition) ³
Pine Grove/Bolten	32,000	835	336	1,171	3.7%	2,071
Cottonwood Draw	376	0	11	11	2.9%	23
Middlewood Hill	4,506	0	4	4	< 0.1%	10
Sage Creek	6,699	45	0	45	0.7%	54
Grizzly	7,542	1	0	1	< 0.1%	40
Total	51,123	881	351	1,232	2.4%	2,198

¹ BLM 2019; The total AUMs for each allotment were updated for this document based on best available data.

² BLM 2017a (Table 4-5)

³ BLM 2012b (Table 4.6-2)

AUM animal unit month

2.2 Issue 2: Are impacts to sub-watersheds in the Project Area consistent with those disclosed in the CCSM Project FEIS, given the final layout of the Phase II Wind Turbine Development?

2.2.1 Impacts disclosed in CCSM Project FEIS

The CCSM Project FEIS quantified the Project's impacts to water resources by calculating the percentage of acres within a sub-watershed that would be subject to surface disturbance (BLM 2012b, § 4.13). The CCSM Project FEIS disclosed that, during construction, the Project as a whole would result in 7,694 acres of surface disturbance. For the North Platte Basin, where the majority of impacts occur, the FEIS disclosed 7,164 acres of surface disturbance, equaling 1.4 percent of the portion of the North Platte Basin within the CCSM Project Area (BLM 2012b). The FEIS stated that the surface disturbance would include 348 stream crossings Project-wide (BLM 2012b, pages 4.13-4 to 4.13-11).

The CCSM Project FEIS determined that significant impacts to water resources would occur when:

- Streamflow and stream channel geometry or gradient of perennial, intermittent, and ephemeral streams is altered through accelerated runoff and erosion (e.g., undesirable aggradation, degradation, or side cutting) beyond the expected range of natural processes (BLM 2012b, page 4.13-3).

Analysis presented in the CCSM Project FEIS (BLM 2012b, page 4.13-6) found that,

"The number of stream crossings may change during the detailed design phase. These crossings would alter the channel geometry and riparian vegetation, potentially increasing water velocities and decreasing bank stability through all phases of the project. The project area experiences high levels of variability in channel processes under natural and existing conditions that may be exacerbated by development."

Impacts to water resources from the CCSM Project were considered significant due to the surface disturbance and crossing impacts, as well as the residual impacts of the CCSM Project (BLM 2012b, pages 4.13-23 and 4.13-24). These impacts were considered significant because they were found to result in increases to erosion and sedimentation that are likely beyond the expected range of natural processes.

2.2.2 Alternative A – No Action Alternative: Deny approval of a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW

Under the No Action Alternative, there would be no impacts on surface water because the BLM authorized officer would deny approval of a ROW grant for the

Phase II Wind Turbine Development SPOD filed by PCW, and stream crossings associated with this SPOD would not occur. Under the No Action Alternative, currently approved land uses, including impacts from previous SPODs, in the CCSM Project Area would continue. The CCSM Project FEIS (BLM 2012b) addresses impacts of the No Action Alternative on Water Resources in Section 4.13.1 that are consistent with those anticipated from the No Action Alternative of this EA. However, if BLM selected the No Action Alternative and denied approval of this ROW grant, PCW would have the opportunity to submit a revised Phase II Wind Turbine Development SPOD to address the BLM's reasons for denial.

2.2.3 Alternative B – Proposed Action: Approve a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW and allow the construction of Phase II wind turbine generators and associated facilities

The Phase II Wind Turbine Development Site is wholly within the analysis area for surface water resources discussed in the CCSM Project FEIS (BLM 2012b). The analysis area was defined as all 6th-order, 12-digit Hydrologic Unit Code (HUC-12) sub-watersheds that have a portion of the CCSM Project Area included within their boundaries (BLM 2012b). Map E-4 in Appendix E shows sub-watersheds and major drainages in the Phase II Wind Turbine Development Site, all of which are included in the FEIS. All of the sub-watersheds in the Phase II Wind Turbine Development Site are in the North Platte Basin.

The Proposed Action would result in surface disturbance and stream crossings within the same sub-watersheds that were identified as having surface disturbance in Table 4.13-2 of the CCSM Project FEIS (BLM 2012b). The Proposed Action would result in more surface disturbance than estimated in the CCSM Project FEIS for four sub-watersheds, all within the North Platte Basin: (1) Hugus Draw; (2) Rasmussen Creek; (3) 10180002304; and (4) Middle Sugar Creek. However, the grand total amount of surface disturbance caused by the Project within the North Platte Basin is 6,134 acres, or 1.2 percent of that portion of the North Platte Basin that is within the CCSM Project Area. This total is less than the total disclosed in the CCSM Project FEIS for the North Platte Basin (7,164 acres, 1.4 percent) (BLM 2012b).

For the analysis of the number of stream crossings, the CCSM Project FEIS (BLM 2012b) uses the National Hydrography Dataset (NHD) to define the location of waterways. The number of stream crossings identified for the Phase II Wind Turbine Development Site is based on the Phase II Wind Turbine Development SPOD (PCW 2019) and on the jurisdictional delineations conducted for the Phase II Wind Turbine Development Site, which provide more site-specific information than the NHD. Based on this information, 273 streams and unnamed ephemeral drainages would be crossed as part of the Proposed Action. The total number of stream crossings for the CCSM

Project, when combining all project phases (i.e., Phase I Infrastructure Components, Phase I Wind Turbine Development, Phase II Haul Road and Facilities, and Phase II Wind Turbine Development), is 530 stream crossings. This is 52 percent greater than the 348 stream crossings that were described in the CCSM Project FEIS.

The FEIS discloses that significant impacts to water resources would occur from the CCSM Project as a result of increased erosion and sedimentation from surface disturbance and stream crossings. As summarized in Table 7, total surface disturbance remains well within the range disclosed in the FEIS, as does surface disturbance as a percentage of the acres in affected sub-watersheds. While the number of stream crossings exceeds that reported in the FEIS, the FEIS acknowledged that “the number of stream crossings may change during the detailed design phase” (BLM 2012b, page 4.13-6) and has already disclosed the potential for significant impacts.

To reduce impacts to water resources, as contemplated in the CCSM Project FEIS, PCW has developed Stormwater Pollution Prevention Plans and Erosion Control Plans to avoid the discharge of sediment and other pollutants to water bodies. Additionally, PCW has implemented a watershed monitoring program to monitor potential changes to water quality, streamflow, and channel geometry and geomorphology to proactively identify and address any degradation to water quality or stream condition from construction and operation of the CCSM Project. The watershed monitoring program is designed to detect impacts to the watershed from the CCSM Project for early identification and management. A qualified, licensed professional engineer has designed each stream crossing and individuals qualified as stormwater compliance inspectors would monitor stormwater and erosion conditions across the Phase II Wind Turbine Development Site. These plans and monitoring efforts, together with the associated best management practices would reduce impacts to water resources as contemplated in the CCSM Project FEIS. Overall, the anticipated impacts to water resources from the CCSM Project are consistent with those disclosed in the CCSM Project FEIS and no new significant impacts are expected beyond those previously disclosed in the CCSM Project FEIS (BLM 2012b).

Table 7: Initial and Long-term Surface Disturbance of Sub-Watersheds Associated with Phase I and II of the CCSM Project

Watershed/ Sub-Watershed	Watershed/ Sub- Watershed Total Area within the CCSM Project Area (acres)	Total for Phase I of the CCSM Project			Phase II of the CCSM Project ¹				Grand Total Phase I and II of the CCSM Project		Grand Total in CCSM Project FEIS	
		Initial Acres	Long- Term Acres	Initial Percent	Initial Acres	Long- Term Acres	Activity Areas	Initial Percent	Initial Acres	Percent	Construction Acres ³	Percent
North Platte Basin												
Little Jack Creek	35,711	--	--	--	--	--	--	--	--	--	--	--
First Cottonwood Draw-North Platte River	46,942	--	--	--	287	49	15	0.6%	287	0.6%	326	0.7%
Grenville Dome	22,059	446	81	2%	13	4	6	0.1%	459	2.1%	739	3.4%
Hugus Draw*	35,341	765	145	2%	779	145	102	2.2%	1,544*	4.4%	1,508	4.3%
Iron Springs Draw	18,853	--	--	--	623	124	73	3.3%	623	3.3%	703	3.7%
Coal Mine Draw- North Platte River	34,326	--	--	--	--	--	--	--	--	--	153	0.4%
Lost Springs Draw- North Platte River	47,020	1	--	< 0.1%	--	--	--	--	1	< 0.1%	1	< 0.1%
Pass Creek-Stage Station Springs	34,785	--	--	--	--	--	--	--	--	--	--	--
Lower Little Sage Creek	16,898	131	28	0.8%	11	4	16	0.1%	142	0.8%	165	1.0%
Lower Sage Creek- Upper North Platte River	20,079	15	4	0.1%	--	--	--	--	15	0.1%	507	2.5%
Miller Creek	28,571	587	129	2.1%	181	30	44	0.6%	768	2.7%	794	2.8%
Rasmussen Creek*	23,488	669	105	2.8%	211	46	35	0.9%	880*	3.7%	820	3.5%

Watershed/ Sub-Watershed	Watershed/ Sub-Watershed Total Area within the CCSM Project Area (acres)	Total for Phase I of the CCSM Project			Phase II of the CCSM Project ¹				Grand Total Phase I and II of the CCSM Project		Grand Total in CCSM Project FEIS	
		Initial Acres	Long- Term Acres	Initial Percent	Initial Acres	Long- Term Acres	Activity Areas	Initial Percent	Initial Acres	Percent	Construction Acres ³	Percent
Upper Little Sage Creek	30,732	2	< 1	0%	--	--	--	--	2	0%	4	0%
Upper Sage Creek- North Platte River	40,935	224	32	0.5%	--	--	--	--	224	0.5%	494	1.2%
101800021304*	11,042	892	202	8.1%	0.4	0.1	0.4	<0/1%	892*	8.1%	528	4.8%
Lower Sugar Creek	42,909	44	16	0.1%	--	--	--	--	44	0.1%	235	0.5%
Middle Sugar Creek*	24,897	252	35	1.0%	--	--	--	--	252*	1.0%	189	0.8%
North Platte Basin Subtotal	514,648	4,028	777	0.8%	2,106	401	291	0.4%	6,134	1.2%	7,164	1.4%
White-Yampa Basin												
Little Savery Creek	30,995	--	--	--	--	--	--	--	--	--	--	--
North Fork Savery Creek	30,812	--	--	--	--	--	--	--	--	--	--	--
McKinney Creek	30,433	436	71	1.4%	--	--	--	--	436	1.4%	530	1.7%
Muddy Creek- Littlefield Creek	32,259	--	--	--	--	--	--	--	--	--	--	--
White-Yampa Basin Subtotal	124,499	436	71	0.4%	0	0	0	0%	436	0.4%	530	0.4%
GRAND TOTAL²	639,147	4,464	848	0.7%	2,106	401	291	0.3%	6,570	1.0%	7,694	1.2%

¹ Acreages include the Phase II Haul Road and Facilities and Phase II Wind Turbine Development Site with the overlap removed.

² Numbers may not add up to this total because of rounding.

³ BLM 2012b (Table 4.13-2 Alternative 1R Construction Disturbance acres).

*Indicates impacts in the sub-watershed are above what was identified in the CCSM Project FEIS for that sub-watershed. Overall impacts are substantially lower than what was estimated in the CCSM Project FEIS.

2.3 Issue 3: Are anticipated mortalities for bats, migratory birds, raptors, and/or eagles consistent with those disclosed in the CCSM Project FEIS, given that the Phase II Wind Turbine Development Site would include fewer wind turbines than analyzed in the FEIS but the individual turbines would be taller and would have a larger rotor-swept area?

2.3.1 Impacts Disclosed in CCSM FEIS

The CCSM Project FEIS discloses that bats, migratory birds, raptors, and/or eagles would experience mortalities due to colliding with wind turbine generators. The CCSM Project FEIS estimated mortality based on the amount of power being generated by the Project (3,000 MWs). Specifically, the CCSM Project FEIS estimated that the Project would result in annual mortalities of 6,300 bats, 150-210 raptors, 46-64 golden eagles, and 5,400 non-raptors. (BLM 2012b, §§ 4.14.2.3 and 4.14.2.4.). The CCSM Project FEIS noted that PCW was in the process of collecting additional data on bat and bird use of the Project Area, and would use that data to develop a Bat Protection Plan and Avian Protection Plan that could lead to reductions in bird and bat mortalities.

2.3.2 Alternative A – No Action Alternative: Deny approval of a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW

Under the No Action Alternative, there would be no impacts to bats, migratory birds, raptors, and/or eagles because the BLM authorized officer would deny approval of a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW, and construction and implementation of the Phase II Wind Turbine Development associated with this SPOD would not occur. Under the No Action Alternative, currently approved land uses, including impacts from previous SPODs, in the CCSM Project Area would continue. The CCSM Project FEIS (BLM 2012b) addresses impacts of the No Action Alternative on Wildlife and Fisheries Resources (bats and migratory birds) in Section 4.14.1, and on Special Status Species (eagles, special-status raptors and special-status bats and birds) in Section 4.15.1 that are consistent with those anticipated from the No Action Alternative of this EA. However, if BLM selected the No Action Alternative and denied approval of this ROW grant, PCW would have the opportunity to submit a revised Phase II Wind Turbine Development SPOD to address the BLM's reasons for denial.

2.3.3 Alternative B – Proposed Action: Approve a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW and allow the construction of Phase II wind turbine generators and associated facilities

The CCSM Project FEIS analyzed the mortality of bats, birds, and eagles, based on the amount of power being generated by the project (3,000 MWs). The total power

expected to be generated by the CCSM Project remains at 3,000 MWs; therefore, applying the same methodology as the CCSM Project FEIS, no additional mortality would be anticipated as a result of the Phase II Wind Turbine Development. However, the CCSM Project FEIS also acknowledged that different sizes of turbines might result in different bat and bird mortality rates. The 396 wind turbines proposed in the Phase II Wind Turbine Development SPOD would have rotor diameters of 541 feet (165 meters) with tower heights of 492 feet (150 meters) for a tip height (also referred to as a total structure height) of 763 feet (232.5 meters), which would be taller than the turbine models that were considered in the CCSM Project FEIS.

Since publication of the CCSM Project FEIS (BLM 2012b), PCW conducted additional bat, bird, raptor, and eagle surveys throughout the CCSM Project, including the Phase II Wind Turbine Development. Acoustic bat monitoring was completed from June 15 to October 20, 2011, and June 27 to August 29, 2012. Migratory bird surveys were performed from April 4, 2011, through March 27, 2012. Eight hundred-meter raptor count surveys were conducted between August 2012 and August 2013 and 800-meter eagle count surveys were conducted from June 2017 through June 2018. PCW also conducted avian and bat radar surveys from March 2011 through the end of March 2013 at nine locations across the CCSM Project Site.

The avian and bat radar system runs continuously, collecting data for movements of birds and bats throughout the day and night. The avian and bat radar system is unable to distinguish between birds and bats; however, the radar collected more than 5,000 hours of data that consistently demonstrate that the highest average number of birds and bats per hour occurs at night during the spring and fall migration events. Avian and bat radar data also demonstrate that the mean and median height of these night-migrating birds and bats are well above the tip height of the wind turbine generators, indicating that the majority of the targets are not at risk of collision. Because the majority of night-migrating avian and bat species would occur well above the tip height of the turbines, increased turbine height is not expected to result in new significant impacts to avian or bat species.

Bats: The CCSM Project FEIS identified that increased turbine heights may result in increased bat mortality. As discussed in Baerwald and Barclay (2007), bat mortalities may increase if increased turbine heights begin to encroach on the airspace being used by migrating bats. However, avian radar data collected for birds and bats indicate that the majority of the birds and bats that use the CCSM Project Site at night fly well above the tip height of the wind turbine generators, and during migration events, birds and bats generally pass over the CCSM Project Site without landing, indicating there is likely a lower risk of collision.

Acoustic bat monitoring was completed from June 15 to October 20, 2011, and June 27 to August 29, 2012, at five locations (Chokecherry Bench, Smith Draw, Upper Iron Springs, McKinney Creek, and Pine Grove) co-located with the radar system to characterize nightly bat activity. In total, 185 and 134 bat passes were recorded in 2011 and 2012, respectively, for an average of 2.0 bat passes/detector-night (PCW 2016), which is substantially lower than the 4.29 bat passes/detector-night presented in the CCSM Project FEIS (BLM 2012b). The higher bat passes/detector-night reported for the CCSM Project FEIS is most likely due to the inclusion of an outlier in the 2008 data used in the FEIS and placement of an acoustic bat monitoring location in a low-lying riparian area where wind turbine generators would not be located.

The lower bat activity rates indicate that bat fatalities for the 396 wind turbine generators included in the Phase II Wind Turbine Development Site would be well within the number of bat fatalities disclosed in the CCSM Project FEIS. In addition, a Bird and Bat Conservation Strategy (BBCS) is being developed for Phase II of the CCSM Project that includes measures to avoid and minimize impacts on bats. As contemplated in the CCSM Project FEIS, the avoidance, minimization, and conservation measures in the CCSM Project Phase II BBCS would further reduce risks to bats from Phase II of the CCSM Project.

Based on overall bat activity on the Phase II Wind Turbine Development Site and the implementation of the CCSM Project Phase II BBCS, impacts on bats from the Phase II Wind Turbine Development are anticipated to be substantially less than those disclosed in the CCSM Project FEIS (BLM 2012b). In addition, mitigation measures for eagles and other avian species in the CCSM Project Phase II ECP and BBCS would reduce the risk to bats from Phase II of the CCSM Project.

Birds (migratory birds and sagebrush obligates): A total of 295 migratory bird surveys were performed from April 4, 2011, through March 27, 2012, throughout the CCSM Project Site, in accordance with USFWS guidance and recommendations. In total, PCW identified 117 species of migratory birds within the CCSM Project Site, including the Phase II Wind Turbine Development Site. Of these, 22 species are identified as USFWS Birds of Conservation Concern, BLM sensitive species, or WGFD Species of Greatest Conservation Need (PCW 2016; PCW in preparation [1]). These results are similar to and within the 2008 survey results provided in the CCSM Project FEIS (BLM 2012b).

The primary risk to migratory birds identified in the CCSM Project FEIS is collision with wind turbine generators. The CCSM Project FEIS estimated 5,400 migratory bird fatalities per year with construction of up to 3,000 MWs of wind energy generation (BLM 2012b). The USFWS FEIS indicated between 3,150 and 5,400 bird fatalities for all

species per year could occur as a result of the CCSM Phase I Project; however, these estimates are very rough and are not based on modeled predictions (USFWS 2016). The USFWS indicated that, based on post-construction mortality monitoring results from other wind projects, these estimates are likely to be high. Further, avian radar surveys found that during migration events, migratory bird species generally pass over the CCSM Project Site, well above the tip height of the wind turbine generators, indicating that these birds are not at risk of collision and that the area is not used as a stopover location. Because the fatality estimates are likely high and are based on per megawatt estimates of avian mortality, Phase II of the CCSM Project is expected to result in avian mortalities similar to and within the ranges disclosed in the CCSM Project FEIS and in the USFWS analysis.

The migratory bird survey and avian radar survey data are being used to develop a BBCS for Phase II of the CCSM Project that includes measures to avoid and minimize impacts on migratory birds. The CCSM Project Phase II BBCS includes measures to further avoid and minimize impacts on migratory birds (PCW in preparation [1]). For Phase I, the USFWS acknowledged that the numerous avoidance and minimization measures implemented by PCW as part of the BBCS would help reduce avian mortalities. These same avoidance and minimization measures would have similar reductions for Phase II of the CCSM Project and it is expected that impacts to migratory birds would be similar to or less than those disclosed in the CCSM Project FEIS. As contemplated in the CCSM Project FEIS, the avoidance, minimization, and conservation measures in the CCSM Project Phase II BBCS would reduce risks to migratory birds from Phase II of the CCSM Project.

Raptors: PCW collected detailed data on raptor use of the CCSM Project Site through raptor count surveys, long-watch raptor surveys, raptor nest inventories, and other monitoring protocols. Between August 2012 and August 2013, 800-meter raptor count surveys were conducted within Phase II of the CCSM Project. Starting August 2012, long-watch raptor surveys were conducted for four to eight hours at forty 800-meter survey locations across the CCSM Project Site. To increase the spatial and temporal coverage of the surveys, the survey program was increased to sixty 800-meter survey locations for surveys completed from mid-November 2012 through August 2013. The data collected during these surveys capture the fall migration period, winter use, nesting, incubation and chick-rearing periods, and summer use within Phase II of the CCSM Project.

During the August 2012 to August 2013 raptor count surveys, 748 individual surveys were conducted within the 29 Phase II survey locations for a total of 45,609 minutes. A total of 55 raptors (eagles and non-eagles) were observed between August 2012 and 2013 (0.024 raptors observed/survey plot/20 minutes of survey) and 37 minutes of

non-eagle raptor flight (0.043 minutes of flight per 20 minutes of survey) were recorded within the 800 meters of the long-watch raptor survey locations. The most commonly observed non-eagle raptors were Swainson's hawk (*Buteo swainsoni*), merlin (*Falco columbarius*), northern harrier (*Circus hudsonius*), American kestrel (*Falco sparverius*), and ferruginous hawk (*Buteo regalis*).

Potential impacts on raptors include direct impacts, such as fatalities, as well as indirect impacts associated with habitat loss and modification and displacement. As described above, based on the August 2012 to August 2013 800-meter raptor point count data, raptor use in the Phase II Wind Turbine Development amounted to 0.024 raptors observed/survey plot/20 minutes of survey. Combined with the 0.047 raptor observed/survey plot/20 minutes of survey in the Phase I Wind Turbine Development area, an estimated total of 0.037 raptors were observed/survey plot/20 minutes of survey throughout the CCSM Project Site. This is 12.4 times lower than the 0.46 raptor observed/survey plot/20 minutes survey period values presented in the CCSM Project FEIS (BLM 2012b). Based on raptor activity on the Phase II Wind Turbine Development Site that is significantly less than that assumed in the CCSM Project FEIS and the implementation of the CCSM Project Phase II BBCS, the anticipated impacts on raptors from the CCSM Project would be less than those identified in the CCSM Project FEIS (BLM 2012b).

Eagles: PCW conducted hour-long 800-meter point count eagle-only surveys at 56 locations throughout the CCSM Project Site in 2017 and 2018. Eagles were also surveyed during the August 2012 to 2013 surveys that were conducted for all raptors. PCW has conducted raptor nest surveys for the CCSM Project since 2011.

There are no bald eagle (*Haliaeetus leucocephalus*) nests located within one mile of the Phase II Wind Turbine Development Site. Four golden eagle nests are located within 0.5 mile or 2,640 feet (805 meters) of the Phase II Wind Turbine Development Site (Map E-5). Impacts to these golden eagle nests were previously analyzed in the USFWS FEIS (USFWS 2016) and a standard eagle take permit (ETP) was issued to PCW for construction of Phase I of the CCSM Project. The four golden eagle nests are located closer to Phase I of the CCSM Project; nest 150 is approximately 328 feet (100 meters), nest 148 is approximately 584 feet (178 meters), nest 147 is approximately 1,969 feet (600 meters), and nest 69 is approximately 2,083 feet (635 meters) from the Phase I Haul Road. Nest 150 is approximately 522 feet (159 meters), nest 148 is approximately 1,509 feet (460 meters), nest 147 is approximately 2,539 feet (774 meters), and nest 69 is approximately 2,438 feet (743 meters) from the Phase II Wind Turbine Development. All four golden eagle nests are more than 2,640 feet (805 meters) away from planned Phase II wind turbine locations.

From August 2012 to August 2013, 30 golden eagles were observed within 800 meters of the raptor survey locations during 45,609 minutes of survey (0.013 golden eagles observed/survey plot/20 minutes of survey) resulting in 55 minutes of golden eagle flight at or below the Phase II turbine tip height (0.024 minutes of flight below tip height/survey plot/20 minutes of survey). During this same period, a total of 2 bald eagles were observed (0.0009 bald eagles observed/survey plot/20 minutes of survey) resulting in 2 minutes of bald eagle flight at or below the Phase II turbine tip height (0.0009 minutes of flight below tip height /survey plot/20 minutes of survey).

From June 2017 to June 2018, 37 golden eagles were observed within 800 meters of the survey locations during 40,560 minutes of survey (0.018 golden eagles observed/survey plot/20 minutes of survey) resulting in 82.3 minutes of golden eagle flight at or below the Phase II turbine tip height (0.041 minutes of flight below tip height/survey plot/20 minutes of survey). During this same period, a total of 5 bald eagles were observed (0.003 bald eagles observed/survey plot/20 minutes of survey) resulting in 6.5 minutes of bald eagle flight at or below the Phase II turbine tip height (0.003 minutes of flight below tip height/survey plot/20 minutes of survey).

Potential impacts on eagles would be the same as those on other raptors and would include direct impacts, such as fatalities, as well as indirect impacts associated with habitat loss and modification and displacement. As described above, based on the 800-meter point count data, use in the Phase II Wind Turbine Development Site amounted to 0.013 golden eagles observed/survey plot/20 minutes of survey in 2012 and 2013 and 0.018 golden eagles observed/survey plot/20 minutes of survey in 2017 and 2018. Over the same periods, 0.0009 bald eagles were observed/survey plot/20 minutes of survey in 2012 and 2013 and 0.003 bald eagles were observed/survey plot/20 minutes of survey in 2017 and 2018.

Recorded golden eagle use in 2012 and 2013 across the entire CCSM Project Site is nearly 8.5 times lower than the value of 0.14 golden eagles observed/survey plot/20 minutes of survey presented in the CCSM Project FEIS (BLM 2012b). Similarly, recorded golden eagle use in 2017 and 2018 is 6.1 times lower than the value presented in the CCSM Project FEIS. Impacts to bald eagles would be even lower with observed use 6-15 times lower than that observed for golden eagles.

Based on this analysis, eagle use at or below the Phase II wind turbine tip height is substantially lower than that assumed in the CCSM Project FEIS. Therefore, the anticipated impacts to eagles from the CCSM Project would be less than those identified in the CCSM Project FEIS. These impacts would be further reduced through the implementation of avoidance and minimization measures identified in the BBCS and ECP for Phase II of the CCSM Project.

As recommended by the BLM in the CCSM Project FEIS and ROD, PCW is in the process of developing an ECP and BBCS for Phase II of the CCSM Project (PCW in preparation [2]). The Phase II ECP, similar to the Phase I ECP (PCW 2015b) will include avoidance, minimization, and conservation measures to avoid and minimize risks to eagles to the extent practicable such that the remaining take is unavoidable. The Phase II ECP will also detail the compensatory mitigation measures developed by PCW to offset anticipated eagle fatalities, as required by the CCSM Project ROD (BLM 2012a) and as required by USFWS for an ETP.

2.4 Issue 4: Are anticipated impacts to mule deer crucial winter range consistent with those disclosed in the CCSM Project FEIS, given the final layout for the Phase II Wind Turbine Development?

2.4.1 Impacts disclosed in CCSM Project FEIS

The CCSM Project site includes 24,693 acres of mule deer crucial winter range (CWR), which is a portion of the 130,989-acre CWR that generally follows the North Platte River from three miles north of Saratoga to the inflow of Seminole Reservoir approximately nine miles northwest of Fort Steele.

The CCSM Project FEIS (BLM 2012b) discloses that the CCSM Project would directly impact 232 acres of CWR, which equals approximately 0.9 percent of the 24,693-acre CWR area located within the CCSM Project Area and approximately 0.1 percent of the larger 130,989-acre CWR area. In addition, the CCSM Project FEIS discloses that the Project would indirectly impact 20,158 acres of CWR that is located within 0.62 mile of surface disturbance areas. The CCSM Project FEIS further discloses that winter habitat condition is a limiting factor in mule deer population growth, and therefore these impacts could reduce the overall carrying capacity of the CWR. According to the CCSM Project FEIS, the Project would likely result in habitat loss and disturbance levels exceeding the significance criterion. Specifically, the CCSM Project FEIS contemplates that a significant impact would occur due to the potential substantial disruption or irreplaceable loss of vital and high value habitats, as defined in the WGFD Mitigation Policy (BLM 2012b, p. 4.14-6). Finally, the CCSM Project FEIS (BLM 2012b) discloses that mule deer are known to migrate through the CCSM Project Area, and the specific locations of migration corridors are largely unknown, but that mule deer easily traverse dirt roads and isolated development features.

2.4.2 Alternative A – No Action Alternative: Deny approval of a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW

Under the No Action Alternative, there would be no impacts to mule deer CWR because the BLM authorized officer would deny approval of a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW, and construction and implementation of the

Phase II Wind Turbine Development associated with this SPOD would not occur. Under the No Action Alternative, currently approved land uses in the CCSM Project Area, including impacts from previous SPODs, would continue. The CCSM Project FEIS (BLM 2012b) addresses impacts of the No Action Alternative on Wildlife and Fisheries Resources in Section 4.14.1 that are consistent with those anticipated from the No Action Alternative of this EA. However, if BLM selected the No Action Alternative and denied approval of this ROW grant, PCW would have the opportunity to submit a revised Phase II Wind Turbine Development SPOD to address the BLM's reasons for denial.

2.4.3 Alternative B – Proposed Action: Approve a ROW grant for the Phase II Wind Turbine Development SPOD filed by PCW and allow construction of Phase II wind turbine generators and associated facilities

Crucial Winter Range: The Phase II Wind Turbine Development Site occurs within the Platte Valley (#541) and Baggs (#427) Mule Deer Herd Units, and overlaps with mule deer CWR in the northern portion of the Chokecherry WDA (WGFD 2012a) (Map E-6).

The Proposed Action would result in direct impacts to 209 acres of CWR. Of these 209 acres, 170 acres are associated with short-term direct impacts and 39 acres are associated with long-term direct impacts as defined in the CCSM Project FEIS (BLM 2012b). In addition, the Proposed Action would result in indirect impacts to 11,370 acres of mule deer CWR located within 0.62 mile of surface disturbance areas.

The Project's total impacts on CWR include the impacts of the Proposed Action together with the impacts that were previously disclosed in the EA for Infrastructure Components (BLM 2014a), the EA for Phase I Wind Turbine Development Site (BLM 2017a), and the DNA for the Phase II Haul Road and Facilities Site (BLM 2017c). Table 8 discloses the total Phase I and Phase II direct and indirect impacts to CWR, including the impacts associated with the Proposed Action.

Table 8: Impacts to Mule Deer Crucial Winter Range within the CCSM Project Site

Mule Deer	Phase I Total ¹		Phase II Total		Grand Total Phase I and II of the CCSM Project ⁴		Grand Total in CCSM Project FEIS ⁵	
	Direct Acres	Indirect Acres ²	Direct Acres	Indirect Acres ³	Direct Acres	Indirect Acres	Direct Acres	Indirect Acres
Crucial Winter Range	1,165	18,475	235	9,870	1,360	20,340	232	20,158

¹As reported on p. 4-35 and 4-36 of the Phase I Wind Turbine Development EA (BLM 2017a).

²Overlap between the Phase I Infrastructure Components Site (BLM 2014a) and the Phase I Wind Turbine Development Site (BLM 2017a) was removed.

³Overlap between the Phase II Haul Road and Facilities Site (BLM 2017c) and the Phase II Wind Turbine Development Site was removed.

⁴Overlap between Phase I and Phase II was removed.

⁵As reported on p. 4.14-12 of the CCSM Project FEIS (BLM 2012b).

As shown in Table 8, direct impacts to CWR associated with all Phase I and Phase II development, including the Proposed Action, are anticipated to be 1,360 acres. This equals approximately 5.5 percent of the 24,693 acres of CWR located within the CCSM Project Area, and approximately 1.0 percent of the larger 130,989-acre CWR area extending beyond the CCSM Project Area.

Indirect impacts to CWR associated with Proposed Action partially overlap with indirect impacts associated with the Phase II Haul Road and Facilities Site. When overlap is removed, the total indirect impacts associated with Phase II development, including the Proposed Action, are anticipated to be 9,870 acres (Table 8).

As Table 8 shows, the combined direct and indirect impacts to CWR associated with all Phase I and Phase II development is 20,340 acres. While the impacts are 182 acres more than the combined direct and indirect impacts to CWR that were disclosed in the CCSM Project FEIS (BLM 2012b) (20,158 acres), the impact to the larger 130,989 CWR area extending beyond the CCSM Project Area remains at 15 percent.

The CCSM Project FEIS disclosed that the Project would likely result in significant impacts. While the acres of direct impacts to mule deer CWR from the CCSM Project are greater than those identified in the CCSM Project FEIS, the CCSM Project FEIS already disclosed significant impacts of the type and magnitude as those anticipated from the Proposed Action. Therefore, the Proposed Action would have no new significant impacts to mule deer CWR because the types and extents of impacts are consistent with the significance determination made in the CCSM Project FEIS.

As noted in the CCSM Project FEIS, mule deer avoidance of development areas may be related to traffic levels (BLM 2012b). Per the 2008 Rawlins RMP and ROD (BLM 2008a),

no surface-disturbing or disruptive activities are allowed on federal lands from November 15 to April 30 within mule deer CWR. PCW would also implement this timing stipulation for new construction activities on private and state lands within mule deer CWR between November 15 and April 30. These timing stipulations would reduce impacts on mule deer CWR by minimizing the amount of human activity and traffic associated with new construction activities and the potential disruption of wintering mule deer in CWR.

According to the Platte Valley Mule Deer Plan (WGFD 2012b), the Platte Valley mule deer herd has been in decline since approximately 2006, and winter habitat condition is the limiting factor with respect to the herd's population growth. As a result, implementation of the Proposed Action of this EA and the resulting impacts on CWR could result in declines in the overall carrying capacity of the CWR, an impact that is disclosed in the CCSM Project FEIS (BLM 2012b, p. 4.14-11).

Migration Corridors: After publication of the CCSM Project FEIS (BLM 2012b), the WGFD added one new potential mule deer migration corridor to the statewide migration route mapping (WGFD 2012) at the southern edge of the Chokecherry WDA (located outside of mule deer CWR). This potential migration corridor crosses the proposed electrical transmission right-of-way, within which towers and overhead transmission lines are proposed (Map E-6). As noted in the CCSM Project FEIS (BLM 2012b), mule deer easily traverse dirt roads and isolated development features similar to those proposed within the electrical transmission right-of-way.

The CCSM Project FEIS (BLM 2012b) states that mule deer are known to migrate through the CCSM Project Area, but specific locations of migration corridors are largely unknown. However, the potential migration corridor identified by WGFD is in an area that is not impacted by turbines but where only isolated development features occur. Therefore, potential impacts on possible mule deer migration corridors resulting from the Proposed Action are consistent with those disclosed on page 4.14-12 of the CCSM Project FEIS (BLM 2012b) and are within the scope of the impacts disclosed in the CCSM Project FEIS.

3.0 CONSULTATION AND COORDINATION

3.1 List of Preparers

In coordination with the BLM, PCW prepared this EA with the assistance of its consultant ICF. PCW, ICF, and the BLM coordinated throughout the preparation process. The BLM reviewed the EA, and PCW and ICF revised the document as needed prior to public distribution in response to the BLM's comments. The BLM has made its own evaluation of the environmental issues pertaining to the Proposed Action and takes responsibility for the scope and content of this EA. Table 9 identifies the preparers of this EA.

Table 9. List of Preparers

Name	Discipline	Organization
Heather Schultz	Project Manager	BLM Rawlins Field Office
Dennis Carpenter	Field Office Manager	BLM Rawlins Field Office
Nancy Baker	Assistant Field Office Manager	BLM Rawlins Field Office
Heath Cline	Wildlife Biology	BLM Rawlins Field Office
Susan Foley	Planning and Environmental Coordinator	BLM Rawlins Field Office
Ryan Shively	Vegetation	BLM Rawlins Field Office
Andy Mowery	Recreation	BLM Rawlins Field Office
Cheryl Newberry	Range Management	BLM Rawlins Field Office
Timothy Novotny	Wild Horses and Burros	BLM Rawlins Field Office
Raymond Ogle	Natural Resource Specialist	BLM Rawlins Field Office
Jennifer Skeldon	Weed Program Coordinator	BLM Rawlins Field Office
Brandon Snyder	Realty	BLM Rawlins Field Office
Jacob Stout	Hydrology	BLM Rawlins Field Office
Megan Vasquez	Engineering	BLM Rawlins Field Office
Gary Miller	Vice President – Land and Environmental Affairs	Power Company of Wyoming
Kelly Cummins	Director of Environmental Permitting and Compliance	Power Company of Wyoming
Lisa Christian	Associate General Counsel	Power Company of Wyoming
Roxane Perruso	Vice President and General Counsel	Power Company of Wyoming
Ryan Jacobson	Director of Engineering and Construction	Power Company of Wyoming
Madeline Terry	Project Manager	ICF
Kristin Salamack	Deputy Project Manager	ICF
Lissa Johnson	GIS	ICF
Jason Thoene	GIS	ICF
Jon Kehmeier	Biology/Ecology	SWCA

3.2 Persons and Agencies Consulted

U.S. Fish and Wildlife Service: The BLM conducted programmatic consultation with the USFWS under Section 7 of the Endangered Species Act (ESA) as part of the CCSM Project EIS process. The BLM initiated formal consultation by submitting the Biological Assessment to the USFWS. The USFWS concluded consultation by signing a Biological Opinion on September 5, 2012. The Proposed Action falls within the scope of the programmatic consultation; therefore, consultation is considered complete. For documentation of this process and additional information, refer to the Final Biological Opinion (Appendix F of the CCSM Project ROD [BLM 2012a]).

In addition, the BLM plans to be a cooperating agency with USFWS on its analysis of the Phase II ETP application once underway. As a result, the two processes, although distinct, will be coordinated in that they will analyze the same project, i.e., the Phase II Wind Turbine Development for different purposes (issuance of a ROW grant by the BLM and issuance of an ETP by the USFWS). The USFWS is also a cooperating agency in this EA.

Wyoming State Historic Preservation Office (SHPO): The BLM conducted consultation with the Wyoming SHPO under Section 106 of the National Historic Preservation Act as part of the CCSM Project EIS process. Class III surveys have been completed for Phase II of the CCSM Project, and the results of the surveys were sent to the Wyoming SHPO. Consultation on the findings from the Class III cultural resource inventories is ongoing with the SHPO, as required in the *Programmatic Agreement PA Among the BLM, Wyoming State Historic Preservation Office, the Advisory Council on Historic Preservation, and Power Company of Wyoming, LLC, Regarding Adverse Effects to Historic Properties Resulting from the Chokecherry and Sierra Madre Wind Energy Project in Carbon County, Wyoming*. The BLM notified the SHPO regarding the availability of this EA and the opportunity to review and comment during the public review period.

Tribal Consultation: The BLM initiated government-to-government consultation with four potentially affected and interested Native American tribes as part of the CCSM Project EIS process on July 25, 2008. As a result of the consultation request, tribal meetings were held in the summer of 2009 and included the addition of one more tribe. These Native American tribes included the Northern Cheyenne, Eastern Shoshone, Northern Arapaho, Fort Peck Assiniboine and Sioux, and Northern Ute tribes. The BLM conducted a Class II sample survey of areas with the potential for archaeological sites of traditional, cultural, and/or religious importance. The BLM requested the tribes become consulting parties to the PA and transmitted the final PA to the tribes for signature on August 16, 2012. For documentation of this process and additional information, refer to Section 4 of the CCSM Project ROD (BLM 2012a). On April 26, 2013, the BLM sent letters to the tribes, updating them on the SPODs, inviting them to

continue consultation on the CCSM Project, and inviting them to participate in the Class III cultural resource inventories. In addition to the letters identified above, the BLM has continued consultation through letters and numerous phone conversations and emails with the five tribes throughout the CCSM Project. On October 16, 2015, the BLM hosted and participated in a tribal consultation meeting with the USFWS in the BLM RFO. As result of the meeting, the BLM provided an additional review period to the tribes for comment and coordination on the PA. The BLM sent letters to the tribes regarding the Phase II Wind Turbine Development and followed those letters with phone calls to each tribe. Based on requests from the tribes, the BLM sent the Class III report and site forms for the Phase II Wind Turbine Development to the tribes. The tribes did not feel the need for site visits or in-person meetings.

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**U.S. Department of the Interior
Bureau of Land Management**

**Finding of No New Significant Impacts
(FONNSI)**

PHASE II WIND TURBINE DEVELOPMENT

for the

**Chokecherry and Sierra Madre (CCSM)
Wind Energy Project (EA 3)
DOI-BLM-WY-D030-2019-0083-EA**

December 2019

**U.S. Bureau of Land Management
High Desert District
Rawlins Field Office**

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FONNSI

ENVIRONMENTAL ASSESSMENT

NEPA Number: DOI-BLM-WY-D030-2019-0083-EA

Phase II Wind Turbine Development

I. Finding

The Chokecherry and Sierra Madre (CCSM) Wind Energy Project Phase II Wind Turbine Development Environmental Assessment (EA 3) analysis shows that the Proposed Action to authorize the construction, operation, maintenance, and decommissioning of the Phase II Wind Turbine Development described in EA 3, initiated from a Right-of-Way (ROW) application submitted by Power Company of Wyoming LLC (PCW), would have no significant impacts beyond those already analyzed and disclosed in the 2012 Chokecherry and Sierra Madre Wind Energy Project Final Environmental Impact Statement (FEIS). EA 3 is tiered to the CCSM Project FEIS and conforms with the Bureau of Land Management (BLM) Rawlins Field Office Approved Resource Management Plan (RMP), as amended.

I have determined that the Proposed Action will not cause significant impacts to the human environment beyond those previously described in the CCSM Project FEIS. No new significant impacts were disclosed while completing the analysis for EA 3. Therefore, consistent with Department of the Interior regulations implementing the National Environmental Policy Act (NEPA) (43 Code of Federal Regulations [CFR] Part 46), the BLM does not need to complete an additional or supplemental EIS before authorizing the Phase II Wind Turbine Development.

The Proposed Action, which incorporates all of the environmental constraints, applicant-committed measures and mitigation measures contained in CCSM Project Record of Decision (ROD) Appendix D, as well as all of the conditions of the CCSM Project ROD, would not create any additional significant effects (above those already disclosed in the CCSM Project FEIS), which would have sufficient context and intensity, as defined in Section 7.3 of the BLM NEPA Handbook (Manual H-1790-1, page 70), to be considered significant. Appendix D in the CCSM Project FEIS (Appendix D in EA 3) includes timing and distance stipulations to reduce impacts to multiple resources. Chapter 2 of EA 3 describes the issues and impacts of the Proposed Action on the applicable resources and sets forth the reasons, with respect to each resource, why the Proposed Action would either have no significant impacts or no new significant impacts beyond the scope and intensity of the impacts analyzed in the CCSM Project FEIS. Based on the significance criteria identified in the CCSM Project FEIS, significant impacts to the following resources could occur from the CCSM Project: bats, Greater Sage-Grouse, mule deer, raptors, passerine birds, soils, water resources, livestock grazing within individual pastures, historic

properties where setting is an aspect of integrity, and noise impacts on two residences. EA 3 describes four issues that were identified by the interdisciplinary team for further analysis, and that analysis was conducted using the tiering procedures in Appendix C of the CCSM Project ROD.

Following the tiering procedures described in Appendix C of the CCSM Project ROD, the BLM concludes that some impacts from the facilities proposed in the Phase II Wind Turbine Development site-specific plan of development (SPOD 6) may warrant additional evaluation beyond the analysis in the CCSM Project FEIS. The BLM prepared EA 3 to evaluate those impacts. The CCSM Project FEIS analyzes and discloses environmental impacts including significant impacts to some environmental resources. EA 3 compares the SPOD 6 against the analysis conducted in the CCSM Project FEIS to identify and evaluate any additional or new environmental impacts that were not addressed in the EIS.

EA 3 screens the Phase II Wind Turbine Development SPOD 6 and the additional impacts described in the NEPA documents for SPODs 1-5, including the Infrastructure Components for Phase I and Phase II, and Phase I Turbine Development, against the analysis conducted in the CCSM Project FEIS to assess and disclose any additional or new environmental impacts; no new significant impacts were identified. EA 3 incorporates the analysis and other content contained in the CCSM Project FEIS and the CCSM Project ROD.

The direct take of eagles from the Phase II Wind Turbine Development is anticipated and PCW will apply for a eagle take permit from the U.S. Fish and Wildlife Service. The impacts to migratory birds from the Phase II Wind Turbine Development are within the impacts disclosed in the CCSM Project FEIS.

The Finding of No New Significant Impacts is based on my consideration of the Council on Environmental Quality's criteria for significance, 40 CFR 1508.27, both regarding the context and intensity of impacts described in EA 3 and supporting documents. The interdisciplinary team checklist in Appendix C and the analysis in Chapter 2 of EA 3 provide detail on the expected impacts of the separate elements of the Proposed Action on the resources present in the project area and the reasons why those impacts are either not significant or are within the range of impacts previously analyzed. The context and intensity of impacts are discussed further below.

II. Context

The CCSM Project FEIS analyzed the entire CCSM Project. Relying on the tiering procedures in the Appendix C of the CCSM Project ROD, EA 3 compiles the surface disturbance of the Phase II Wind Turbine Development, together with the surface disturbance for the earlier components of the CCSM Project that were analyzed in previous site-specific NEPA documents and compares it to the total surface

disturbance analyzed in the CCSM Project FEIS. The Phase II Wind Turbine Development identifies site-specific actions involving 2,399 acres of initial surface disturbance and 370 acres of long-term surface disturbance on public, state, and private lands in Carbon County, Wyoming. PCW has applied for a ROW grant for the construction, operation, maintenance and decommissioning of the Phase II Wind Turbine Development.

The Phase II Wind Turbine Development includes 396 wind turbine generators and associated facilities, such as turbine pad access roads, electrical lines, substations, operation and maintenance buildings, meteorological towers, utilities, and temporary construction features. The Phase II Wind Turbine Development relies on many of the infrastructure components and facilities that BLM has previously analyzed and approved in connection with the five SPODs described above, including the rail facility, quarry, haul roads, arterial roads, and many electrical facilities with Project-wide functionality.

The CCSM Project FEIS analyzed the entire CCSM Project; therefore, EA 3 compares the surface disturbance of the entire CCSM Project as disclosed in the FEIS with the surface disturbance for the CCSM Project Infrastructure Components, Phase I Wind Turbine Development, Phase II Haul Road and Facilities, and Phase II Wind Turbine Development.

The initial surface disturbance analyzed in the CCSM Project FEIS was 7,733 acres, with a long-term disturbance of 1,545 acres. The total surface disturbance for the CCSM Project, when combining all project phases, is 7,715 acres of initial disturbance and 1,400 acres of long-term disturbance, which is 18 acres less for initial and 145 acres less for long-term disturbance than the acreage analyzed in the CCSM Project FEIS.

III. Intensity

The considerations listed in 40 CFR 1508.27(b) (1-10) were used to evaluate the intensity of the effects described in EA 3:

1. There would be no new significant effects as a result of approving the Proposed Action beyond those already disclosed in the CCSM Project FEIS. The Proposed Action would result in both beneficial and adverse impacts.
2. The public's health and safety would not be significantly affected (Appendix C of EA 3). There would be no new adverse social or economic effects beyond those disclosed in the CCSM Project FEIS (Section 4.2.7).
3. Neither the Rawlins RMP review nor interdisciplinary review found any new unique characteristics in the geographic area or ecologically critical areas which would be adversely affected, beyond those disclosed in the CCSM Project FEIS (EA 3 Appendix C).

4. The effects of the Proposed Action are within the scope and scale of effects analyzed in the CCSM Project FEIS. The ID Team reviewed the Phase II Wind Turbine Development SPOD 6, identified issues of concern for specific resources, and determined which resources required additional site-specific assessment in this EA. The ID Team analysis of resources and issues considered for this EA is found in Appendix C.
5. There would not be a high uncertainty of the effects, nor any new unique or unknown risks not previously discussed in the CCSM Project FEIS. The CCSM Project ROD determined that wind energy development is appropriate within the 219,707-acre conceptual area of development described in detail and referred to as the Application Area.
6. This proposal does not set a precedent for future actions with significant effects beyond those described in the CCSM Project FEIS, and does not represent a decision in principle about a future consideration. The CCSM Project ROD allows for issuance of multiple ROW grants. The Phase II Wind Turbine Development will be granted under a wind energy development grant.
7. The Proposed Action is Phase II of the wind energy development project analyzed in the CCSM Project FEIS. This proposal is not related to other actions with individually insignificant but cumulatively significant effects beyond those that were considered in the CCSM Project FEIS. The BLM has reviewed the list of current and planned projects disclosed in Table 5.0-1 of the CCSM Project FEIS (pages 5-2 through 5-5), to determine if any new projects are related to EA 3. No new reasonably foreseeable actions were identified, beyond those disclosed in Table 5.0-1 of the CCSM Project FEIS.
8. The proposal will not adversely affect districts, sites, highways, structures or objects listed or eligible for listing in the National Register of Historic Places in a manner or degree beyond that disclosed in the CCSM Project FEIS (Sections 4.2.2 and 4.2.11 of EA 3). The BLM conducted consultation with the Wyoming State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act as part of the CCSM Project EIS process. Class III surveys have been completed, and the results of the surveys were sent to the Wyoming SHPO. No adverse effects were identified for the Phase II Wind Turbine Development.
9. There would be no new effects to threatened or endangered species, including to their habitat, beyond those disclosed in the CCSM Project FEIS. Construction timing restrictions, design features and additional mitigation measures would minimize or prevent adverse effects to other wildlife species and their habitat (Sections 4.2.13 and 4.2.14 of EA 3).
10. Approving the Proposed Action would not violate any federal, state, or local laws or regulations imposed for the protection of the environment (Section 1.8 of EA 3).

For the reasons set forth above and as explained in EA 3, I conclude that the Proposed Action will have no new significant impacts on the human environment that were not adequately disclosed in the CCSM Project FEIS.

/s/Dennis J Carpenter
Dennis J. Carpenter, Rawlins Field Manager

December 2, 2019
Date

**U.S. Department of the Interior
Bureau of Land Management**

**DECISION RECORD
PHASE II WIND TURBINE DEVELOPMENT**

for the

**Chokecherry and Sierra Madre (CCSM)
Wind Energy Project (EA 3)**

DOI-BLM-WY-D030-2019-0083-EA

December 2019

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DECISION RECORD

NEPA Number: DOI-BLM-WY-D030-2019-0083-EA

Phase II Wind Turbine Development

I. Introduction

This Decision Record (DR) documents the Bureau of Land Management's (BLM) decision on the wind energy Right-of-Way (ROW) application for Phase II Wind Turbine Development at the Chokecherry and Sierra Madre Project (CCSM) submitted by the Power Company of Wyoming LLC (PCW). This DR is based on the "Environmental Assessment for Phase II Wind Turbine Development for the Chokecherry and Sierra Madre Wind Energy Project" (EA 3) and the Finding of No New Significant Impact (FONNSI).

The CCSM Project Record of Decision (ROD) allows the BLM the flexibility to issue multiple ROW grants. The Phase I Infrastructure Components, Phase I Wind Turbine Development and Phase II Haul Road and Facilities were analyzed and approved in previous National Environmental Policy Act (NEPA) documents, including separate DRs and FONNSIs, and are part of the CCSM Project.

The authority for these decisions is contained in the Federal Land Policy and Management Act of 1976 (FLPMA), 43 U.S.C. 1701–1787, including Title V of FLPMA, which authorizes the issuance of rights-of-way on the public lands.

II. Alternatives Considered

A. Proposed Action

The Proposed Action is described in detail in Chapter 1 and Appendix B: Phase II Wind Turbine Development Site-specific Plan of Development (SPOD 6) of EA 3. The Phase II Wind Turbine Development includes 396 wind turbine generators and associated facilities for the CCSM Project, such as turbine pad access roads, electrical lines, substations, operation and maintenance buildings, meteorological towers, utilities, and temporary construction features. The Phase II Wind Turbine Development relies on the infrastructure components and facilities that BLM has previously analyzed and approved in SPODs 1-5, including the rail facility, quarry, roads, water lines and electrical facilities. The location of the Phase II Wind Turbine Development is consistent with the Selected Alternative in the CCSM Project ROD (BLM 2012a). The wind turbine layout is shown in Map E-2 in EA 3 (see Appendix E in EA 3) for the Chokecherry Wind Development Areas (WDA) and Map E-3 in EA 3 (see Appendix E in EA 3) for the Sierra Madre WDA.

The Phase II Wind Turbine Development will occur in the eastern portions of the Chokecherry and Sierra Madre WDAs and will provide the second half of the electricity (about 1,500 MWs) needed to meet the objectives of the CCSM Project.

B. No Action

Under the No Action Alternative, the BLM Authorized Officer would deny approval of a ROW grant for PCW's Phase II Wind Turbine Development. Notwithstanding such a denial, PCW would have the opportunity to resubmit a revised Phase II Wind Turbine Development SPOD addressing the BLM's reasons for not issuing a ROW grant as anticipated in the CCSM Project ROD (BLM 2012a). Selection of the No Action Alternative would not meet one of the purposes of the CCSM Project, which is to support the Federal goals and objectives for the development of domestic renewable energy projects on public lands.

III. Plan Conformance and Consistency

The CCSM Project, including the Phase II Wind Turbine Development, is subject to and is in conformance with, the BLM Rawlins 2008 Resource Management Plan (RMP), approved on December 24, 2008, as amended by the CCSM Project ROD 2012 and 2015 Approved Resource Management Plan Amendment (ARMPA). EA 3 is also consistent with the Council on Environmental Quality and the Department of the Interior regulations implementing the NEPA (40 C.F.R. 1508.28 and 1502.21, and 43 C.F.R. 46.140(c)). EA 3 tiers to, and incorporates by reference, the information and analysis contained in the CCSM Wind Energy Project Final Environmental Impact Statement (FEIS) and ROD.

The Proposed Action has been reviewed based on the process set out in the CCSM Project ROD for issuing ROW grant(s). The ROD states that "The BLM will not issue ROW grants for the CCSM portions of the project to PCW until the BLM determines that PCW has developed an adequate Compensatory Mitigation Plan (CMP) for cultural resources and the U.S. Fish and Wildlife Service (USFWS) issues concurrence on Eagle Conservation Plans (ECPs), and Avian Protection Plans. [now a Bird and Bat Conservation strategy (BBCS)]." See CCSM Project ROD at 1-2. The BLM will issue the ROW once all other requirements are met and the USFWS issues a letter of concurrence to the BLM.

IV. Compliance with Major Laws and Policies

The Proposed Action and the No Action Alternative meet the standards and direction of applicable laws, regulations, and directives, including the Federal Land Policy and Management Act of 1976 (FLPMA) (43 U.S.C. 1701). The BLM complied with all applicable laws, including but not limited to, NEPA, 42 U.S.C. 4321 et seq., the regulations issued by the Council on Environmental Quality and the Department of the Interior (DOI), 40 C.F.R. 1500–1508 and 43 C.F.R. part 46, guidance documents including

DOI requirements contained in Department Manual 516, Environmental Quality (BLM 1980), guidelines listed in the BLM NEPA Handbook, H-1790-1 (BLM 2008b), and Guidelines for Assessing and Documenting Cumulative Impacts (BLM 1994).

A. Endangered Species Act (ESA)

The BLM conducted programmatic consultation with the USFWS under Section 7 of the ESA as part of the CCSM Project Environmental Impact Statement (EIS) process. The BLM initiated formal consultation by submitting a Biological Assessment to the USFWS. The USFWS concluded consultation by signing the Biological Opinion on September 5, 2012. The Proposed Action falls within the scope of the programmatic consultation; therefore, consultation is considered complete. For documentation of this process and additional information, refer to the Final Biological Opinion (Appendix F of the CCSM Project ROD [BLM 2012a]). The USFWS is a cooperating agency for EA 3.

B. Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act

PCW is developing an ECP for Phase II of the CCSM Project. See CCSM Project ROD at 3-1 (BLM 2012a). The Phase II ECP will include the data collected for eagles, the avoidance, minimization, and conservation measures designed to minimize risks to eagles to the extent practicable such that any remaining take is unavoidable, and monitoring provisions to determine the effectiveness of these measures. See CCSM Project ROD at 1-2 (BLM 2012a).

The CCSM Project FEIS discloses that bats, migratory birds, raptors, and/or eagles will experience mortalities due to colliding with wind turbine generators. Specifically, the CCSM Project FEIS estimated that the Project will result in annual mortalities of 6,300 bats, 150-210 raptors, 46-64 golden eagles, and 5,400 non-raptors. (BLM 2012b, §§ 4.14.2.3 and 4.14.2.4.). The CCSM Project FEIS noted that PCW was in the process of collecting additional data on bat and bird use of the Project Area, and will use that data to develop a Bat Protection Plan and Avian Protection Plan that could lead to reductions in bird and bat mortalities.

C. National Historic Preservation Act

The BLM conducted consultation with the Wyoming State Historic Preservation Office (SHPO) under Title 54 U.S.C. § 306108 (formerly known as Section 106 of the National Historic Preservation Act) as part of the CCSM Project EIS process. Class III surveys have been completed for Phase II of the CCSM Project and the results of the surveys were sent to the Wyoming SHPO. Consultation on the findings from the Class III cultural resource inventories is ongoing with the SHPO, as required in the *Programmatic Agreement Among the BLM, Wyoming State Historic Preservation Office, the Advisory Council on Historic Preservation, and Power Company of Wyoming, LLC Regarding Adverse Effects to Historic Properties Resulting from the Chokecherry and Sierra Madre Wind Energy*

Project in Carbon County, Wyoming (PA), and will be completed prior to issuance of any Notice to Proceed that may adversely affect historic properties. The BLM notified the SHPO regarding the availability of EA 3 and the opportunity to review and comment during the public review period.

Tribal Consultation: The BLM initiated Government-to-Government consultation with four potentially affected and interested Native American tribes as part of the CCSM Project EIS process on July 25, 2008. As a result of the consultation request, tribal meetings were held in the summer of 2009, and included the addition of a fifth tribe. The five American Indian tribes were the Northern Cheyenne, Eastern Shoshone, Northern Arapaho, Fort Peck Assiniboine and Sioux, and Northern Ute tribes. The BLM conducted a Class II sample survey of areas with the potential for archaeological sites of traditional, cultural, and/or religious importance. The BLM requested the tribes become consulting parties to the Programmatic Agreement and transmitted the final Programmatic Agreement to the tribes for signature on August 16, 2012. For documentation of this process and additional information refer to Section 4 of the CCSM Project ROD (BLM 2012a). On April 26, 2013, the BLM sent letters to the tribes updating them on the SPODs, inviting them to continue consultation on the CCSM Project as well as inviting the tribes to participate in the Class III cultural resource inventories. In addition to the letters identified above, the BLM has continued consultation through letters and numerous phone conversations and emails with the five tribes. On April 4, 2015, BLM hosted a tour to review sites of tribal interest. Following the tour on October 16, 2015, the BLM hosted and participated in a tribal consultation meeting with the USFWS in the BLM Rawlins Field Office. As result of the meeting, the BLM provided an additional review period to the tribes for consultation and coordination on the Programmatic Agreement.

V. Environmental Constraints, Applicant Committed Measures, and Mitigation Measures

The BLM will require the environmental constraints, the Applicant Committed Measures (ACMs), Applicant Committed Best Management Practices (BMPs), and mitigation measures, described in Appendix D of the CCSM Project ROD (BLM 2012a), Appendix D “Summary of BLM Environmental Constraints, Applicant Committed Measures, Applicant Committed Best Management Practices, and Proposed Mitigation Measures” of EA 3, the Wyoming ARMPA, the Cultural Resources Programmatic Agreement (CCSM Project ROD [BLM 2012a], Appendix E, as amended in 2014), the Biological Opinion (CCSM Project ROD [BLM 2012a], Appendix F), the Wildlife Monitoring and Protection Plan (CCSM Project ROD [BLM 2012a], Appendix G), and Phase II Wind Turbine Development SPOD.

A. Greater Sage-Grouse

The CCSM Project ROD (BLM 2012a) prohibits development inside Greater Sage-Grouse Core Areas. The CCSM Project is not located in any area identified as a priority area for Greater Sage-Grouse conservation, i.e., USFWS Priority Areas of Conservation, State of Wyoming Core Areas, or BLM Priority Habitat Management Areas (PHMAs). To further minimize impacts to Greater Sage-Grouse, PCW will comply with the stipulations pertaining to Greater Sage-Grouse in the Wildlife Monitoring and Protection Plan included in the CCSM Project ROD (BLM 2012a, Appendix G) and the Sage-Grouse Conservation Plan included in the CCSM Project ROD (BLM 2012a, Appendix B). The Sage-Grouse Conservation Plan includes Applicant committed conservation measures to mitigate impacts to Greater Sage-Grouse, such as monitoring of Greater Sage-Grouse through lek counts and telemetry data collection and analysis, habitat evaluation, and responsible land management practices. Further, as part of its wind energy development proposal, PCW has committed to provide voluntary mitigation measures to further offset impacts to Greater Sage-Grouse. These measures are described in the Sage-Grouse Conservation Plan and include fence marking and removal, habitat improvements, and a conservation easement on private lands (BLM 2012a, Appendix B).

While the conservation easement will be placed on private lands owned by The Overland Trail Cattle Company LLC on which PCW has wind energy development rights, the easement will also effectively conserve the sections of Federal land interspersed due to the checkerboard land ownership pattern. The following environmental constraints, ACMs, Applicant Committed BMPs, and mitigation measures, summarized in Appendix D of the CCSM Project ROD (BLM 2012a), will be implemented to reduce impacts on Greater Sage-Grouse from the Proposed Action:

- BLM Environmental Constraints for Greater Sage-Grouse (CCSM Project ROD [BLM 2012a, p. D-1])
- ACMs A-1-01, A-1-08 through A-1-12, and A-1-22 through A-1-33
- Applicant Committed BMPs A-2-11 and A-3-94 through A-3-97
- Mitigation Measure WFM-1

B. Bald and Golden Eagles

The Phase II ECP will detail the compensatory mitigation measures developed and adopted by PCW to offset anticipated eagle fatalities, as required by the CCSM Project ROD and USFWS in connection with PCW's application for an Eagle Take Permit. See CCSM Project ROD at 1-2 and 3-3 (BLM 2012a).

The following environmental constraints, ACMs, Applicant Committed BMPs, and mitigation measures, summarized in Appendix D of the CCSM Project ROD (BLM 2012a), will be implemented to reduce impacts to raptors from the Proposed Action:

- BLM Environmental Constraint for raptors (CCSM Project ROD [BLM 2012a, p. D-1])
- ACMs A-1-01, A-1-02, A-1-08 through A-1-12, and A-1-25 through A-1-31
- Applicant Committed BMPs A-3-94 through A-3-97
- Mitigation Measure WFM-1
- PCW has and will continue to conduct annual preconstruction surveys for raptors in accordance with the Wildlife Monitoring and Protection Plan included as Appendix G of the CCSM Project ROD (BLM 2012a)

C. Cultural Resources

Impacts and mitigation to cultural sites are addressed in the cultural Programmatic Agreement and CMP.

The BLM has determined that PCW has developed an adequate CMP for cultural resources for the CCSM Project, including Phase II. In accordance with stipulations III.c.1 and 2 of the PA, the BLM established a Compensatory Mitigation Committee which developed a CMP to mitigate adverse effects from the CCSM Project, including Phase I, on certain historic properties. Per Stipulation III.c.1 of the PA, on May 18, 2015, the BLM-RFO Manager, with the concurrence of the Wyoming SHPO, approved the recommendations of the Committee as outlined in the Plan. The Plan has been appended to the PA for the CCSM Project.

D. Compliance and Monitoring

Compliance and monitoring measures are fully described in the tiered EA 3 and CCSM Project FEIS and are incorporated by reference into this DR.

E. Waivers and Authorizations

Wildlife – Raptor Nests

The one active nest (used by a golden eagle during three of the eight years monitored) is located within 825 feet of initial disturbance and activity areas associated with a Phase II Wind Turbine Development transmission line. However, the same nest is also located within 825 feet of the Phase I Haul Road and a waiver was previously authorized with respect to that nest. This DR authorized a waiver for the Phase II Turbine development.

Wildlife – High-Profile Structure Authorizations

This DR authorizes locating wind turbines and transmission structures within 1.0 mile of ten Greater Sage-Grouse leks, however outside of the 0.25-mile buffer around occupied lek locations and uses natural project-specific topography to shield the lek locations and seasonal habitats from the turbines to the extent practicable.

Wildlife – Unoccupied and Undetermined Leks

This authorization from the BLM applies the stipulations for unoccupied and undetermined leks, as described in the 2015 ARMPA and Wyoming's Greater Sage-Grouse Core Area Protection Executive Order (EO) 2019-3, to the Phase II Wind Turbine Development including the Smith Draw and West Junction leks. The Smith Draw lek is unoccupied, and there has been no lek activity since 1982. The West Junction lek is undetermined, and there has been no lek activity since 1989. The 2015 ARMPA and EO 2019-3 apply a timing limitation stipulation to surface-disturbing or disruptive activities that occur within a 2-mile buffer surrounding occupied leks that are outside of the PHMA/Core. Therefore, this timing limit stipulation would not apply to the unoccupied Smith Draw lek or the undetermined West Junction lek, so long as they remain unoccupied or undetermined.

Soils – Steep Slopes

This DR authorized a waiver of the prohibition of surface disturbance on slopes greater than 25 percent, for wind turbine staging areas totaling 5.5 acres of initial disturbance (Appendix B of PCW 2019). No wind turbine generators will be located on slopes greater than 25 percent; however, the initial disturbance areas for some wind turbine sites will affect slopes greater than 25 percent because of the cut-and-fill requirements necessary to establish appropriate slopes. Generally, this disturbance will consist of leveling features or placing fill on steep slopes to establish the design grade for the staging area. PCW will apply the appropriate measures in the Erosion Control Plan, Stormwater Pollution Prevention Plan, and Reclamation Plan to stabilize these locations and minimize erosion.

Lands and Realty – ROW Boundary Setbacks

This DR authorized five wind turbines (SCB-A-17, SCB-A-18, SVF-G-13, SVF-F-23, and SVF-F-24) located within the 5D ROW setback and three turbines (SCB-A-18, SCR-A-02, and SVF-F-24) located within the 1.1 times the total structure height setback, or less than the required 839 feet from external property lines.

Water – Wetlands

The CCSM Project ROD (BLM 2012a) does not allow for disturbance in wetlands identified on the National Wetlands Inventory (NWI) or in the proper functioning condition inventory (conducted by BLM). The Phase II Wind Turbine Development Site includes approximately 10.9 acres of disturbance in areas identified as wetlands on the

NWI on Federal lands. However, based on field wetland delineations conducted for the Phase II Wind Turbine Development Project, less than 25 square feet (0.0006 acres) of this area is actually wetland. Because of the delineation information demonstrating that the vast majority of the NWI wetlands do not meet wetland criteria, and PCW's commitment to obtaining a permit from the U.S. Army Corps of Engineers for the less than 25 square feet of wetlands that could not be avoided, the BLM will grant a waiver for the 10.9 acres of disturbance identified as wetlands on federal lands.

Visual – Substation Fence Painting:

Mitigation measure VR-5 in the CCSM Project ROD (BLM 2012a) requires fencing to be painted Shadow Gray or a similar dark gray color. Painting chain-link fencing will be waived as it provides little benefit to visual resources. Painting fences will also require near-constant maintenance in the conditions found on-site. In addition, painting fences may cause other unanticipated adverse effects (e.g., housekeeping issues related to paint chipping and deterioration).

VI. Rationale for Decision

The Proposed Action, now referred to as the Selected Action, will not result in any new significant effects to the quality of the human environment that were not adequately analyzed in the CCSM Wind Energy Project FEIS (BLM 2012b). A project-specific EIS is not required, as found in the FONNSI for Phase II Wind Turbine Development. EA 3 was prepared consistent with the tiering procedures outlined in Appendix C to the CCSM Project ROD signed by the BLM's Acting Director on September 28, 2012, and approved by the Secretary of the Interior on October 9, 2012. The CCSM Project ROD was based on the project-level FEIS prepared by the BLM for the CCSM Wind Energy Project. As described in Appendix C of the CCSM Project ROD, tiering uses the coverage of general matters in broader NEPA documents (e.g., the CCSM Project FEIS) in subsequent, narrower NEPA documents (e.g., EA 3).

This DR incorporates by reference the BLM's 2012 CCSM Project FEIS. In addition, this DR incorporates by reference analysis presented in the USFWS 2016 CCSM Eagle Take Permit FEIS. Finally, the analysis for impacts to Greater Sage-Grouse as a result of wind energy development presented in the BLM's 2015 Greater Sage-Grouse RMP amendments is also incorporated by reference.

The decision to approve the Selected Action—to authorize the construction, operation, maintenance, and decommissioning of all 396 wind turbine generators and supporting facilities for wind energy development—was based upon the following: (1) consistency with the BLM Rawlins RMP, as amended; (2) national policy; (3) agency statutory requirements; (4) relevant resource and economic issues; (5) application of measures to avoid or minimize environmental impacts; (6) meeting the purpose and need for the project; and (7) application of resource protection mitigation measures (i.e., ROW terms

and conditions). The Selected Action was chosen as being the most environmentally sound alternative that meets the BLM's purpose and need.

This decision is a step toward implementing the decision "to accept and evaluate future ROW applications for wind energy development and associated facilities on public lands," as described in the selected alternative of the CCSM Project ROD. The Phase II Wind Turbine Development is designed to extract the maximum potential wind energy from the Phase II Wind Turbine Development Site, while avoiding resources of concern to the extent possible and complying with the requirements of the BLM's Selected Alternative in the CCSM Project ROD.

Additionally, in December 2015, Congress passed the Fixing America's Surface Transportation (FAST) Act. Title 41 of the FAST Act creates a new entity – the Federal Permitting Improvement Council – to oversee the cross-agency Federal permitting and review process. Other FAST Act provisions addressing the project delivery process and tracking environmental review and permitting milestones, are set out in Title I and Title IX. This Project is covered by the FAST Act. The Phase II Wind Turbine Development will be constructed on an optimized schedule, efficiently, and cost-effectively.

VII. Scoping and Public Involvement

A. Internal Scoping

An Interdisciplinary Team (ID Team) meeting was held on March 6, 2019. The ID Team reviewed the Phase II Wind Turbine Development SPOD, identified issues of concern for specific resources, and determined which resources required additional site-specific assessment in this EA. The ID Team analysis of resources and issues considered for this EA is found in Appendix C.

B. Site-Specific Surveys

Consistent with ACMs outlined in Appendix D of the CCSM Project (provided as Appendix D of this EA), the BLM and PCW conducted on-site inspections for specific resources, and PCW incorporated the outcomes of the site-specific surveys by micro-siting the Phase II Wind Turbine Development so as to avoid or minimize impacts to the extent practicable. Refer to the CCSM Project FEIS (Chapter 2, pages 2 2 to 2 17, and Appendix A, Project Elements Common to All Action Alternatives) (BLM 2012a) and the Phase II Wind Turbine Development SPOD (Section 4, Phase II Wind Turbine Development Design) (PCW 2019) for more information about the micro-siting and design process.

Since publication of the CCSM Project FEIS (BLM 2012b), PCW conducted additional bat, bird, raptor, and eagle surveys throughout the CCSM Project, including the Phase II Wind Turbine Development (PCW2019).

C. Public Involvement

The BLM published an initial copy of EA 3 for public review and comment. During the review period, (October 21, 2019 to November 4, 2019), the BLM received four comment documents from agencies and the public. Based on the four comment documents, additional narrative has been added to the EA regarding designing and monitoring the stream crossings, the FONNSI was revised and Appendix N of the SPOD6 was added to the ePlanning website.

VIII. Final Agency Action

Right-of-Way Authorization

It is my decision to approve the wind energy ROW grant to PCW, subject to the terms, conditions, and stipulations, SPOD, and environmental protection measures developed by the BLM and reflected in this DR. The EA associated with this decision, EA 3, fully analyzes the impacts of the Phase II Wind Turbine Development and the FONNSI documents the conclusions of that analysis. It is my decision to select Alternative B, the Proposed Action as described in EA 3, and authorize a ROW grant for the construction, operation, maintenance, and decommissioning of all 396 wind turbine generators and supporting facilities for wind energy development, as well as the waivers discussed in part V.E.. I have determined the impacts of the Phase II Wind Turbine Development have been fully analyzed.

This decision is effective on the date this DR is signed.

DATE: December 2, 2019

/s/Dennis J. Carpenter
Dennis J. Carpenter
Rawlins Field Manager