Summary of ConnectGen Agency Coordination[1]

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
10/4/2018	Meeting	Albany County Planning	David Gertsch (Planning Director)	Discuss target project area and Albany County wind permitting requirements
10/4/2018	Meeting	Office of State Lands & Investments	Holly Dyer (Commercial Leasing Manager) Jason Crowder (Assistant Director)	Discuss target project area and State wind lease application process
3/13/2019	Letter	BLM Rawlins Field Office	Dennis Carpenter (Field Manager)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	BLM Wyoming State Office	Mary Jo Rugwell (State Director)	Notify agency of proposed wind project; request info on project area and permitting process
3/13/2019	Letter	National Parks Service, Intermountain Region	John Wessels (Director)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	US Army Corp of Engineers, WY Regulatory Office	Chief of Public Affairs	Notify agency of proposed wind project; request info on project area and any permitting considerations

[1] The table references select local, state, and federal agency communications performed by ConnectGen, and the respective agency recipients or attendees. The table includes Section 106 agency coordination led by Western Area Power Administration (WAPA) as part of the federal review process in which the applicant is participating as a consulting party; however, the table does not reflect other agency coordination conducted by WAPA that has supported the development of the Project.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
3/13/2019	Letter	US Forest Service, Medicine Bow and Routt National Forests and Thunder Basin National Grassland	Russ Bacon (Forest Supervisor)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	US Forest Service, Arapaho and Roosevelt National Forests and Pawnee National Grassland	Monte Williams (Forest Supervisor)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	US Fish and Wildlife Service, Wyoming	Trish Sweanor (Renewable Energy Coordinator)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	Wyoming Game and Fish Department	John Kennedy (Acting Director)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	Wyoming Department of Environmental Quality	Todd Parfitt (Director)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	WY DEQ, Industrial Siting Division	Brian Lovett (Administrator)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	WY Dept of State Parks and Cultural Resources	Darin Westby (Director)	Notify agency of proposed wind project; request info on project area and any permitting considerations

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
3/13/2019	Letter	WY State Historic Preservation Office	Mary Hopkins (State Historic Preservation Officer)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	Wyoming State Engineer's Office	Pat Tyrell (State Engineer)	Notify agency of proposed wind project; request info on project area and any permitting considerations
3/13/2019	Letter	Wyoming State Geological Survey	Erin Campbell (Director and State Geologist)	Notify agency of proposed wind project; request info on project area and any permitting considerations
5/13/2019	Meeting	U.S. Fish & Wildlife Service, Ecological Services	Trish Sweanor (Renewable Energy Coordinator)	Introduce Project; share initial survey data; solicit feedback on survey methodology
6/20/2019	Email	U.S. Fish & Wildlife Service, Ecological Services	Trish Sweanor (Renewable Energy Coordinator)	As follow up to May 2019 meeting, provide memo outlining modifications to avian use survey methodology
6/11/2019	Email	Wyoming Game and Fish Department	Nichole Bjornlie (Nongame Mammal Biologist)	Notify WGFD of ConnectGen's planned participation in 2019 NABat monitoring program.
7/9/2019	Meeting	WY Industrial Siting Division	Kimber Wichmann (Chief Economist) Brian Lovett (Industrial Siting Administrator) Matt Van Wormer (Senior Assistant AG)	Introduce Project; discuss ISC permit process
7/31/2019	Meeting	Wyoming Game and Fish Department	Matt Fry (Terrestrial Specialist) Rick Huber (Aquatics Specialist)	Introduce Project; discuss current and planned biological studies and surveys

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
8/28/2019	Meeting	Wyoming Department of Transportation	Tom DeHoff (District 1 Engineer) Randy Griesbach (Traffic Engineer)	Introduce Project; discuss possible road improvements and permits required prior to construction
8/28/2019	Meeting	Albany County	Kayla White (Deputy County Clerk) Tracy Fletcher (Treasurer) David O'Malley (Sheriff) Art Sigel (Fire District #1 Chairman) Jon Essley (Fire District Treasurer; Tie Siding VFD) Stacy Lam (Clerk of District Court) Pete Gosar (Commissioner) Bryan Shuster (Laramie City Council)	Roundtable discussion open to Albany County elected officials; introduce and answer questions about Project
8/29/2019	Meeting	Laramie River Conservation District	Tony Hoch (Director)	Introduce Project
9/26/2019	Email	Wyoming Game and Fish Department	Matt Fry (Terrestrial Specialist) Rick Huber (Aquatics Specialist)	As follow up to July 2019 meeting, provide memo detailing historic, current and planned surveys of wildlife resources in Project area.
10/20/2019	Meeting	Albany County Road & Bridge	Rob Fisher (Superintendent)	Introduce Project; discuss process for negotiating Road Use Maintenance Agreement
12/17/2020	Meeting	Albany County Weed & Pest	Lindsay Wheat (Supervisor) Wade LaCount (Asst Supervisor)	Introduce Project

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
4/1/2020	Phone conference	U.S. Fish & Wildlife Service	Ecological Services - Trish Sweanor (Renewable Energy Coordinator) - Nathan Darnall (Deputy Supervisor) Regional Office, Division of Migratory Birds - Tomas Kamienski (Region 6 Biologist)	Provide Project updates and biological survey updates; discussed planned 2020 surveys
4/1/2020	Phone conference	Wyoming Game and Fish Department	Matt Fry (Terrestrial Specialist)	Provide Project updates and biological survey updates; discussed planned 2020 surveys
4/21/2020	Email	U.S. Fish and Wildlife Service, Ecological Services	Trish Sweanor (Renewable Energy Coordinator)	Provide Year 1 Eagle Use Data in USFWS's requested spreadsheet template
5/18/2020	Phone conference	U.S. Fish & Wildlife Service -Regional Office, Division of Migratory Birds -Ecological Services	Ecological Services - Trish Sweanor (Renewable Energy Coordinator) - Nathan Darnall (Deputy Supervisor) Regional Office, Division of Migratory Birds -Rob Doster (Deputy Chief) - Tomas Kamienski (Wildlife Biologist)	Discuss role of USFWS in WAPA NEPA review
5/19/2020	Phone conference	Wyoming State Engineers Office	Jeff Cowley (River Basin Coordinator)	Introduce Project and discuss water use needs

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
5/28/2020	Email	Wyoming Game and Fish Department	Matt Fry (Terrestrial Specialist)	Summarize and request concurrence on planned burrowing owl and swift fox survey methodology.
5/28/2020	Letter/Email	Wyoming State Engineer's Office	Jeff Cowley (River Basin Coordinator)	Outline water-related project activities and seek concurrence that these activities will not result in downstream depletions to the Platte River System.
6/11/2020	Video conference	Wyoming State Historic Preservation Office; Western Area Power Administration; Advisory Council on Historic Preservation; National Park Service	Mary Hopkins (WY SHPO, State Historic Preservation Officer) Heather Rockwell (WY SHPO, Deputy SHPO) Joe Daniele (WY SHPO, Archaeologist) Mark Wieringa (WAPA, NEPA Document Manager) Lisa Meyer (WAPA, HQ Archaeologist) Cal Jennings (WAPA, Native American Liaison) Chris Wilson (ACHP, Federal Property Mgmt Section, Program Analyst) Justin Henderson (NPS, Heritage Partnerships Program Manager) Astrid Liverman (NPS, NHL Coordinator) Skylar Bauer (NPS, Archaeologist)	Discuss Section 106 process; discuss cultural Key Observation Points for visual effects; discuss Programmatic Agreement

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
7/7/2020	Phone conference	U.S. Fish & Wildlife Service, Ecological Services	Trish Sweanor (Renewable Energy Coordinator) Lynn Gemlo Mark Wieringa (WAPA Document Manager) Tim Langer (WAPA Biologist)	Share results of Preble's Meadow Jumping Mouse habitat assessment
8/3/2020	Video conference	Wyoming State Historic Preservation Office; Western Area Power Administration; Advisory Council on Historic Preservation; National Park Service; Wyoming State Parks	Mary Hopkins (WY SHPO, State Historic Preservation Officer) Joe Daniele (WY SHPO, Archaeologist) Lisa Meyer (WAPA, HQ Archaeologist) Cal Jennings (WAPA, Native American Liaison) Chris Wilson (ACHP, Federal Property Mgmt Section, Program Analyst) Kelly Yasaitis Fanizzo (ACHP, Attorney) Justin Henderson (NPS, Heritage Partnerships Program Manager) Astrid Liverman (NPS, NHL Coordinator) Carly-Ann Carruthers (WY State Parks, Planning & Grants Manager)	Continue Section 106 process; presentation on project design and results of visual, noise and shadow flickers studies with respect to Ames Monument; continued discussion on Programmatic Agreement
8/19/2020	Phone conference	U.S. Fish & Wildlife Service, Ecological Services	Trish Sweanor (Renewable Energy Coordinator)	Share updated 2020 avian use and raptor nest data

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
8/20/2020	Video conference	Albany County	David Gertsch (Planning Director) Chris Van Aken (Asst Planning Director) Rob Fisher (Road & Bridge Dept Supervisor)	Discuss WECS permit application process and solicit advice on preparation of application package
9/1/2020	Video conference	WY Industrial Siting Council	Colin McKee (Senior Policy Advisor) Matt Van Wormer (Senior Assistant AG)	Jurisdictional Meeting

10/8/2020	Video conference	Wyoming State Historic Preservation Office; Western Area Power Administration; Advisory Council on Historic Preservation; National Park Service; Office of State Lands; Wyoming State Parks; Colorado State Historic Preservation Office	Mary Hopkins (WY SHPO, State Historic Preservation Officer) Richard Currit (WY SHPO, Senior Archaeologist) Joe Daniele (WY SHPO, Archaeologist) Mark Wieringa (WAPA, NEPA Document Manager) Lisa Meyer (WAPA, HQ Archaeologist) Cal Jennings (WAPA, Native American Liaison) Chris Wilson (ACHP, Federal Property Mgmt Section, Program Analyst) Justin Henderson (NPS, Heritage Partnerships Program Manager) Astrid Liverman (NPS, NHL Coordinator) Skylar Bauer (NPS, Archaeologist) Holly Dyer (OSLI) Carly-Ann Carruthers (WY State Parks, Planning & Grants Manager) Sara Needles (WY State Parks, Cultural Resources Admin) Christina Bird (WY State Parks, Cultural Resources Supervisor) Holly Norton (CO SHPO, State Archaeologist/Deputy of SHPO) Mark Tobias (CO SHPO, Intergovernmental Services Manager)	Continue Section 106 process; page turn of Draft Programmatic Agreement

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
10/13/2020	Email	Tie Siding VFD	Jon Essley (Fire Chief)	Initial coordination on Emergency Response Plan
10/13/2020	Email	Vedauwoo VFD	Brett Wadsworth (Fire Chief)	Initial coordination on Emergency Response Plan
10/13/2020	Email	County Sheriff's Office	David O'Malley (County Sheriff)	Initial coordination on Emergency Response Plan
10/13/2020	Email	Albany County Fire District #1	Art Sigel (Chairman)	Initial coordination on Emergency Response Plan
10/13/2020 11/4/2020	Email Phone conversation	Laramie Fire Department	Dan Johnson (Fire Chief)	Initial coordination on Emergency Response Plan
10/14/2020	Email	Albany County Fire Warden	Chad Dinges (Fire Warden)	Initial coordination on Emergency Response Plan
10/30/2020	Phone conference	Albany County Emergency Management	Blake Halsey (Emergency Coordinator)	Introduce Project; initial coordination on Emergency Response Plan
11/4/2020	Email	Wyoming Game and Fish Department	Matt Fry (Terrestrial Specialist)	Provide update on completed and ongoing 2020 wildlife surveys

11/9/2020	Video conference	Wyoming State Historic Preservation Office; Western Area Power Administration; National Park Service; Office of State Lands; Wyoming State Parks; Colorado State Historic Preservation Office; Wyoming Governor's Office	Mary Hopkins (WY SHPO, State Historic Preservation Officer) Richard Currit (WY SHPO, Senior Archaeologist) Joe Daniele (WY SHPO, Archaeologist) Mark Wieringa (WAPA, NEPA Document Manager) Lisa Meyer (WAPA, HQ Archaeologist) Cal Jennings (WAPA, Native American Liaison) Chris Wilson (ACHP, Federal Property Mgmt Section, Program Analyst) Kelly Yasaitis Fanizzo (ACHP, Attorney) Justin Henderson (NPS, Heritage Partnerships Program Manager) Astrid Liverman (NPS, NHL Coordinator) Skylar Bauer (NPS, Archaeologist) Holly Dyer (OSLI) Tyler Seno (OSLI) Carly-Ann Carruthers (WY State Parks, Planning & Grants Manager) Sara Needles (WY State Parks, Cultural Resources Admin) Christina Bird (WY State Parks, Cultural Resources Supervisor) Holly Norton (CO SHPO, State Archaeologist/Deputy of SHPO)	Continue Section 106 process; continuation of page turn of Draft Programmatic Agreement

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
			Mark Tobias (CO SHPO, Intergovernmental Services Manager)	
1/7/2021	Video conference	Wyoming State Historic Preservation Office; Western Area Power Administration; National Park Service; Office of State Lands; Wyoming State Parks; Colorado State Historic Preservation Office; Wyoming Governor's Office	Sara Needles (WY SHPO, State Historic Preservation Officer) Richard Currit (WY SHPO, Senior Archaeologist) Brian Beadles (WY SHPO, Deputy SHPO) Joe Daniele (WY SHPO, Archaeologist) Mark Wieringa (WAPA, NEPA Document Manager) Lisa Meyer (WAPA, HQ Archaeologist) Cal Jennings (WAPA, Native American Liaison) Justin Henderson (NPS, Heritage Partnerships Program Manager) Astrid Liverman (NPS, NHL Coordinator) Tyler Seno (OSLI) Carly-Ann Carruthers (WY State Parks, Planning & Grants Manager) Christina Bird (WY State Parks, Cultural Resources Supervisor) Dan Bach (WY State Parks, Senior Planner) Beth Callaway (WY Governor's Office)	Continue Section 106 process; discuss options for Ames Monument mitigation

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Albany Co. Rural Fire District #1		Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Albany County Weed & Pest		Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Laramie Rivers Conservation District		Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Transportation	Luke Reiner (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Wyoming Public Service Commission	Christopher Petrie (Chief Counsel)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Game and Fish Department	Brian Nesvik (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Health	Thomas Forslund (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Education	Jillian Balow (Superintendent)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Wyoming Office of State Engineer	Patrick Tyrrell (State Engineer)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming State Geological Survey	Erin Campbell (State Geologist)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Agriculture	Doug Miyamoto (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Environmental Quality	Todd Parfitt (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Wyoming Department of Revenue	Dan Noble (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Workforce Services	Robin Cooley (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming State Lands & Investments	Holly Dyer (Leasing Manager)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming State Parks & Cultural Resources	Darin Westby (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Wyoming Department of Fire Prevention & Electrical Safety	J. Michael Reed (Fire Marshal)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Family Services	Korin Schmidt (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Oil & Gas Conservation Commission	Mark Watson (Supervisor)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming DEQ- Air Quality Division	Nancy Vehr (Administrator)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Wyoming DEQ- Water Quality Division	Kevin Federick (Administrator)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming DEQ- Solid & Hazardous Waste Division	Luke Esch (Administrator)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming DEQ- Land Quality Division	Kyle Wendtland (Administrator)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming DEQ- Abandoned Mine Lands Division	Alan Edwards (Administrator)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Wyoming Office of Homeland Security	Ms. Lynn Budd (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Criminal Investigation Division	Mr. Steve Woodson (Director)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Transportation	Mr. Tom DeHoff (District #1 Engineer)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Transportation	Mr. Scott Gamo (Environmental Services Manager)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Wyoming Game and Fish Department	Ms. Angi Bruce (Habitat Supervisor)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of State Parks	Ms. Mary Hopkins (State Historic Preservation Officer)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Department of Workforce Services	Mr. Matthew Halama (Senior Economist)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
1/22/2021	Letter	Wyoming Building & Construction Trades Council	Mr. Doug Thomas (President)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.

Date	Communication Type	Agency	Recipients / Meeting Attendees	Purpose of Communication
1/22/2021	Letter	Wyoming State Historic Preservation Office	Mr. Richard Curritt (Senior Archaeologist)	Provide agency/government a description of proposed Project and Project details (construction period, transportation routes, economic benefits) and offer methods to provide comments, including public meeting invitation.
2/11/2021	Email	Albany County Weed & Pest	Lindsay Wheat	Provided draft Weed Management Plan for review.

Wyoming Industrial Development Information and Siting Act

Jurisdictional Meeting Information Package

Rail Tie Wind Project
Albany County, Wyoming

ConnectGEN

September 1, 2020

TETRA TECH

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ATTACHMENTS

Attachment A Maps

Figure A-1 Project Location Map
Figure A-2 Representative Project Layout and Siting Corridor
Figure A-3 Recommended Study Area and Area of Site Influence

Attachment B Legal Description

Attachment C Project Schedule

1 PROJECT NAME

Rail Tie Wind Project (Project)

2 APPLICANT

ConnectGen Albany County LLC (ConnectGen)

ConnectGen is an independent renewable energy company focused on developing renewable generation and energy storage projects across North America. ConnectGen's portfolio includes wind, solar and energy storage projects, as well as transmission infrastructure, that will increase America's supply to low-cost clean energy.

ConnectGen is backed by Quantum Energy Partners. Founded in 1998, Quantum Energy Partners is a leading provider of private equity capital to the global energy industry, having managed together with its affiliates more than $16 billion in equity commitments since inception.

More information can be found on our website: https://www.connectgenllc.com/

3 APPLICANT'S REPRESENTATIVE AND POINT OF CONTACT FOR APPLICATION DEVELOPMENT

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4 APPLICANT'S WYOMING ATTORNEY

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5 APPLICANT'S CONSULTANT AND POINT OF CONTACT

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6 PROJECT DESCRIPTION

The Rail Tie Wind Project (Project) is a proposed utility-scale wind energy facility under development by ConnectGen.

The Project would have a generating capacity of up to 504 megawatts (MW) of renewable energy and would include between 84 and 149 turbines. The total number of wind turbines will depend on the turbine model selected and final design. ConnectGen is currently considering several turbine models with capacities between 3 MW and 6 MW each. Each turbine, with associated foundations and equipment, would have a permanent physical footprint of approximately 0.1 acre and a vertical height between 500 and 675 feet, depending on the turbine type selected.

The wind turbines would be arranged in collinear strings located within 1,000-foot wide wind turbine siting corridors (**Figure A-2, Representative Project Layout and Siting Corridor**). This corridor design approach provides flexibility in turbine placement during the design phase to avoid and minimize impacts to wetlands, waterbodies, cultural sites, and other environmentally sensitive areas, to the extent practicable. Access roads and electrical collection lines will also be located within these corridors where feasible to minimize the Project's overall footprint. For the portions of the Project where it is not feasible to locate the access roads and electrical collection lines within the turbine string corridors, 100-foot and 50-foot wide siting corridors respectively will be used in these areas (**Figure A-2, Representative Project Layout and Siting Corridor**). The precise locations of each turbine within the corridor would be based on the wind turbine model selected, various siting criteria such as optimal wind speed, geotechnical conditions, environmental considerations, and landowner requested setbacks.

Of the several turbine models being considered by ConnectGen, the smallest model would be the General Electric Company (GE) 3.0 MW, and the largest would be the Siemens Gamesa 6.0 MW or the Vestas 5.6 MW. The turbine specifications for each of these models are provided in **Table 1-1, Potential Turbine Specifications**. As shown in the table, the specifications of the turbine models are similar, and thus many of the potential resource impacts associated with each turbine model would be anticipated to be similar. It is also expected that the specifications associated with a selected turbine model with a capacity between 3.0 MW and 6.0 MW would fall within the range of dimensions outlined in **Table 1-1, Potential Turbine Specifications**. Regardless of the turbine model selected, all turbines would be sited within the 1000' siting corridors depicted in **Figure A-2, Representative Project Layout and Siting Corridor**.

Table 1-1. *Potential Turbine Specifications*

Turbines	GE 3.0 MW	Vestas 5.6 MW	Siemens Gamesa 6.0 MW
Tower Type	Tubular	Tubular	Tubular
Blade (Rotor) Diameter	127 m	162 m	170 m
Hub Height	89 m	125 m	115 m
Total Turbine Height	152.5 m	206 m	200 m

ConnectGen has applied to interconnect the Project to the existing Craig to Ault 345 kilovolt (kV) transmission line that intersects the Project Area, under the Western Area Power Administration's (WAPA) Large Generator Interconnection Process (LGIP). The Craig to Ault line is jointly owned by WAPA, Tri-State Generation and Transmission Association, and Platte River Power Authority.

In accordance with its Open Access Transmission Service Tariff, WAPA's consideration to grant an interconnection request is a federal action subject to environmental review pursuant to the National Environmental Policy Act of 1969 (NEPA), U.S. Department of Energy (DOE), and the Council on Environmental Quality (CEQ) NEPA implementing regulations.

The Project would include associated facilities including access roads, temporary crane paths, electrical collection lines, a 345-kilovolt transmission interconnection line and associated switchyard, two electrical substations, an operations and maintenance building, meteorological equipment, and construction laydown yards.

For construction planning and site optimization, the Project consists of two phases, each approximately 252 MW. Construction of the Project is expected to begin in early 2022, and both phases could be fully operational by the end of 2022. As is common with large wind projects, the Project may require 2 years to fully construct. If additional time is required to facilitate construction, it is anticipated that the first 252 MW phase would be completed and fully operational by the end of 2022, and second phase operational in 2023.

7 PROJECT LOCATION AND LEGAL DESCRIPTION

The Project is located in southeastern Albany County, Wyoming, near the community of Tie Siding, Wyoming and approximately 15 miles south of Laramie (**Figure A-1, Project Location**).

The legal description of the lands in the Project Area is included in **Attachment B, Legal Description.**

8 LAND OWNERSHIP

The Project encompasses approximately 26,000 acres of ranchland on private (21,302 acres) and state (4,804 acres) lands; no federally managed lands are located within the Project Area (**Figure A-1, Project Location)**.

The Project has entered into wind lease agreements for 21,976 acres of private land and has exclusivity over an additional 1,878 acres of private land. The Project has finalized a wind lease agreement with the Office of State Lands and Investments for 4,804 acres of State land and anticipates approval by the Board of Land Commissioners by the end of 2020.

9 PRELIMINARY SITE PLAN

The preliminary site plan is shown in **Figure A-2, Representative Project Layout and Siting Corridor**.

10 STATUS OF LOCAL AND FEDERAL PERMITTING

10.1 National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires the disclosure of potential environmental impacts for projects with a federal action, through either a Categorical Exclusion, Environmental

Assessment, or Environmental Impact Statement (EIS), as well as a process of public and agency review and comment.

WAPA's action on the interconnection request is considered a major Federal action subject to NEPA, in accordance with Council on Environmental Quality (CEQ) regulations for implementing NEPA, and DOE NEPA Implementing Procedures (40 CFR Parts 1500−1508, 10 CFR Part 1021). On December 30, 2019, WAPA published a notice of intent to prepare an Environmental Impact Statement to analyze and disclose the potential effects to the natural and human environments associated with approving or denying the interconnection request. WAPA is in the process of developing the Draft EIS for the project, which is anticipated to be published in February 2021. The Final EIS is planned to be published in September 2021, with the Record of Decision planned for November 2021.

10.2 Wind Energy Conversion System Permit

The Albany County Wind Energy Siting Regulations require all facilities with an aggregate generating capacity greater than 25 kW to apply for a Wind Energy Conversion System (WECS) Use Permit (Albany County 2017). The application process involves the review and recommendation of the Planning and Zoning Commission and the approval of the Board of County Commissioners, as well as community input during a defined and requisite public hearing and comment period (§§18-5-502(a)). The WECS permit applicants must certify that the Project would comply with all applicable state and county zoning and land use regulations. As part of the application, potential impacts to resources such as economic, air quality, water quality, general nuisances, soil disturbance, wildlife, and cultural resources must be addressed.

ConnectGen is pursuing an Albany County Wind Energy Conversion System (WECS) permit, which is anticipated to be submitted in February 2021.

11 PROJECT SCHEDULE

Construction of the Project is anticipated to start in January 2022 and last twelve months with a target commercial operations date by the end of 2022. The Project construction schedule is included as **Attachment C, Project Schedule**.

12 PROJECT COST ESTIMATE

ConnectGen estimates that the Project will cost $563 million, exceeding the Section 109 jurisdictional threshold of $228.8 million. The material costs are estimated to be approximately $490 million. A preliminary line-item cost estimate is included in **Table 12.1**, Preliminary Cost Estimate.

Table 12-1. *Preliminary Cost Estimate*

Item	Estimated Cost
Project Development	$9,500,000
Engineering	$3,000,000
Equipment and Materials	$490,478,375
Construction	$60,678,166
TOTAL	**$563,656,541**

13 PHYSICAL LOCATION FOR RECEIPT OF MATERIALS

Road and foundation materials are anticipated to be sourced locally within Wyoming as close to the Project site as possible. The turbine supplier has not been selected and as such the point of origin for turbine components is not currently known. The turbine components will likely be delivered either by rail to Cheyenne or Laramie then transferred to trucks or will be trucked directly from their point of origin in the U.S. to the Project site. Title for turbine components would transfer at the Project site in Albany County, Wyoming.

14 PROJECT PHASES

ConnectGen does not have plans for future phases of the Project.

15 SECTION 107 OR SECTION 109 PREFERENCE

ConnectGen prefers to pursue the Section 109 permit process.

16 ANTICIPATED APPLICATION DELIVERY DATE

ConnectGen anticipates submitting a Section 109 Permit Application in April 2021.

17 WATER USE

If an applicant for an ISC Permit plans to construct a facility that will use more than 800 acre-feet (260.7 million gallons) of water per year, the Applicants must submit a water supply and water yield analysis to the Wyoming State Engineer's Office (WSEO). The State Engineer would then review the analysis and "render a preliminary opinion as to the quantity of water available for the proposed facility." This preliminary opinion would be made available for public comment, and the State Engineer would consider submitted comments in preparing a final opinion. The State Engineer's final opinion is binding on the ISC (W.S. §35-12-108).

Water will be required during construction for concrete production, soil compaction, and dust control on Project access roads. Water use would decrease substantially during operations. Water usage during operations would be limited to the operations and maintenance (O&M) building.

A water supply and yield analysis has not been conducted for the Project. However, it is conservatively anticipated that the volume of water required for construction of the Project would not exceed 200 acre-feet over the course of a 12-month construction period. The exact source for this water has not yet been determined, and there are several possible sources. Water used for Project construction would likely to be obtained from either temporary groundwater wells or from an offsite water purveyor. During Project operations, only minimal daily water use will be required to support onsite staff at the O&M building and is anticipated to be supplied by either an existing landowner well or a new domestic on-site well.

18 RECOMMENDED STUDY AREA AND AREA OF SITE INFLUENCE

The Project Study Area is the geographic and political boundary, as designated by the Administrator for the required governmental, social, and economic studies. The Study Area provides the boundaries for studies of counties and municipalities. Based on preliminary analysis

and discussions with staff from the Industrial Siting Division during an in-person meeting on July 9, 2019, ConnectGen respectfully recommends that the Study Area for the Project be defined as Albany County (**Figure A-3, Recommended Study Area and Area of Site Influence**).

The data gathered on existing conditions in the Study Area ultimately informs the determination of which areas and governments within the Study Area to include or omit from the recommended area of site influence. The area of site influence includes those areas within the Study Area that may be affected socially, economically, or environmentally in any significant degree, by the Project. The anticipated area of site influence is depicted in **Figure A-3, Recommended Study Area and Area of Site Influence.**

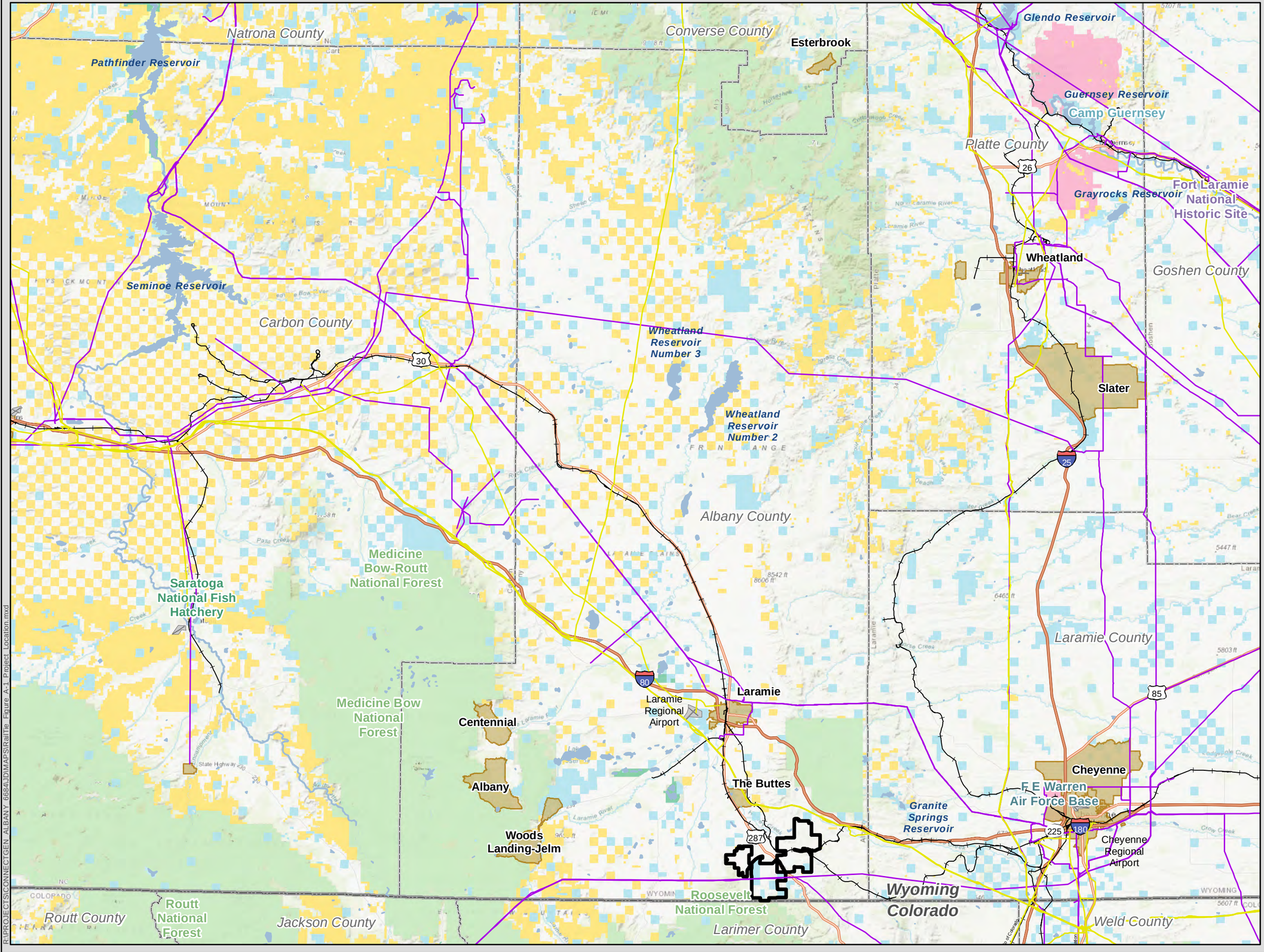
The recommended area of site influence includes the portion of the county where the Project would be located and the city of Laramie. Based on estimated commuting distances and the availability of temporary housing resources, the majority of workers temporarily relocating to work on the Project are expected to seek temporary accommodation in the city of Laramie. Some non-local workers may seek accommodation elsewhere in Albany County and Wyoming, including Laramie County, but the numbers involved are not expected to be large enough to affect these other potentially affected areas to a significant degree. Non-local workers may also seek accommodation in neighboring Larimer County, Colorado.

19 PROJECT DEQ AIR QUALITY PERMIT

The Project is a renewable energy generation facility, and no air emissions of criteria pollutants, greenhouse gases (GHG) or hazardous air pollutants (HAP) will be directly produced by the generation of electricity. Air emissions associated with the Project would include emissions from equipment used for construction and maintenance at the Project site (e.g., tailpipe exhaust from motor vehicles and construction equipment, fugitive dust resulting from travel on unpaved surfaces, etc.) and associated with the transport of Project equipment and supplies to the Project Area. In addition, portable concrete batch plants may be utilized onsite during construction.

Air emissions from Project construction and operation will be subject to Chapter 6 of the Wyoming Department of Environmental Quality's Air Quality Division Standards and Regulations. ConnectGen, or the construction contractor(s), will obtain all necessary air quality permits for construction upon final Project design and before construction begins. Air quality permits are not anticipated to be needed during Project operations.

ATTACHMENT A:
Maps



ConnectGEN

Rail Tie Wind Project

Figure A-1
Project Location

Albany County, WY

- Project Area
- Transmission Line
- Natural Gas Pipeline
- Interstate
- Highway
- Railroad
- Airport
- Urban Area
- Waterbody/Watercourse
- State Boundary
- County Boundary
- Department Of Defense (DOD)
- Bureau of Land Management (BLM)
- National Park Service (NPS)
- US Forest Service (USFS)
- US Fish and Wildlife (USFW)
- Bureau of Reclamation (BOR)
- State Land

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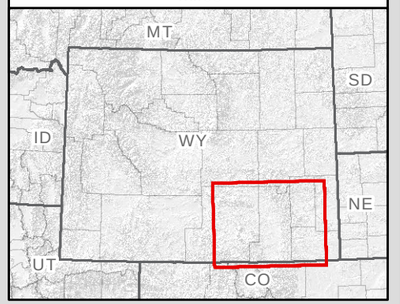
Miles



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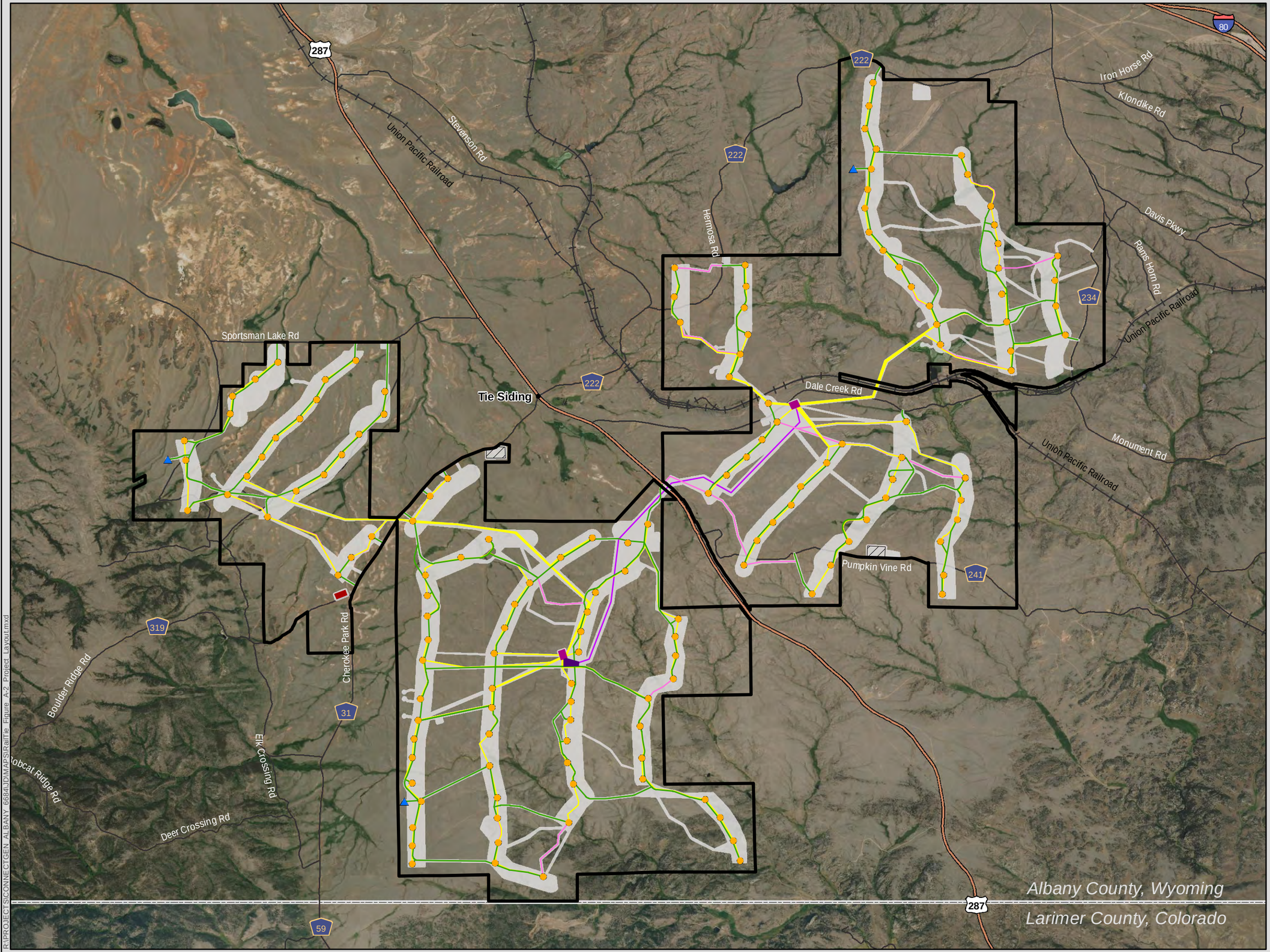
ConnectGEN

Rail Tie Wind Project

Figure A-2
Representative Project Layout and Siting Corridor

Albany County, WY



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- Project Area
- Siting Corridor

Representative Project Layout

- Turbine
- Met Tower
- Access Road
- Collection Line
- Crane Path
- Transmission Line
- Project Substation
- Interconnection Switchyard
- Laydown Yard
- O&M Site
- State/County Boundary
- Highways
- County Roads
- Railroads

NOTE: WTG locations shown in the figure are representative and may change based on final engineering, environmental review and WTG model selection.

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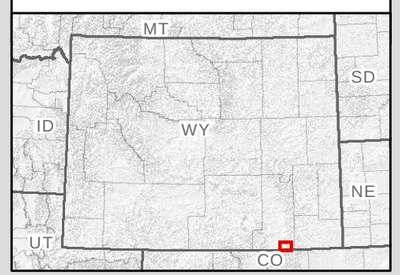
NOT FOR CONSTRUCTION



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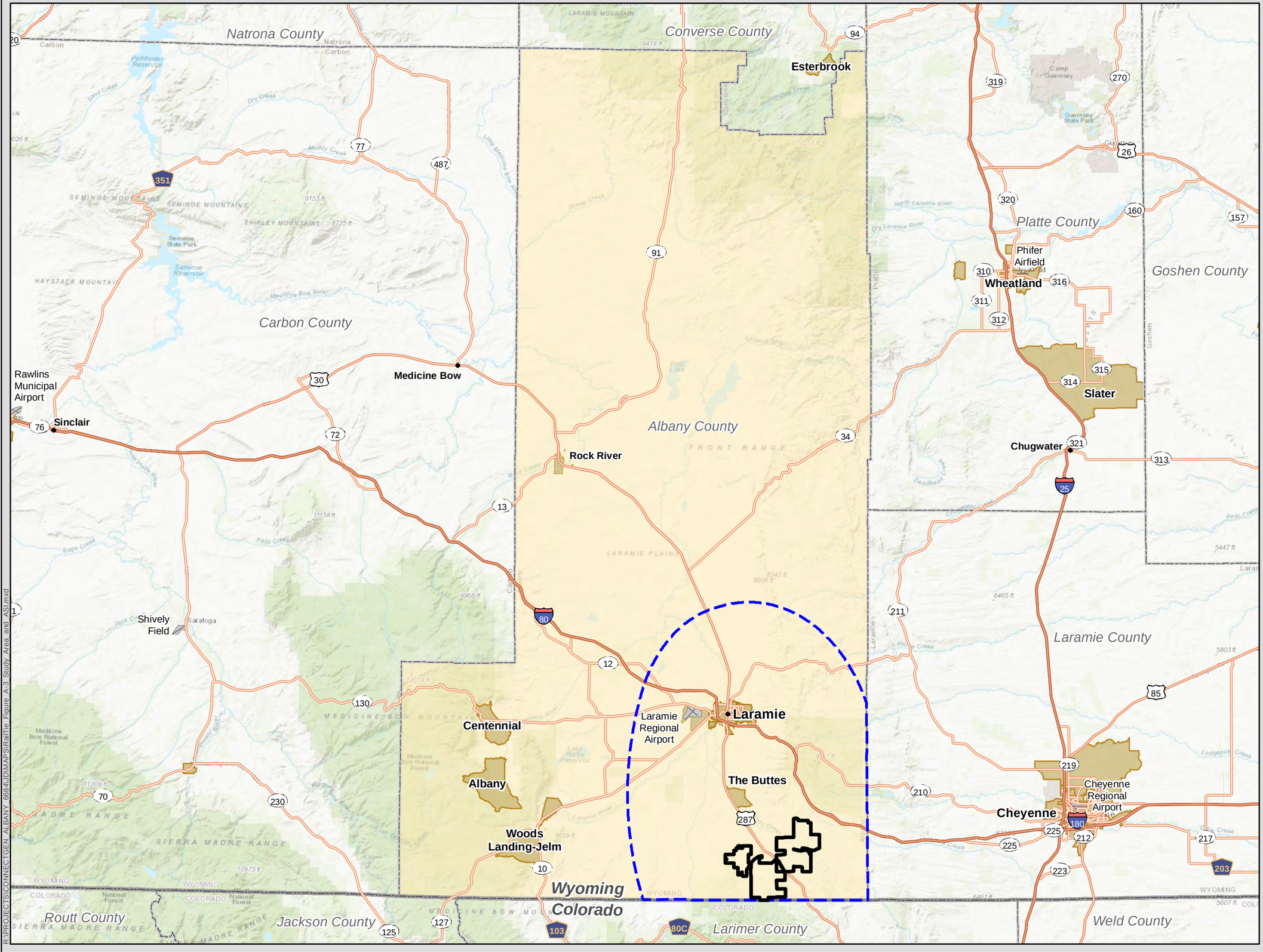
ConnectGEN

Rail Tie Wind Project

Figure A-3
Recommended Study Area and Area of Site Influence

Albany County, WY



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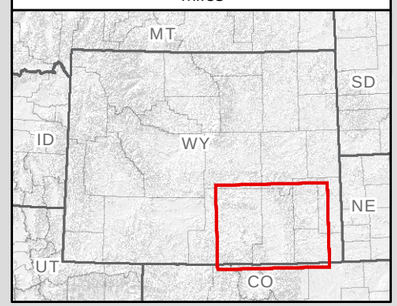

Project Area

Recommended Study Area

Recommended Area of Site Influence

Interstate

Highway

Airport

Urban Area

County Boundary

State Boundary

TETRA TECH

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ATTACHMENT B:
Legal Description

Rail Tie Wind Project
Legal Description

Township 14 North, Range 72 West of the 6th P.M., Albany County, Wyoming:

Section 35: All South of the centerline of Albany County Road 222, Hermosa Road

Township 13 North, Range 71 West of the 6th P.M., Albany County, Wyoming:

Section 7: S/2 S/2, S/2 N/2 S/2

Section 18: All, less County Road right of way

Section 19: All North of the Union Pacific Railroad right of way

Township 13 North, Range 72 West of the 6th P.M., Albany County, Wyoming:

Section 1: All lying Southerly of the County Road from Tie Siding, Wyoming, to Ames Monument as set out on the plat of N. E. Zipfel, County Surveyor (dated December 1, 1936) excepting Lot One (1) and East Nine (9) acres of Lot Two (2); That portion of the N½NW¼, W½NW¼NE ¼, and W½E½NW¼NE¼ lying North of Albany County Road No. 222 (known as Hermosa Road;

Section 2: All

Section 11: All

Section 12: All

Section 13: All

Section 14: All

Section 15: All

Section 16: All

Section 21: N/2

Section 22: All

Section 23: All, less Union Pacific Railroad right of way;

Section 24: All, less Union Pacific Railroad right of way;

Section 25: All

Section 26: All

Section 27: All

Section 28: N/2, N/2 S/2 Less Highway 287 right of way, S/2 S/2 ALL North & East of Highway 287

Section 29: A tract of land in the SE/4 of Section 29 more particularly described as follows: Beginning at the SE corner of Section 29: Thence N89°35'55"W 2,784 feet; Thence N42°21'46"E 3,379 feet; Thence S48°15'38"E 718 feet; Thence S0°48'44"W 2,038 feet to point of beginning of said tract.

Section 30: A tract of land in the NW/4 of Section 30 more particularly described as follows: Commencing at the NW corner of Section 30: Thence S0°40'12"W 1,020 feet to point of beginning; Thence S0°39'26"W 788 feet; Thence N89°30'21"E 1,404 feet; Thence N0°41'19"E 1,016 feet; Thence N79°28'25"W 528 feet; Thence S54°35'25"W 501 feet along Cherokee Park Road; Thence S84°25'28"W 482 feet along Cherokee Park Road to the point of beginning of said tract.

Section 31: All

Section 32: All

Section 33: All lying North and East of Highway 287

Section 34: All

Section 35: All lying north of Albany County Road 241, Pumpkin Vine Road.

Section 36: All

Township 13 North, Range 73 West of the 6th P.M., Albany County, Wyoming:

Section 22: S/2, W/2 NE/4, SE/4 NE/4, SE/4 NW/4

Section 23: All

Section 25: All lying south of Cherokee Park Road

Section 26: W/2, W/2 E/2

Section 27: All

Section 28: All, Less a tract in SW¼, which tract is more particularly described as follows: Commencing at a point that lies 345 feet South of the West Quarter corner of said Section and thence North 62°30' East, 765 feet; thence South 450 feet parallel with the West boundary of said Section; thence South 62°30' West, 765 feet to the West boundary of said Section; thence North along said Section line 450 feet to the point of beginning.

Section 34: All less SW/4

Section 35: All lying North and West of Cherokee Park Road

Section 36: All

Township 12 North, Range 72 West of the 6th P.M., Albany County, Wyoming:

Section 4: All

Section 5: All

Section 6: All

Section 7: All

Section 8: All

Section 16: All

Section 17: All

Section 18: All

Section 19: Lots 1, 2, 3, 4 (AKA N/2 N/2)

Township 12 North, Range 73 West of the 6th P.M., Albany County, Wyoming:

Section 1: All

Section 2: S/2 NW/4, Lots 3 and 4

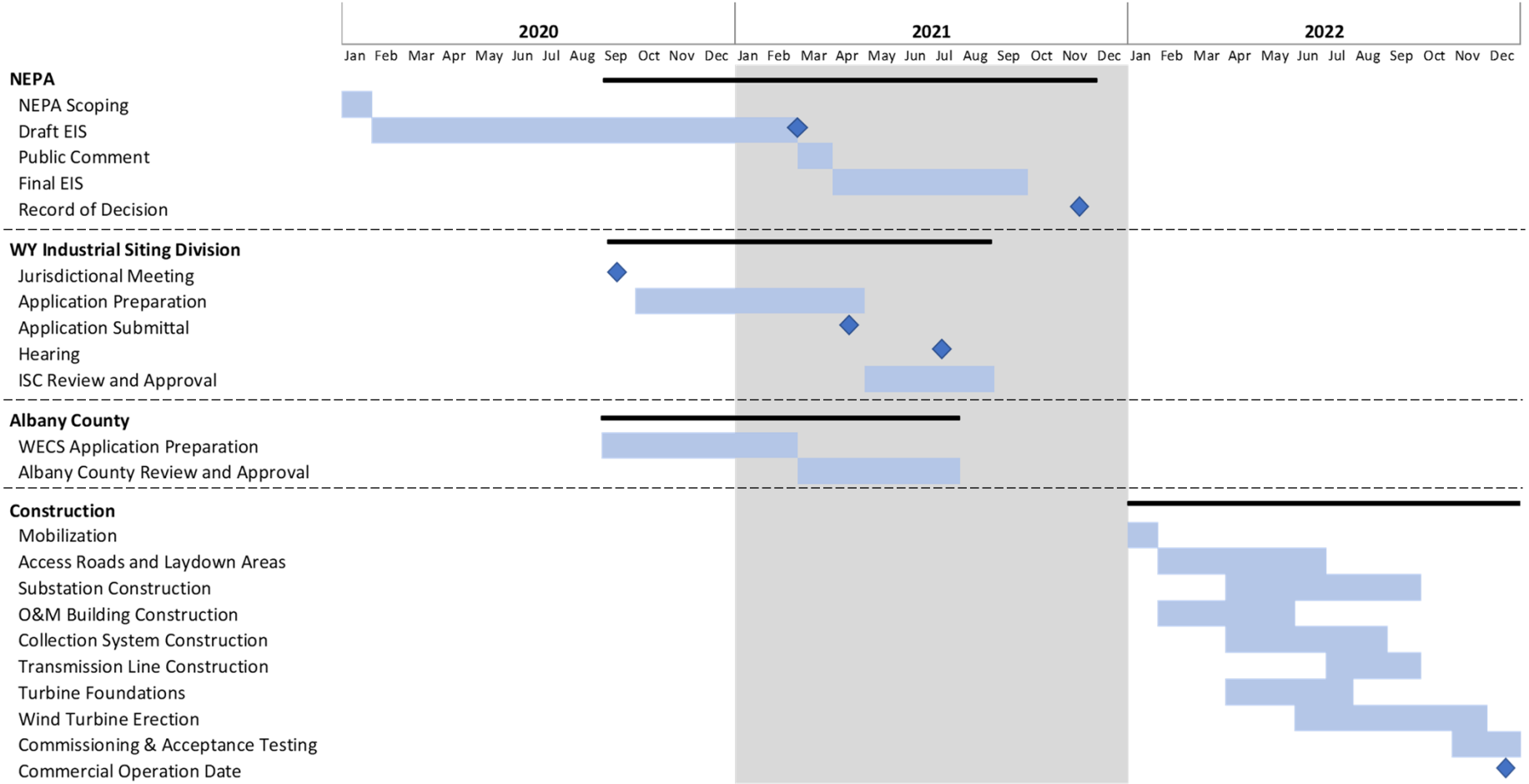
Section 3: All of the NE/4 lying North and West of Boulder Ridge Road

Section 12: All

Section 13: All

ATTACHMENT C:
Project Schedule

Project Schedule: ConnectGen is Targeting a Commercial Operations Date by the end of 2022



ConnectGEN

Mark Gordon, Governor

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

DEQ

Todd Parfitt, Director

September 10, 2020

Amanda MacDonald, Project Manager
ConnectGen Albany County LLC
1001 McKinney Street, Suite 700
Houston, TX 77002

NOTICE OF JURISDICTION – PERMIT REQUIRED INDUSTRIAL SITING COUNCIL DOCKET DEQ/ISC 20-09 CONNECTGEN ALBANY COUNTY LLC RAIL TIE WIND PROJECT

Dear Ms. MacDonald,

As a result of the jurisdictional meeting held on September 1, 2020 the Wyoming Department of Environmental Quality, Industrial Siting Division determined that ConnectGen Albany County LLC's project in Albany County called the Rail Tie Wind Project (Project) requires a permit from the Industrial Siting Council. The jurisdictional determination was based on the fact that the Project, as presented to ISD, meets the definition of a facility requiring a permit from the Industrial Siting Council. Specifically, the following factor was considered:

- The Project will consist of at least twenty (20) wind turbines.

Copies of the Industrial Development Information and Siting Act statutes and rules of the Industrial Siting Council were provided to you on August 26, 2020. The Study Area for this project includes Albany County and the City of Laramie.

When submitting the application, please include:

- 12 hard-bound copies and 40 .pdf-USB flash drive files of the application;
- Payment of the application fee; and
- A letter of transmittal from an officer with the authority to bind the corporation.

Colin McKee is available at colin.mckee1@wyo.gov and (307) 777-7244 to explain the application requirements and to provide information to assist with the preparation of the application.

Sincerely,

For Brian Lovett, Administrator
Industrial Siting Division

cc: Paul Hickey, Hickey & Evans, LLP
Todd Parfitt, Director, WDEQ
Matt VanWormer, Wyoming Attorney General's Office

State Engineer's Office

HERSCHLER BUILDING, 2 WEST
CHEYENNE, WYOMING 82002
(307) 777-6150

MARK GORDON
GOVERNOR

GREG LANNING
STATE ENGINEER

June 8, 2020

ConnectGen
Attn John Kuba,
Director Environmental Affairs
1001 McKinney St, Suite 700
Houston, TX 77002

RE: Rail Tie Wind Project

To Mr. Kuba,

To assist in the Platte River Recovery Implementation Program (PRRIP) compliance process involving the construction of the Rail Tie Wind Project, I reviewed the associated water-related activities.

The installation of approximately 149 wind turbines located within the North and South Platte River basins and the temporary water use of approximately 200 acre-feet during the 18 month construction is considered an existing water-related activity. Due to (1) the use of temporary water use agreements allowing for no new net depletions to occur within the North and South Platte River basins; and/or (2) the use of water from wells considered not hydrologically connected to the North Platte River or its tributaries; this water use is covered under Wyoming's Depletions Plan. Once the source of water through the temporary water use agreements and/or non-hydrologically connected groundwater wells is identified, mitigation will be determined unnecessary as there will be no new depletions of water within the North and South Platte River basins associated with the Rail Tie Wind Project. In the event this obligation is not met, the water use associated with this project will be reevaluated to determine any necessary mitigation.

If any further questions or comments exist, please don't hesitate to contact me.

Sincerely,

Jeffrey R. Cowley

North Platte River Coordinator
State Coordinator, Wyoming's Depletion Plan

ARTS. PARKS. HISTORY.
Wyoming State Parks & Cultural Resources

Mark Gordon | *Governor*
Darin J. Westby, P.E. | *Director*
Domenic Bravo | *Administrator*
Sara Needles | *Administrator*

Received
MAR 2 7 2019
TETRA TECH
GOLDEN OFFICE

Mar 19, 2019

Amy Sherman
Tetra Tech, Inc.
350 Indiana Street, Suite 500
Golden, CO 80404

Re: Proposed Albany County Wind Project, Albany County (SHPO File # 0319JRD004)

Dear Mrs. Sherman:

Thank you for consulting with the Wyoming State Historic Preservation Office (SHPO) regarding the above referenced undertaking. Due to a lack of existing information in the project area, we recommend a class III survey be done prior to any construction activities.

Please refer to the SHPO project control number 0319JRD004 on any future correspondence dealing with this project. If you have any questions, contact me at 307-777-8793.

Sincerely,

Joseph Daniele
Wyoming State Historic Preservation Office

WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006

Phone: (307) 777-4600 Fax: (307) 777-4699

wgfd.wyo.gov

April 12, 2019

WER 14216.00
Tetra Tech, Inc.
Proposed Albany County Wind Project
Albany County

Amy Sherman
Project Manager
Tetra Tech, Inc.
350 Indiana Street, Suite 500
Golden, CO 80404

Dear Ms. Sherman,

The staff of the Wyoming Game and Fish Department (Department) has reviewed the proposed Albany County Wind Project located in Albany County. We offer the following comments for your consideration.

Terrestrial Considerations:

Bats

The following are general recommendations aimed at standardizing surveys to improve our understanding and provide guidance on collection of baseline data related to bat issues (e.g., causal factors, species susceptibility, distribution, abundance, and behavior). These recommendations were developed by the Department and the Wyoming Bat Working Group (WYBWG) specifically to address survey standardization in Wyoming. If additional information on broader objectives is required, please consult survey recommendations in Hester and Grenier (2005). These recommendations are intended to provide specific details (e.g., timing, duration, equipment, etc.), yet remain flexible enough to provide managers with the ability to prescribe appropriate surveys (e.g., pre- and post-construction, etc.) across a broad range of project sites. A combination of multiple approaches (e.g., passive and active acoustic or passive acoustic and carcass searches, etc.) is recommended and survey strategies may vary by site. At a minimum, passive acoustic surveys and North American Bat Monitoring Program monitoring protocols should be implemented during the pre-construction phase and continue through post-construction, and carcass searches should be conducted during the post-construction phase.

Habitat Evaluation

1. Objective – Identify and quantify existing bat habitats within a project site.

2. Rationale – The results can be used to identify potential roosting and foraging areas for bats within project sites to prioritize surveys and improve siting. The analysis can also be used to quantify changes in habitat.

3. Equipment – No specialized equipment is required, however, analysis is most easily completed using remote sensing techniques (e.g., aerial or satellite imagery) and GIS.

4. Application – A pre-construction evaluation should be completed by identifying potential foraging areas (i.e., Forest and Woodlands, Grasslands and Shrub-steppe, Riparian Corridors, and Water Features) and roosting areas (i.e., Rock Shelters, Forest and Woodlands, Riparian Corridors) within the project boundary. Please refer to "A Conservation Plan for Bats in Wyoming" (Hester and Grenier 2005) for additional information on habitats and associated bat species. Habitat can be evaluated either remotely (e.g., GIS) or using ground surveys. Delineate foraging and roosting habitats within the project site. If the pre-construction evaluation is done using remote sensing, then field verification is also recommended. Compare proposed turbine siting data with the results of the habitat evaluation to identify potential conflict areas.

   A post-construction habitat evaluation is recommended following development of the project site. Compare pre- and post-construction habitat evaluations to quantify changes in habitats within the project site.

5. Analysis of Data – Total area and the percentage of each foraging and roosting habitat type present within the project area prior to construction should be reported.

North American Bat Monitoring Program (NABat) -Recommended

1. Objective – Identify resident bat species' presence and occupancy in the project area allowing for trend analyses.

2. Rationale – NABat is a continent-wide effort to monitor and assess trends of bat species (Loeb et al. 2015). NABat protocols can be continued throughout the life of the project to better assess impacts to resident bats. While passive and active acoustic surveys described above and below allow for a compilation of species present, they provide only a single snapshot in time and do not allow for analysis of species composition trends.

3. Equipment – The same equipment used for passive acoustic monitoring should be used for NABat surveys. If equipment is limited, acoustic detectors can be reallocated from passive acoustic surveys to NABat monitoring and then returned to passive acoustic surveys after the monitoring window.

4. Application – Follow methods outlined in Chapter 3 – The NABat Sampling Design and Chapter 4 – Stationary Point Acoustic Survey Protocols in Loeb et al. (2015). Conduct as many grids in the project area as is feasible and possible within the sampling time-frame. The goal of NABat is to target resident populations before juveniles enter the population. In general, this is between May 15 and July 10 in Wyoming, although specific timing will depend on location and elevation of the site.

5. 5. Analysis of Data – Refer to Chapter 6 – Species Identification of Acoustic Recordings and Chapter 9 – Analysis in Loeb et al. (2015) for analysis.

Passive Acoustic Surveys

1. Objective – Identify and quantify bat species and relative abundance near the rotor sweep zone.

2. Rationale – Results can be used to identify bat species presence and describe bat behavior (e.g., spatial and temporal use, etc.) likely to occur near rotor sweep zone. Data can also be used as an index of relative abundance for this component of the project area. Season-long surveys will allow for an assessment of the entire bat community, including residents and migrants. For passive acoustic survey recommendations that address broader objectives see Abel and Grenier (2007).

3. Equipment – There are many systems available for acoustic monitoring of bats (e.g., Song Meter SM2, AnaBat, Pettersson D500x, Binary Acoustics, etc.). Currently, the recommended bat detectors are full-spectrum, SonoBat-compatible units (e.g., Song Meter SM2, Pettersson D500x). If other systems are to be used, please consult the WYBWG prior to data collection to ensure that survey equipment is compatible with survey objectives.

4. Application – Passive acoustic survey stations should be designed to collect bat calls at ≥ 50m whenever possible to identify activity within the rotor sweep zone. Met Towers often provide an appropriate structure for this type of data collection. At least one acoustic unit, aimed away from the prevailing wind direction, per Met Tower should be utilized. A second unit, placed near the ground (e.g., < 5 m), can be used to quantify bat activity below the rotor sweep zone in areas that concentrate bat use (e.g., roosting or foraging areas, etc.).

   Units should be deployed between April 15 and October 15 and be programmed to begin data collection ½ hr prior to sunset and end data collection ½ hr after sunrise. Equipment should be calibrated annually and checked bi-monthly to ensure that units are properly functioning. Non-functioning equipment should be replaced immediately. Storage cards should be rotated bi-monthly for data analysis.

The number of acoustic survey stations needed for a project will vary depending on the available bat habitat in the area. If few (e.g., ≤ 2) survey stations are used during the pre-construction survey period, then the data collection period may need to extend past two years to ensure that the data accurately reflect conditions (e.g., species diversity, temporal and spatial use, etc.) within the project area.

Results from previous studies have demonstrated a high correlation between data collected using the above recommendations and project site conditions (e.g., species diversity, temporal and spatial use, etc.) despite constraints that each unit samples a small amount of area (Weller 2007, Collins and Jones 2009). Please refer to Weller (2007) for additional specifics regarding the deployment of passive units on met towers.

5. Analysis of Data –Analysis of bat calls should only be performed by experienced personnel. Species identification should be made whenever possible; however, calls should at a minimum be identified to a frequency grouping (e.g., 25 kHz, 40 kHz, etc.).

   For each unit deployed report the total number of calls, number of identifiable calls, total number of survey nights, number of species detected, scientific name of species detected, and number and identity of frequency groups detected (e.g., 25 kHz, 40 kHz, etc.). The index of activity should be reported as the total calls per survey night per unit. The location (i.e., UTM), equipment aspect, microphone height, surveyor, and name of call analyst should also be reported.

   A voucher call (i.e., representative call sequence) should be submitted for each species, and frequency groups detected with the final report. The following supporting information should be supplied for each voucher call, location (i.e., UTM), date, time, scientific name of species detected, detector height and aspect, and name of call analyst.

Carcass Search

1. Objective – Identify and quantify bat species mortality after construction of turbines.

2. Rationale – The results of post-construction carcass searches are used to estimate mortality rates of bats at wind energy development sites.

3. Equipment – The WYBWG recommends searchers have their rabies prophylactic vaccination prior to conducting carcass searches to minimize risk associated with handling dead or wounded bats. A Chapter 33 Scientific Collection Permit is also required by the Wyoming Game and Fish Department for all personnel planning to collect bat carcasses.

4. Application – Carcass searches should be conducted weekly during two periods (Apr 15 – Jun 15) and (Aug 1 – Sept 30). More intensive carcass searches may be conducted if

necessary. We recommend that a subset of carcasses collected be submitted to the Wyoming Game and Fish Department as voucher specimens. Remaining carcasses (that likely remain attractive to scavengers) should be used to determine searcher efficiency and disappearance rates (Kerns 2005, Arnett et al. 2008). Carcass searches should be conducted in a robust method and estimates should correct for disappearance rates and searcher efficiency (Arnett et al. 2009, Baerwald et al. 2009).

5. Analysis of Data – Report age, sex, species, total number of killed and wounded bats found, and an estimate of bat mortality (Arnett et al. 2009, Baerwald et al. 2009). Reporting procedures for the Wyoming Game and Fish Department Chapter 33 Scientific Collection Permits must also be followed.

Passerines and Raptors

Each proposed wind energy project is site-specific with local differences in avian species present, season and type of use, habitat, topography, weather patterns, and site development potential. Appropriate site selection for wind energy development is key in preventing negative impacts to birds. In addition, planning a wildlife-friendly wind energy development can lower long-term costs and potential liabilities under Federal wildlife protection laws, such as the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and the Endangered Species Act. Therefore, detailed planning and survey efforts prior to construction will identify problems that may occur, how to circumvent these problems, how to mitigate problems that cannot be avoided, and identify sites that are unsuitable for development. We encourage developers to meet as soon as possible with the U.S. Fish and Wildlife Service (USFWS) to get their input relating to potential impacts to migratory birds and raptors.

We recommend the following monitoring recommendations for pre-, during, and post-construction should be implemented when wind energy projects are proposed or occur in areas occupied by breeding, foraging, and migrating birds, especially Species of Greatest Conservation Need (SGCN).

1. Perform a risk assessment reconnaissance survey that includes a review of existing wildlife databases, maps, literature, reports, and aerial photographs, as well as discussions with wildlife experts, to determine concerns and potential conflicts with birds occurring in the proposed development area. Results may indicate that certain sites are unsuitable for wind energy or that the size of the project may need to be scaled back.

2. Until a sufficient body of scientific research is developed nationwide to determine acceptable certainty regarding the level of disturbance or displacement of birds due to wind energy developments in general, wind project proponents are expected to implement appropriate monitoring to help answer this question on a case-by-case basis in Wyoming.

3. We recommend conducting pre-construction surveys within the project area and within 1 mile of the project boundary using the techniques described below. Data should document the species and number of birds observed, their movements and distribution, the proportion of birds occurring within the rotor sweep area, and altitude and orientation of flight during various weather conditions.

Point Counts

1. Conduct spring and autumn point- count surveys to detect resident and migrant passerines, and other localized birds. Fixed-radius point count surveys (Reynolds et al. 1980) should be conducted weekly over a 12-week period in spring and again in fall in order to detect early, mid, and late migrants. Point count surveys should begin in April to late June (depending on location and elevation) to detect breeding songbirds. Points should be randomly distributed across the proposal area or strategically placed to assess data at turbine locations (depending on the proposed development design). A sufficient number of points should be incorporated in the design to enable statistical power in the analyses. Surveys should begin ½ hour before official sunrise and end approximately 4 to 5 hours after official sunrise (USGS 1998) for breeding birds; and occur at other times during the day for other birds. UTM coordinates of the count site, number of birds detected, time, and species should be recorded. Surveys should be conducted for 20 minutes at each point to optimize surveying time and number of stations (points) in the survey (Reynolds et al. 1980). Sufficient distance between point count stations should be considered to avoid duplication of counts (Alldredge et al. 2006, Buckland et al. 2009).

2. Winter surveys- A minimum of 2 surveys should be conducted per season: early winter from 1 December – 15 January and late winter from 16 January – 28 February. Follow point count protocol. Species, number of birds detected, time, primary habitat, and UTM coordinates of each sighting should be recorded.

3. Depending upon survey results, additional surveys for sensitive avian species (e.g. SGCN) present within sensitive habitats (e.g. wetlands, riparian areas) may be suggested. Survey methodology will depend on the species present.

Raptors

1. We recommend one day-long survey for raptors should occur each week during both the spring and autumn 12-week period of bird point counts. UTM coordinates of the count site, location relative to the project, number of birds detected, sex and age class (if possible), time, species, behavior, altitude, flight direction, and primary habitat should be recorded. Any observations of large flocks of non-raptors (waterfowl, shorebirds, swallows, cranes, etc.) should also be recorded.
2. We recommend area search surveys occur during the breeding season to locate raptor nests. Surveys to locate raptor nest structures within suitable habitat (trees, rock outcrops, hillsides, etc.) can be conducted either aerially in a low-flying fixed-wing

aircraft or helicopter, or on foot along transects that are no more that ½ mile apart (depending on topography and physical features) or by driving along public roads and accessible private roads that are within 1.0 miles of the project area. In general, the method used will depend on the size and accessibility of the proposed project site. However, if ground surveys cannot provide comprehensive coverage and accurate locations of nests within the project area, aerial surveys should be implemented. UTM coordinates, nesting substrate, status (occupied, unoccupied, incubating adult, young in the nest), and primary habitat should be recorded for each nest located. See the Table 2 for species-specific survey dates.

Carcass Search and Collection

1. Conduct carcass collection surveys for the duration of post-construction monitoring; typically 3 years (appropriate state and federal permits are required for carcass salvage). The extent (e.g. sub-sample versus complete sample of developed area), frequency (e.g. daily, weekly, biweekly), and seasonality (e.g. migration, breeding season) should be determined prior to the initiation of the surveys and will be influenced by site-specific characteristics such as terrain and vegetation type, bird population levels, size of the development, and the level of impact the development has on birds in the area. All carcasses should be collected and identified. Annual fatality rates per MW or per turbine should be estimated. Actual fatality rates at wind turbines are incompletely observed and must be adjusted by at least these two factors: carcass removal by scavengers and searcher efficiency rates. Scavenger removal trials should be conducted at each site to determine the length of time it takes scavengers to find and remove carcasses. This rate can then be factored into statistical estimations of fatality rates to provide more accurate estimates (for protocols see Smallwood 2007).

2. Searcher efficiency trials should be conducted at each site to account for differences in vegetation and individual detection rates. This rate can then be factored into statistical estimations of fatality rates to provide more accurate estimates (for protocols see Kunz et al. 2007).

We also recommend that pre-construction monitoring be conducted for Burrowing Owl, Long-billed Curlew, Mountain Plover, and Swift Fox. Swift Fox den sites should be identified prior to construction. The Department recommends conducting surveys as described within the Departments Wildlife Handbook of Biological Techniques. https://wgfd.wyo.gov/Wildlife-in-Wyoming/More-Wildlife/Handbook-Bio-Techniques

Finally, we recommend that incidental sitings of other wildlife species be documented while work is being done at the proposed project location.

Aquatic Considerations:

A portion of the Albany County Wind Project occurs within the Harney Creek-Laramie River 5th level Hydrological Unit Code (HUC) (10 digits) that contain the following SGCN species: Brassy minnow (Tier 3) and common shiner (Tier 3). We recommend that a Reconnaissance Level Assessment (RLA) or similar method be completed only for that portion of the Albany County Wind Project that occurs within the Harney Creek-Laramie River 5th level HUC.

Amphibians

Potential habitat for the Wyoming Toad (Tier 1) occurs within the boundary of the Albany County Wind Project boundary. In addition to being a Department's Tier 1 SGCN species, the Wyoming Toad is also an Endangered Species under the Endangered Species Act. Management of this species falls under the USFWS. We recommend that Mr. Doug Keinath, USFWS Recovery Coordinator, at 307-760-4201 be contacted to determine if additional surveys are needed for the Wyoming Toad.

Potential habitat for the Plains Spadefoot Toad (Tier 2) also occurs within the boundary of the Albany County Wind Project boundary. We recommend the following:

If a SGCN is known to occur or has the potential to occur within or near a development project, the Department will recommend monitoring for that species during interagency consultations. Department recommendations will be provided as follows

- The Department recommends the monitoring of SGCNs start with creating habitat maps for a development project. In conjunction with mapping terrestrial habitats, the Department will also recommend that the following water features also be mapped: ephemeral drainages, perennial waters, vernal pools and playas.

- If SGCN amphibian habitat is not found during mapping, no additional monitoring recommendations will be made during interagency consultation. However, incidental monitoring is recommended during other wildlife surveys. Incidental observations will allow for general trend data, which could elucidate possible shifts in species assemblages resulting from energy development. All amphibians encountered incidentally during other wildlife surveys are documented. Species, geographic coordinates (preferably decimal degrees or UTM), date, age class (adult, juvenile, larval, or egg), general vegetation type, and general comments are requested for each observation.

- However, if suitable SGCN amphibian habitat is found on the project site, the Department recommends the project developer contact the Department to discuss if the project can be designed to avoid SGCN habitat. To protect SGCN amphibian habitat, the Department may recommend a 500 meter buffer between project construction activities

and suitable SGCN habitat. This buffer was designed to incorporate SGCN average home range and migration distances (Baxter and Stone 1985, Hammerson 1999, Lannoo 2005, Werner et al. 2004). If the project is designed such that habitat disturbance is located greater than 500 meters from suitable SGCN amphibian habitat, additional monitoring will not be recommended during interagency consultation. However, incidental monitoring is recommended.

- If SGCN amphibian habitat cannot be avoided, the Department will work with the project developer to determine the type and level of additional monitoring.

- Because of breeding chronology and the secretive nature of some SGCN species, two years of survey are recommended before development begins. During pre-development surveys, important SGCN amphibian areas (such as breeding sites) should be designated for avoidance during construction if possible. Where impacts are unavoidable, the Department will recommend surveys continue at least three years post-construction to determine possible effects of development on SGCN amphibian species.

- Mitigation, including habitat replacement, may be recommended if SGCN habitats or species are to be impacted.

- The Department recommends reclamation plans of disturbed habitat sites or management plans for these species be developed that specifically address the needs of SGCN species.

Reptiles

All reptiles encountered incidentally during wildlife surveys should be documented. Species, geographic coordinates (preferably decimal degrees or UTM), date, age class (adult, juvenile, larval, or egg), general vegetation type, and general comments are requested for each observation. Observations will be collected while performing other wildlife surveys within the study area. We recommend that 2 years of pre-construction incidental monitoring and 3 years post-construction incidental monitoring be completed. A two year pre-construction time frame helps ensure that surveys can be conducted in a wide range of environmental conditions. Many species that are rare or cryptic may easily be overlooked with only one year of survey. If a SGCN is discovered during the incidental observations, additional monitoring may be recommended.

Thank you for the opportunity to comment. If you have any questions or concerns please contact Rick Huber, Habitat Protection Biologist, at 307-777-4558 or Matt Fry, Habitat Protection Biologist, at 307-777-4510.

Sincerely,

Angi Bruce
Habitat Protection Supervisor

AB/mf/ml

cc: U.S. Fish and Wildlife Service
Doug Keinath, Recovery Coordinator, U.S. Fish and Wildlife Service
Bobby Compton, Wyoming Game and Fish Department
Wendy Estes-Zumpf, Wyoming Game and Fish Department
Chris Wichmann, Wyoming Department of Agriculture, Cheyenne

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January 29, 2020

WER 14216.01
Wyoming Department of Environmental Quality
Proposed Rail Tie Wind Project
Environmental Impact Statement
Albany County

Mark Wieringa
NEPA Document Manager
Western Area power Administration, Headquarters
PO Box 281213
Lakewood, CO 80228-8213
RailTieWind@wapa.gov

Dear Mr. Wieringa,

The staff of the Wyoming Game and Fish Department (Department) has reviewed the proposed Rail Tie Wind Project Environmental Impact Statement located in Albany County. We offer the following comments for your consideration.

Terrestrial Considerations:

The Department previously provided recommendations to the project proponent regarding pre-construction surveys. Those comments are re-iterated below. Additionally, we are providing more specific recommendations for potentially affected resources.

Bats

The following are general recommendations aimed at standardizing surveys to improve our understanding and provide guidance on collection of baseline data related to bat issues (e.g., causal factors, species susceptibility, distribution, abundance, and behavior). These recommendations were developed by the Department and the Wyoming Bat Working Group (WYBWG) specifically to address survey standardization in Wyoming. If additional information on broader objectives is required, please consult survey recommendations in Hester and Grenier (2005). These recommendations are intended to provide specific details (e.g., timing, duration, equipment, etc.), yet remain flexible enough to provide managers with the ability to prescribe appropriate surveys (e.g., pre- and post-construction, etc.) across a broad range of project sites. A combination of multiple approaches (e.g., passive and active acoustic or passive acoustic and carcass searches, etc.) is recommended and survey strategies may vary by site. At a minimum, passive acoustic

surveys and North American Bat Monitoring Program monitoring protocols should be implemented during the pre-construction phase and continue through post-construction, and carcass searches should be conducted during the post-construction phase.

Habitat Evaluation

1. Objective – Identify and quantify existing bat habitats within a project site.

2. Rationale – The results can be used to identify potential roosting and foraging areas for bats within project sites to prioritize surveys and improve siting. The analysis can also be used to quantify changes in habitat.

3. Equipment – No specialized equipment is required, however, analysis is most easily completed using remote sensing techniques (e.g., aerial or satellite imagery) and GIS.

4. Application – A pre-construction evaluation should be completed by identifying potential foraging areas (i.e., Forest and Woodlands, Grasslands and Shrub-steppe, Riparian Corridors, and Water Features) and roosting areas (i.e., Rock Shelters, Forest and Woodlands, Riparian Corridors) within the project boundary. Please refer to "A Conservation Plan for Bats in Wyoming" (Hester and Grenier 2005) for additional information on habitats and associated bat species. Habitat can be evaluated either remotely (e.g., GIS) or using ground surveys. Delineate foraging and roosting habitats within the project site. If the pre-construction evaluation is done using remote sensing, then field verification is also recommended. Compare proposed turbine siting data with the results of the habitat evaluation to identify potential conflict areas.

   A post-construction habitat evaluation is recommended following development of the project site. Compare pre- and post-construction habitat evaluations to quantify changes in habitats within the project site.

5. Analysis of Data – Total area and the percentage of each foraging and roosting habitat type present within the project area prior to construction should be reported.

North American Bat Monitoring Program (NABat) –Recommended

1. Objective – Identify resident bat species' presence and occupancy in the project area allowing for trend analyses.

2. Rationale – NABat is a continent-wide effort to monitor and assess trends of bat species (Loeb et al. 2015). NABat protocols can be continued throughout the life of the project to better assess impacts to resident bats. While passive and active acoustic surveys described

above and below allow for a compilation of species present, they provide only a single snapshot in time and do not allow for analysis of species composition trends.

3. Equipment – The same equipment used for passive acoustic monitoring should be used for NABat surveys. If equipment is limited, acoustic detectors can be reallocated from passive acoustic surveys to NABat monitoring and then returned to passive acoustic surveys after the monitoring window.

4. Application – Follow methods outlined in Chapter 3 – The NABat Sampling Design and Chapter 4 – Stationary Point Acoustic Survey Protocols in Loeb et al. (2015). Conduct as many grids in the project area as is feasible and possible within the sampling time-frame. The goal of NABat is to target resident populations before juveniles enter the population. In general, this is between May 15 and July 10 in Wyoming, although specific timing will depend on location and elevation of the site.

5. Analysis of Data – Refer to Chapter 6 – Species Identification of Acoustic Recordings and Chapter 9 – Analysis in Loeb et al. (2015) for analysis.

Passive Acoustic Surveys

1. Objective – Identify and quantify bat species and relative abundance near the rotor sweep zone.

2. Rationale – Results can be used to identify bat species presence and describe bat behavior (e.g., spatial and temporal use, etc.) likely to occur near rotor sweep zone. Data can also be used as an index of relative abundance for this component of the project area. Season-long surveys will allow for an assessment of the entire bat community, including residents and migrants. For passive acoustic survey recommendations that address broader objectives see Abel and Grenier (2007).

3. Equipment – There are many systems available for acoustic monitoring of bats (e.g., Song Meter SM2, AnaBat, Pettersson D500x, Binary Acoustics, etc.). Currently, the recommended bat detectors are full-spectrum, SonoBat-compatible units (e.g., Song Meter SM2, Pettersson D500x). If other systems are to be used, please consult the WYBWG prior to data collection to ensure that survey equipment is compatible with survey objectives.

4. Application – Passive acoustic survey stations should be designed to collect bat calls at ≥ 50m whenever possible to identify activity within the rotor sweep zone. Met Towers often provide an appropriate structure for this type of data collection. At least one acoustic unit, aimed away from the prevailing wind direction, per Met Tower should be utilized. A second unit, placed near the ground (e.g., < 5 m), can be used to quantify bat activity below the rotor sweep zone in areas that concentrate bat use (e.g., roosting or foraging areas, etc.).

Units should be deployed between April 15 and October 15 and be programmed to begin data collection ½ hr prior to sunset and end data collection ½ hr after sunrise. Equipment should be calibrated annually and checked bi-monthly to ensure that units are properly functioning. Non-functioning equipment should be replaced immediately. Storage cards should be rotated bi-monthly for data analysis.

The number of acoustic survey stations needed for a project will vary depending on the available bat habitat in the area. If few (e.g., ≤ 2) survey stations are used during the pre-construction survey period, then the data collection period may need to extend past two years to ensure that the data accurately reflect conditions (e.g., species diversity, temporal and spatial use, etc.) within the project area.

Results from previous studies have demonstrated a high correlation between data collected using the above recommendations and project site conditions (e.g., species diversity, temporal and spatial use, etc.) despite constraints that each unit samples a small amount of area (Weller 2007, Collins and Jones 2009). Please refer to Weller (2007) for additional specifics regarding the deployment of passive units on met towers.

5. Analysis of Data –Analysis of bat calls should only be performed by experienced personnel. Species identification should be made whenever possible; however, calls should at a minimum be identified to a frequency grouping (e.g., 25 kHz, 40 kHz, etc.).

   For each unit deployed report the total number of calls, number of identifiable calls, total number of survey nights, number of species detected, scientific name of species detected, and number and identity of frequency groups detected (e.g., 25 kHz, 40 kHz, etc.). The index of activity should be reported as the total calls per survey night per unit. The location (i.e., UTM), equipment aspect, microphone height, surveyor, and name of call analyst should also be reported.

   A voucher call (i.e., representative call sequence) should be submitted for each species, and frequency groups detected with the final report. The following supporting information should be supplied for each voucher call, location (i.e., UTM), date, time, scientific name of species detected, detector height and aspect, and name of call analyst.

Carcass Search

1. Objective – Identify and quantify bat species mortality after construction of turbines.

2. Rationale – The results of post-construction carcass searches are used to estimate mortality rates of bats at wind energy development sites.

3. Equipment – The WYBWG recommends searchers have their rabies prophylactic vaccination prior to conducting carcass searches to minimize risk associated with handling dead or wounded bats. A Chapter 33 Scientific Collection Permit is also required by the Wyoming Game and Fish Department for all personnel planning to collect bat carcasses.

4. Application – Carcass searches should be conducted weekly during two periods (Apr 15 – Jun 15) and (Aug 1 – Sept 30). More intensive carcass searches may be conducted if necessary. We recommend that a subset of carcasses collected be submitted to the Wyoming Game and Fish Department as voucher specimens. Remaining carcasses (that likely remain attractive to scavengers) should be used to determine searcher efficiency and disappearance rates (Kerns 2005, Arnett et al. 2008). Carcass searches should be conducted in a robust method and estimates should correct for disappearance rates and searcher efficiency (Arnett et al. 2009, Baerwald et al. 2009).

5. Analysis of Data – Report age, sex, species, total number of killed and wounded bats found, and an estimate of bat mortality (Arnett et al. 2009, Baerwald et al. 2009). Reporting procedures for the Wyoming Game and Fish Department Chapter 33 Scientific Collection Permits must also be followed.

Passerines and Raptors

Each proposed wind energy project is site-specific with local differences in avian species present, season and type of use, habitat, topography, weather patterns, and site development potential. Appropriate site selection for wind energy development is key in preventing negative impacts to birds. In addition, planning a wildlife-friendly wind energy development can lower long-term costs and potential liabilities under Federal wildlife protection laws, such as the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act, and the Endangered Species Act. Therefore, detailed planning and survey efforts prior to construction will identify problems that may occur, how to circumvent these problems, how to mitigate problems that cannot be avoided, and identify sites that are unsuitable for development. We encourage developers to meet as soon as possible with the U.S. Fish and Wildlife Service (USFWS) to get their input relating to potential impacts to migratory birds and raptors.

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proposed development area. Results may indicate that certain sites are unsuitable for wind energy or that the size of the project may need to be scaled back.

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1. We recommend one day-long survey for raptors should occur each week during both the spring and autumn 12-week period of bird point counts. UTM coordinates of the count site, location relative to the project, number of birds detected, sex and age class (if possible), time, species, behavior, altitude, flight direction, and primary habitat should be recorded. Any observations of large flocks of non-raptors (waterfowl, shorebirds, swallows, cranes, etc.) should also be recorded.

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Additional Terrestrial Considerations

In the event that project construction activities occur within designated big game crucial winter range, we recommend that no construction activities occur November 15 – April 30. Additionally, our field staff have historically observed seasonal movements of elk, mule deer and pronghorn in the proposed project area. We recommend that more focused observations of these movements occur in order to better understand the way that big game utilize the project area.

Based on the location and topography of the proposed project area, it may be conducive to raptor migratory pathways. We recommend that the analysis consider this and that project infrastructure avoid areas that are used for raptor migrations.

We recommend incidental sitings of other wildlife species be documented while work is being done at the proposed project location.

Finally, potential impacts to public access for hunting should be addressed. The Rail Tie project area overlaps the Cherokee Park Hunter Management Area. Maintaining hunter access to lands developed for wind energy is vital to enable the Department to successfully manage game populations and the habitats upon which they depend, to maintain the quality of the hunting experience in Wyoming, and to reduce subsequent overcrowding of remaining public areas used by hunters. Access for hunting should continue within the project area with landowner permission.

Aquatic Considerations:

A portion of the Rail Tie Wind Project occurs within the Harney Creek-Laramie River 5th level Hydrological Unit Code (HUC) (10 digits) that contain the following Species of Greatest Conservation Need (SGCN) species: Brassy minnow (Tier 3) and common shiner (Tier 3). We recommend that a Reconnaissance Level Assessment (RLA) or similar method be completed only for that portion of the Rail Tie Wind Project that occurs within the Harney Creek-Laramie River 5th level HUC.

Amphibians

Potential habitat for the Wyoming Toad occurs within the boundary of the Rail Tie Wind Project boundary. In addition to being a Department's Tier 1 SGCN species, the Wyoming Toad is also an Endangered Species under the Endangered Species Act. Management of this species falls under the U.S. Fish and Wildlife Service. Potential habitat for the Plains Spadefoot Toad (Tier 2) also occurs within the boundary of the Rail Tie Wind Project boundary.

If a SGCN is known to occur or has the potential to occur within or near a development project, the Department will recommend monitoring for that species during interagency consultations.

- The Department recommends the monitoring of SGCNs start with creating habitat maps for a development project. In conjunction with mapping terrestrial habitats, the Department will also recommend that the following water features also be mapped: ephemeral drainages, perennial waters, vernal pools and playas.

- If SGCN amphibian habitat is not found during mapping, no additional monitoring recommendations will be made during interagency consultation. However, incidental monitoring is recommended during other wildlife surveys. Incidental observations will allow for general trend data, which could elucidate possible shifts in species assemblages resulting from energy development. All amphibians encountered incidentally during other wildlife surveys are documented. Species, geographic coordinates (preferably decimal degrees or UTM), date, age class (adult, juvenile, larval, or egg), general vegetation type, and general comments are requested for each observation.

- However, if suitable SGCN amphibian habitat is found on the project site, the Department recommends the project developer contact the Department to discuss if the project can be designed to avoid SGCN habitat. To protect SGCN amphibian habitat, the Department may recommend a 500 meter buffer between project construction activities and suitable SGCN habitat. This buffer was designed to incorporate SGCN average home range and migration distances (Baxter and Stone 1985, Hammerson 1999, Lannoo 2005, Werner et al. 2004). If the project is designed such that habitat disturbance is located greater than 500 meters from suitable SGCN amphibian habitat, additional monitoring will not be recommended during interagency consultation. However, incidental monitoring is recommended.

- If SGCN amphibian habitat cannot be avoided, the Department will work with the project developer to determine the type and level of additional monitoring.

- Because of breeding chronology and the secretive nature of some SGCN species, two years of survey are recommended before development begins. During pre-development surveys,

important SGCN amphibian areas (such as breeding sites) should be designated for avoidance during construction if possible. Where impacts are unavoidable, the Department will recommend surveys continue at least three years post-construction to determine possible effects of development on SGCN amphibian species.

- Mitigation, including habitat replacement, may be recommended if SGCN habitats or species are to be impacted.

- The Department recommends reclamation plans of disturbed habitat sites or management plans for these species be developed that specifically address the needs of SGCN species.

Reptiles

All reptiles encountered incidentally during wildlife surveys should be documented. Species, geographic coordinates (preferably decimal degrees or UTM), date, age class (adult, juvenile, larval, or egg), general vegetation type, and general comments are requested for each observation. Observations will be collected while performing other wildlife surveys within the study area. We recommend that 2 years of pre-construction incidental monitoring and 3 years post-construction incidental monitoring be completed. A two year pre-construction time frame helps ensure that surveys can be conducted in a wide range of environmental conditions. Many species that are rare or cryptic may easily be overlooked with only one year of survey. If a SGCN is discovered during the incidental observations, additional monitoring may be recommended.

Thank you for the opportunity to comment. If you have any questions or concerns please contact Matt Fry, Habitat Protection Biologist, at 307-777-4510.

Sincerely,

Amanda Withroder
Habitat Protection Supervisor

AW/mf/ap

cc: U.S. Fish and Wildlife Service
Patricia Sweanor, U.S. Fish and Wildlife Service
Zack Walker, Wyoming Game and Fish Department
Lee Knox, Wyoming Game and Fish Department
Embere Hall, Wyoming Game and Fish Department
Bobby Compton, Wyoming Game and Fish Department

Christina Barrineau, Wyoming Game and Fish Department
Wendy Estes-Zumpf, Wyoming Game and Fish Department
Chris Wichmann, Wyoming Department of Agriculture

LITERATURE CITED

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WYOMING GAME AND FISH DEPARTMENT

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May 5, 2020

WER 14216.02
Proposed Rail Tie Wind Project
2020 Wildlife Survey Protocols
Albany County

Amy Sherman
Project Manager
Tetra Tech
350 Indiana Street, Suite 500
Golden, CO 80401

Dear Ms. Sherman,

The staff of the Wyoming Game and Fish Department (Department) has reviewed the proposed wildlife survey protocols associated with the Rail Tie Wind Project for the 2020 field season. We offer the following comments for your consideration.

As discussed in our previous email correspondence, there were initially concerns from our non-game section supervisor regarding the proposal not to conduct surveys for long-billed curlew and mountain plover. However, previous survey work has indicated that these species are not present in the project area. Based on these results, we support not conducting surveys specific to these species during the 2020 field season. If long-billed curlew or mountain plover are observed, the Department would like to have additional discussions regarding these efforts.

The Department supports all other species survey and incidental observation approaches, as proposed.

Thank you for the opportunity to comment. If you have any questions or concerns please contact Matt Fry, Habitat Protection Biologist, at 307-777-4510.

Sincerely,

Amanda Withroder
Habitat Protection Supervisor

AW/mf

cc: U.S. Fish and Wildlife Service
Zack Walker, Wyoming Game and Fish Department

WYOMING
STATE Historic Preservation OFFICE

February 11, 2021

ConnectGen

Re: Rail Tie Wind, Wyoming Industrial Sitting Application

Dear Mrs. MacDonald:

Thank you for consulting with the Wyoming State Historic Preservation Office (SHPO) regarding the above referenced undertaking. We look forward to continued participation in the developement of the Programmatic Agreement regarding this undertaking. We recommend continued consultation with Native American tribal representatives, and ongoing communication with all the interested parties.
If you have any questions, please contact me at 307-777-8793.

Sincerely,

Joseph Daniele