

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA**

**IN THE MATTER OF THE
APPLICATION BY CROCKER WIND
FARM, LLC FOR A PERMIT OF A
WIND ENERGY FACILITY AND A 345
KV TRANSMISSION LINE IN CLARK
COUNTY, SOUTH DAKOTA, FOR
CROCKER WIND FARM**

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**CROCKER WIND FARM, LLC'S
RESPONSES TO STAFF'S THIRD SET
OF DATA REQUESTS**

EL17-055

Below, please find Crocker Wind Farm, LLC's Responses to Staff's Third Set of Data Requests.

3-1) Please provide a final and complete report of Tetra Tech's Vegetation Community Quality Classification as referenced in the Application. Further, if not documented in the final report, please provide:

Melissa Schmit: As outlined in table 7-1 of the Application, the Natural Community Inventory is approximately 78% complete and will be completed this spring once field conditions allow. Therefore, a final report is not available and results of the ongoing survey are outlined below.

i) How the vegetation and plant species were sampled (i.e. study method);

Apryl Jennrich: The relative abundance of plant species observed within the survey corridor was estimated based on the percent aerial cover within the survey corridor. Dominant/common plant species (those with at least 20% aerial cover) were identified and recorded. Many low aerial cover (less than 20%) species were also identified and recorded; however, not all plant species within the survey corridor were documented.

ii) A detailed map of the study area;

Apryl Jennrich: The vegetation community survey was conducted within the environmental survey corridor. Refer to the attached map, which shows the survey corridor, areas where surveys are complete, and areas that will be surveyed in Spring 2018.

iii) When the classification was conducted;

Apryl Jennrich: The Applicant completed the majority of the survey in early October 2016 and early September 2017; a small survey effort for re-routes/minor shifts was also conducted in early December 2017.

iv) How grazing intensity was assessed;

Apryl Jennrich: Gazing intensity was based on the estimated percentage of vegetated area with noticeable/significant grazing (i.e., vegetation grazed close to the ground). Areas were identified as heavily grazed if more than 50 percent of the vegetation was significantly grazed. Moderately

grazed areas were areas where between 25 percent and 50 percent of the vegetation was significantly grazed. In lightly grazed areas less than 25 percent of the vegetation was significantly grazed.

v) **What constituted high, medium, and low plant diversity; and**

Apryl Jennrich: Low plant diversity was defined as an area that had less than 10 species observed; medium diversity had between 10 and 20 species observed; high diversity had more than 20 species observed. However, not all species observed were identified or recorded.

vi) **What plant species were found.**

Apryl Jennrich:

<u>Scientific Name</u>	<u>Common Name</u>
Acer negundo	ash-leaf maple
Achillea millefolium	common yarrow
Ambrosia artemisiifolia	annual ragweed
Andropogon gerardii	big bluestem
Apocynum cannabinum	indianhemp
Artemisia absinthium	common wormwood
Artemisia biennis	biannual wormwood
Artemisia ludoviciana	white sagebrush
Asclepias incarnata	swamp milkweed
Asclepias syriaca	common milkweed
Bouteloua curtipendula	Sideoats grama
Bromus inermis	smooth brome
Carex sp.	sedges
Cirsium arvense	Canada thistle
Conyza Canadensis	Canadian horseweed
Eleocharis sp.	spikerush
Elymus repens	quackgrass
Euphorbia virgate	leafy spurge
Glycyrrhiza lepidota	American licorice
Grindelia suarrosa	curlycup gumweed
Hesperostipa spartea	porcupinegrass
Hordeum jubatum	foxtail barely
Juncus sp.	rush
Juniperus virginiana	eastern red cedar
Medicago lupulina	black medic
Medicago sativa	alfalfa
Melilotus officinalis	sweet clover
Nassella viridula	green needlegrass
Onosmodium molle	false gromwell
Panicum virgatum	switchgrass
Pascopyrum smithii	western wheatgrass
Persicaria sp.	smartweed

<u>Scientific Name</u>	<u>Common Name</u>
Phalaris arundinacea	reed canary grass
Phleum pretense	timothy
Pinus resinosa	red pine
Poa compressa	flat-stem bluegrass
Populus deltoides	eastern cottonwood
Prunus sp.	plum
Quercus sp.	oak
Ratibida columnifera	upright prairie coneflower
Rudbeckia hirta	black-eye Susan
Rumex crispus	curly dock
Salix sp.	willows
Schizachyrium scoparium	little bluestem
Schoenoplectus tabernaemontani	soft stem bulrush
Scirpus atrovirens	green bulrush
Setaria pumila	yellow foxtail
Solidago canadensis	Canada goldenrod
Solidago gigantea	giant goldenrod
Sonchus oleraceus	common sowthistle
Sorghastrum nutans	Indiangrass
Spartina pectinata	prairie cordgrass
Sporobolus heterolepis	prairie dropseed
Symphoricarpos occidentalis	western snowberry
Symphyotrichum pilosum	hairy white oldfield aster
Taraxacum officinale	common dandelion
Trifolium pratense	red clover
Trifolium repens	white clover
Typha sp.	cattail
Ulmus pumila	Siberian elm
Urtica dioica	stinging nettle
Verbena stricta	hoary vervain
Xanthium strumarium	rough cocklebur

3-2) Referring to page 128 of the Application, when does the Applicant plan on completing the assessment of the 10 Native American isolated finds?

Adam Holven: The Applicant anticipates completing shovel testing at these 10 Native American isolated finds in the spring of 2018.

Further, please explain how each of these 10 sites were determined to be an “isolated find” given that no further testing has been conducted.

Adam Holven: The use of “isolated find” is a temporary assignment used for planning purposes. The Applicant has committed to avoidance of all confirmed archaeological sites. The 10 “isolated finds” are isolated surface finds, mostly within agricultural cropland, that will be shovel tested in spring 2018 to determine if additional archaeological material is present in the

subsurface. If no additional archaeological material is recorded during shovel testing, then the location will be formally recommended as an isolated find. If additional archaeological material is recorded during shovel testing, then the location will be formally recommended as a site.

3-3) Will any portion of 39CK0048 be located within the permanent utility right-of-way? If so, what measures will be taken to ensure the site is not negatively impacted by construction and/or on-going maintenance activities?

Adam Holven: Yes, the eastern 75 feet of Site 39CK0048 will be located in the transmission line right-of-way. Site 39CK0048 is a former farmstead with the former farmhouse being located west of the transmission line right-of-way. At this time, the Applicant does not plan to locate transmission line poles within the known extent of Site 39CK0048; therefore, permanent impacts to the site will be avoided. The Applicant also plans to drive around the site within the 49th Avenue right-of-way; therefore, temporary impacts to the site will also be avoided.

3-4) Have efforts been made to consult with the Tribal Historic Preservation Officers (THPO) or local American Indian tribes? If so, please explain the extent of those consultations.

Melissa Schmit: The USFWS initiated consultation under Section 106 of the National Historic Preservation Act (NHPA) with federally-recognized tribes for the Project. Consultation letters were sent to tribes and THPOs on January 24, 2018 requesting responses by April 2, 2018.

3-5) A number of pre-contact sites have been identified in the study area, but not the survey area. Have the THPOs or local American Indian tribes been given an opportunity to identify areas that may be sensitive their tribe?

Melissa Schmit: As outlined in Section 9.5.3 of the Application, Crocker has proposed Project infrastructure on USFWS easements, which will require an easement exchange if approved by the USFWS. This is Federal Action under the National Environmental Policy Act (NEPA) and Crocker has prepared an Environmental Assessment (EA) that tiers from the Upper Great Plains Programmatic Environmental Impact Statement (PEIS). As outlined in the PEIS, the USFWS scope of review is limited to easement land within the Project. Therefore, Section 106 consultation is also limited to survey corridor with the USFWS grassland easement land and any portion of the survey corridor that intersects a protected basin within USFWS wetland easement land. The Level III Cultural Resources report for the entire Project will be submitted to SHPO once surveys are complete and will be accessible to interested tribes. Also, please see response to Data Request 3-4.

3-6) If sensitive areas have been identified, what measures will be taken to avoid or minimize potential direct and indirect effects?

Melissa Schmit: The layout presented in the Application reflects avoidance of known environmentally sensitive areas identified through field surveys, such as cultural resources and sensitive species habitat. Following the completion of field surveys, Crocker has requested the

ability to shift turbines within 1,000 feet in order to adequately avoid and minimize impacts to any new resources identified.

3-7) When does Crocker anticipate submitting the Level III Intensive Survey to SHPO for review?

Adam Holven: At this point, the Applicant plans on submitting the Level III Intensive Survey for USFWS and SHPO review in late summer/early fall 2018.

Dated this 15th day of March, 2018.



Melissa Schmit