BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF SOUTH DAKOTA

IN THE MATTER OF THE APPLICATION OF
CROWNED RIDGE ENERGY STORAGE, LLC FOR A FACILITIES PERMIT TO CONSTRUCT A 120-MEGAWATT BATTERY ENERGY STORAGE SYSTEM FACILITY

Docket No. EL26-

DIRECT TESTIMONY AND EXHIBIT

OF JILL SEED

May 14, 2026

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jill Seed. My business address is 700 Universe Blvd., Juno Beach, Florida 33408.

Q. WHAT IS YOUR JOB AND WHAT ARE YOUR JOB RESPONSIBILITIES?

A. I am employed by NextEra Energy Resources, LLC ("NextEra Energy Resources") as an Environmental Project Manager.

Q. PLEASE DESCRIBE YOUR PRODFESSIONAL BACKGROUND.

A. I received my bachelor's degree in Natural Science from Lakehead University in 1997. In addition, I am a Certified Wetland Delineator. I have 26 years of professional experience with environmental permitting, wildlife ecology, and natural resource management. I have worked in state government, private consulting, and private industry sectors. I have been involved with permitting renewable energy projects for the last three years. A copy of my curriculum vitae is provided as Exhibit A to my testimony.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A. I am testifying on behalf of the applicant in this proceeding, Crowned Ridge Energy Storage I, LLC ("Crowned Ridge Energy Storage" or "CRES").

Q. WHAT IS YOUR ROLE WITH RESPECT TO THE CROWNED RIDGE ENERGY STORAGE PROJECT (OR THE "PROJECT")?

A. As an Environmental Project Manager, I oversee the Project's environmental due diligence and compliance.

Q. HAS THIS TESTIMONY BEEN PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?

A. Yes.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH DAKOTA?

A. No.

II. PURPOSE OF TESTIMONY

Q. PLEASE DESCRIBE THE PURPOSE OF THE TESTIMONY.

A. The purpose of my testimony is to provide an overview of the environmental studies conducted by CRES for the Project in Codington County, South Dakota.

Q. WHAT PORTIONS OF THE APPLICATION DO YOU SPONSOR?

A. I sponsor or co-sponsor the following sections of the Application being filed in this proceeding: Sections 9, 10, 11, 12, 13, 14 (portions), 16, 17, 18 (portions), 29 (portions, and 30 (portions).

III. ENVIRONMENTAL STUDIES

Q. PLEASE DESCRIBE THE PROJECT AREA.

A. The project is located on 52.7 acres of private land at the southeast intersection of 464th Avenue and 161st Street, in Codington County. Within the 52.7-acre project area, the CRES site encompasses approximately 7.8 acres. The land on which the CRES is proposed is zoned as agricultural (Agricultural Zoning District) and is within the Crowned Ridge Wind I (CRWI) Energy Facility project area. The predominant land use within the project area is cultivated crops (71.6%) followed by grassland/herbaceous cover (17.9%).

Q. WHAT WAS THE OVERALL APPROACH TO ENVIRONMENTAL ANALYSIS OF THE PROJECT?

A. CRES completed desktop analyses and site-specific field studies to determine the potential for presence of sensitive natural and cultural resources. Surveys were designed to comply with applicable local, state and Federal regulations and guidelines. Data collected during these analyses and surveys informed an iterative process of refined infrastructure micro-siting, whereby CRES refined the Project configuration over a period of several months. The current Project site layout avoids and minimizes impacts to natural (*e.g.*, wetlands, wildlife) and cultural resources.

Q. DISCUSS THE ENVIRONMENTAL SURVEYS AND/OR STUDIES CONDUCTED FOR THE PROJECT.

A. Under contract with and as requested by CRES, SWCA Environmental Consultants ("SWCA") initially completed a desktop review of known, existing natural and cultural

resources in and within the vicinity of the Project Area, using publicly available data sources as well as the results of more than twenty surveys that were completed between 2007 and 2018 for the Crowned Ridge I and Crowned Ridge II Wind Farms (CRW I and CRW II). SWCA also completed natural resources pedestrian surveys within the CRES Project Area in May 2024 and July 2025. During these surveys, SWCA field verified National Land Cover Dataset ("NLCD")-mapped data, identified the presence or absence of sensitive species habitats, and delineated wetlands. SWCA also completed a cultural resources records search on May 14, 2024, which was updated on February 23, 2026, through the Archaeological Research Center at the South Dakota State Historical Society for the CRES Project Area. In addition, SWCA conducted a supplemental Level III Survey for archaeological and historical resources within the CRES Project Area on May 18, 2024.

Q. IS THERE ANY ENVIRONMENTAL STUDY WORK YET TO BE COMPLETED FOR THE PROJECT?

A. No.

Q. PLEASE EXPLAIN WHAT REMEDIAL ACTIVITIES WILL OCCUR AFTER CONSTRUCTION.

A. Temporary impacts will be mitigated using best management practices ("BMPs") as described in the Project's Stormwater Pollution Prevention Plan ("SWPPP"). Such BMPs may include installation of erosion control devices and re-vegetation practices. For example, in temporarily impacted areas that were previously natural (*i.e.*, non-cropland), CRES will use native vegetation (weed free) seed mixes to revegetate disturbed areas to

pre-construction conditions where feasible. Soil areas disturbed during construction will be decompacted and returned to pre-construction contours to the extent practicable and in accordance with landowner agreements and the SWPPP. The goal is to have all surfaces drain naturally, blend in with the undisturbed natural terrain, and be left in a condition to facilitate re-vegetation, provide proper drainage, and prevent erosion.

IV. ENVIRONMENTAL SITE ANALYSIS

Q. PLEASE PROVIDE A GENERAL OVERVIEW OF THE PROJECT AREA FROM A LAND USE PERSPECTIVE.

A. The Project Area is located within the existing CRW I project area and includes one operational turbine and the CRW I collection substation (the "CRW Collector Substation"). Primary land use within the project area is agricultural, largely land used for row cropping. The Project Area does not contain any of the following: irrigated lands; pasturelands or rangelands; undisturbed native grasslands; known existing or potential extractive nonrenewable resources; residences, farmsteads, family farms, ranches; or municipal water supplies or water sources for organized rural water systems are present in the Project Area. As indicated above, the Project Area does include the CRW Collector Substation and one wind turbine. Other than these structures, no other major industries or public, commercial, or institutional uses are present in the Project Area. The land on which the CRES is proposed is zoned as agricultural (Agricultural Zoning District) and public utilities are considered permissible as a conditional use.

Q. WHAT STEPS WILL CROWNED RIDGE ENERGY STORAGE TAKE TO AVOID, MINIMIZE, AND/OR MITIGATE IMPACTS TO THE EXISTING LAND USES?

A. Existing land use within the Project Area is agricultural. During construction, agricultural practices may be interrupted on up to approximately 32.6 acres within the Project Area. Following construction, all aboveground Project infrastructure will be located entirely within 7.8 acres of land that is currently used for agriculture. On these 7.8 acres, land use will shift from agricultural production to an energy storage facility for the operational life of the Project. Following construction, land use throughout the remainder (44.9 acres; 85.2%) of the Project Area will be restored where temporary impacts occurred.

Q. DISCUSS THE EXISTING GEOLOGICAL AND SOIL RESOURCES, SEISMIC RISKS, AND SUBSIDENCE POTENTIAL IN THE PROJECT AREA.

A. As disclosed in the application, the Natural Resource Conservation Service (NRCS) categorizes soils into four main hydrologic groups based on their runoff potential and rate of infiltration when thoroughly wet. The hydrologic groups are A, B, C, and D, with A having the highest runoff potential and rate of infiltration. All Project Area soils have a low to medium runoff potential (hydrologic groups B and C). Approximately 82% of the soils within the project area are mapped as prime farmland by the NRCS. The potential for soil erosion increases significantly where steeper slopes (i.e., greater than 6 percent) are present. The Project Area is relatively flat, ranging in elevation of only 139.1 feet. Only 2.3 acres (4.4%) consist of soils associated with slopes potentially greater than 6 percent.

Further, there are no locations within the Project Area that have steep (*i.e.*, greater than 3:1 [horizontal: vertical] or 33 percent) slopes.

Risk of seismic activity in the Project Area is considered low. Between 1872 and 2025, nearly 100 earthquakes were recorded in South Dakota, but none of these earthquakes occurred in Codington County.

Limestone units and karst terrain are not present in the Project Area and thus, the potential for subsidence is negligible. CRES is not aware of any subsidence potential or slope instability problems within the Project Area.

Q. WHAT STEPS WILL CROWNED RIDGE ENERGY STORAGE TAKE TO AVOID, MINIMIZE, AND/OR MITIGATE POTENTIAL IMPACTS TO GEOLOGICAL AND SOIL RESOURCES?

A. The risks posed by the Project to geological and soil resources are generally limited by the characteristics of the geologic materials in the area. As indicated in the application, the unconsolidated geologic materials at the Project Area are composed of generally of low permeability. Available geologic data indicate that the project will not significantly affect bedrock geology and seismic activity is not anticipated to affect the performance of the battery. CRES is not aware of any constraints that may be imposed by geological characteristics or soils on the design, construction, or operation of the battery.

To reduce adverse effects to and from soils, CRES will develop and implement a SWPPP and use BMPs during construction to protect topsoil and minimize soil erosion. Soil areas disturbed during construction will be decompacted and returned to pre-construction contours to the extent practicable and in accordance with landowner

agreements and the SWPPP. The goal is to have all surfaces drain naturally, blend in with the undisturbed natural terrain, and be left in a condition to facilitate re-vegetation, provide proper drainage, and prevent erosion.

Q. DISCUSS THE HYDROLOGIC RESOURCES, INCLUDING SURFACE AND UNDERGROUND RESOURCES, PRESENT WITHIN THE PROJECT AREA.

A. As disclosed in the application, no 100-year-floodplains (FEMA Flood Zone A) are present in the Project Area. Desktop Natural Hydrography Dataset (NHD) data indicate the presence of approximately 508 linear feet of one flowline characterized as stream/river-perennial; however, during natural resource surveys in May 2024 and July 2025, a distinct flowline was not observed rather, the resource in this area was delineated as an emergent wetland. No surface waters such as streams, lakes, rivers, or ponds, are present in the Project Area.

As mapped by the NRCS, shallow groundwater occurs in the soils within the project area at depths ranging from 18 to 30 inches in the area just south of the proposed BESS location and 49 to 61 inches in the remainder of the project area. An isolated aquifer occurs in the northwest corner of the Project Area.

Q. WHAT MEASURES WILL CROWNED RIDGE ENERGY STORAGE EMPLOY TO AVOID, MINIMIZE AND/OR MITIGATE POTENTIAL IMPACTS TO HYDROLOGIC RESOURCES?

A. As noted above, an existing isolated aquifer occurs adjacent to the northwest corner of the Project Area; however, CRES moved the proposed BESS location and the Project boundary to avoid potential impacts to this resource.

To limit impacts to hydrological resources caused by soil erosion, groundwater contamination, or stormwater runoff, CRES will obtain a South Dakota General Permit for Storm Water Discharges Associated with Construction Activity (SDR100000), develop and implement a SWPPP, and use BMPs to reduce impacts during construction. As required by SDR100000 and the SWPPP, any vehicle fueling within the project area will employ appropriate BMPs and will occur at an appropriate distance from waterways determined by site-specific conditions, such as ground cover, slope, and soil type. Additionally, if construction or operation of the Project involves storing more than 1,320 gallons of oil or other hazardous substances, a Spill Prevention, Control, and Countermeasure Plan (SPCC plan) will be required and would address potential releases to soils. The need for a SPCC plan will be assessed based on the final design of the Project.

Q. ARE AQUATIC ECOSYSTEMS PRESENT IN THE PROJECT AREA AND, IF SO, WHAT MEASURES WILL CROWNED RIDGE ENERGY STORAGE EMPLOY TO AVOID, MINIMIZE, AND/OR MITIGATE POTENTIAL IMPACTS?

A. As disclosed in the application, CRES completed natural resources surveys, including wetland delineations, within the project area in May 2024 and July 2025. Two wetlands

(0.03 acres and 5.6 acres) were identified and delineated. Both wetlands were classified as palustrine emergent (PEM). Project infrastructure has been sited to avoid impacts on wetlands. Only the medium voltage collection cables must intersect the wetland located directly south of the battery pad. Where the collection cables intersect the wetland, CRES will bore under the wetland to avoid impacts to the resource.

CRES will obtain a SDR100000 permit, develop and implement a SWPPP prior to construction, and use BMPs to reduce impacts during construction. The SWPPP will describe BMPs for erosion and sedimentation control. Such BMPs may include the use of silt fences and/or other measures to control storm water run-on and runoff to mitigate erosion and sedimentation into wetlands located in the Project Area.

As a result of site planning and design, implementation of erosion and sediment control BMPs, and boring collection lines, no impacts to aquatic resources are anticipated and no mitigation measures are proposed.

Q. WHAT VEGETATION IS PRESENT WITHIN THE PROJECT ARE, AND HOW WILL IMPACTS BE AVOIDED, MINIMIZED, AND/OR MITIGATED?

A. NLCD indicates that the project area is primarily cultivated crops (71.6%) followed by grassland/herbaceous cover (17.9%). During natural resources surveys conducted in May 2024 and July 2025, biologists observed that agricultural areas were dominated by soybean production. Impacts to cultivated lands are not considered biologically significant, as these lands are currently frequently disturbed by tilling, planting, and harvesting activities. Temporary impacts will be mitigated through the use of BMPs consistent with the Project SWPPP, as described above.

Q. ARE ANY FEDERALLY-LISTED SPECIES, FEDERALLY-DESIGNATED CRITICAL HABITAT, OR STATE-LISTED SPECIES PRESENT WITHIN THE PROJECT AREA?

A. No. CRES completed an unofficial IPaC review for the Project Area, sent an outreach letter to, and reviewed, the South Dakota Game, Fish and Parks' ("SDGFP") website to identify federally and state-listed species with potential to occur in Codington County. CRES also conducted habitat assessments in May 2024 and July 2025 and sent an outreach letter to United States Fish and Wildlife Service ("USFWS") in January 2026. As described in more detail in Section 12.3.1.2 and Section 13.1.2 of the application, federally-listed species or state-listed species are unlikely to occur in the Project Area. There are no federally designated critical habitats in the Project Area.

Q. IS THE PROJECT ANTICIPATED TO IMPACT FEDERALLY-LISTED SPECIES, FEDERALLY-DESIGNATED CRITICAL HABITAT, OR STATE-LISTED SPECIES?

A. No impacts to federally-listed species, federally designated critical habitat, or state-listed species are anticipated.

Q. IS THE PROJECT ANTICIPATED TO IMPACT BALD AND GOLDEN EAGLES?

A. No. The project area lacks trees or other suitable eagle nesting habitat. No tree removal will occur as part of this project; therefore, no impact to eagles or eagle nesting habitat is anticipated.

Q. WHAT MEASURES WILL CROWNED RIDGE ENERGY STORAGE IMPLEMENT TO AVOID, MINIMIZE, AND/OR MITIGATE IMPACTS TO WILDLIFE SPECIES?

A. As disclosed in Section 12.3.1.2 and Section 13.1.2 of the application, no federally or state-listed wildlife species were observed during natural resources pedestrian surveys conducted in the Project Area in May 2024 or July 2025 or during more than twenty wildlife surveys conducted between 2007 and 2018 for CRW I and CRW II. Species observed were common species that may occur in suitable habitats throughout the region. These species included Richardson's ground squirrel (*Urocitellus richardsonii*), mink (*Mustela vison*), common raccoon (*Procyon lotor*), white-tailed deer (*Odocoileus virginianus*), least weasel (*M. nivalis*), coyote (*Canis latrans*), American robin (*Turdus migratorius*), mourning dove (*Zenaida macroura*), and killdeer (*Charadrius vociferus*).

No leks or greater prairie-chicken or sharp-tailed grouse individual were incidentally observed in the Project Area during May 2024 or July 2025 natural resources surveys. Additionally, in February 2026 SDGFP conducted a search of the South Dakota Natural Heritage Database for the Project Area, which indicated no records of species at risk in the Project Area.

Construction crews will be instructed to avoid disturbing or harassing wildlife if observed. Further, crews will remove trash from the Project Area to avoid inadvertently attracting scavenger species, which could in turn increase potential impacts to prey species (*e.g.*, nesting birds).

Q. IS THE PROJECT ANTICIPATED TO IMPACT EXISTING WATER OR AIR QUALITY?

A. No impacts to water quality or air quality are expected to occur because of construction or operation of the CRES project.

Q. WITH RESPECT TO CULTURAL RESOURCES, WHAT STEPS HAS CROWNED RIDGE ENERGY STORAGE TAKEN TO IDENTIFY CULTURAL RESOURCES WITHIN THE PROJECT AREA?

A. In May 2024, a records search and a Level III pedestrian survey were completed for the proposed project. The records search did not identify any newly recorded archaeological or historic-age resources in the Project Area or within the one-mile buffer. Additionally, the Level III survey, which evaluated 21 acres within the Project Area, did not identify any archaeological sites or standing structures. No impact to archaeological resources or historic properties are anticipated. No further cultural resources work is recommended for this Project.

Additionally, a survey of Tribal sensitive sites within the area comprising the Project Area was conducted with respect to the CRW II generation tie line. That survey identified four Tribal sensitive sites fully within the Project Area and five additional Tribal sensitive sites partially in the Project Area.

Q. WHAT STEPS WILL CROWNED RIDGE ENERGY STORAGE TAKE TO AVOID, MINIMIZE, AND/OR MITIGATE IMPACTS TO CULTURAL AND TRIBAL RESOURCES?

A. The Project has been sited to avoid impacts to cultural or Tribal resources. In particular, CRES's affiliates have had significant voluntary Tribal engagement since the late 2010s related to the CRW I and II projects, including with the Sisseton Wahpeton Oyate ("SWO") of Lake Traverse Reservation, which resulted in the identification of Tribal cultural resources sites in this area, several of which are located between the Project and the CRW I Collector Substation. Previously identified Tribal sites will be fenced for avoidance and monitored during construction of CRES with the participation of SWO of the Lake Traverse Reservation. CRES will also prepare an Unanticipated Discovery Plan prior to construction to ensure safeguards are in place should resources be discovered during construction.

V. AGENCY COORDINATION

Q. PROVIDE AN OVERVIEW OF THE FEDERAL AND STATE AGENCY COORDINATION CONDUCTED BY CROWNED RIDGE ENERGY STORAGE.

A. Throughout the Project planning process and development, CRES has coordinated with various Federal, State, Tribal, and local agencies to identify potential concerns regarding the Project. Specifically, agency outreach letters to SDGFP and USFWS were submitted via email on January 15, 2026. A response from Mandy Pearson with SDGFP was received on February 24, 2026, stating that per the results of the South Dakota Natural Heritage Database search, no species at risk, including those legally designated as rare, threatened,

or endangered, were identified within the project area. A summary of agency consultation efforts is provided in Section 24 of the Application.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

Dated this 14th day of May, 2026.

Jill Seed

Jill Seed