

Codington County Planning Commission/Board of Adjustment Minutes

July 16, 2018

The Codington County Planning Commission/Board of Adjustment met for their monthly meeting on July 16, 2018 at the Codington County Extension Complex. Members of the Planning Commission/Board of Adjustment present were: Myron Johnson, Charles Rossow, Mel Ries, Mark O'Neill, Rodney Klatt, Bob Fox, and Luke Muller (Planner at First District Association of Local Governments/ Codington County Zoning Officer).

Others present were DuWayne Mack, Terry Mack, Sharon Feyereisen, Tony Feyereisen, Brenda Feyereisen, George Feyereisen, Darrell Crandall, Elmer Kruger, Rich Wright, Ed Raml, Anita Raml, Jamie Gentile, Brittany Bruce, Tim Nelson, Laura Oppet, Jeff Riley, Bob Lund, Rob Lueck, Helen Haan, Jeremy Johnson, Paul Oppelt, Julie Walker, G. Walker, Bruce Fritz, Deb Fritz, Judy H., Shelley Scherbenske, Bob Scherbenske, Josh Akers, Jeffrey Booze, Doug Dahl, Jay Haley, Joan Strang, David Strang, Tom Dagel, Laretta Kranz, Greg Wall, Kathy Wall, Diane Redlin, Jerry Redlin, Jerome K., Neal Mack, Jeff DeVille, Robyne Birk, Jared Birk, Bridget Johnson, Bert Magstadt, Amy Tuttle, Bob Tuttle, Scott Dagel, Karla Dagel, Yvonne Pauli, Allen Kasperson, Karen Kasperson, Leon Spartz, Randy Schmeling, Mark Zemlicka, Terence Pellman, Brian Stoltenburg, Angel Spartz, Sam Jacobson, Terri Zemlicka, Dennis Schmeling, Joe Jansen, Chris Ollson, Shirley Robish, Kathleen Dagel, Dave Grooh, Tab Grooh, Kristi Mogen, Wayne Borgheiinck, Amber Christenson, Gerald Zaug, Myra Dahl, Teresa Kaaz, Paul Johnson, Garry Ehlebracht, Patrick Lynch, Tracy Rosenberg, Jeanette Mack, Rose Steen, Michael Sihroli, Linda Heyduk, Julie Voeck, Carolyn Stewart, Jody Fiedler, Chris Fiedler, Tom Raml, Melda Raml, Roger Solum, Kelan Birnbaum, Alison Birnbaum, Matt Whitney, Al Robish, Dewey Zemlicka, Perry Oberg, Jean Stevens, Shad Stevens, Bryan Binicker, Miles Schumacher, Sam Masser, Tyler Wilhelm, Johnson Wiles, Mark Krause, Kevin Kranz, Linda Lindgren, Tim Lindgren, Wade Bauer, Melissa Lynch, Emily Mack, Bonnie Friske, Gary Steen, Phil Raml, Ed Brenn, Erika Fox, Nikki Cordell Petersen, Chad Rohde, Phil Tesch, Lynne Tesch, Leo Kannas, Mark Fransen, James Jackman, Adam McDonald, Brian Comes, Marc Mack, Lee Gabel, Dan Thyen, Kathy Tyler, Jordan Tesch, Nanci Owen, Wayne Owen, Kelly Owen, Kim Wells, Charlie Waterman, Troy VanDusen, Charlies Appelhof, and Becky Goens.

Bob Fox brought the Board of Adjustment meeting to order at 6:35 pm.

Motion by Johnson, second by Ries, to approve the June 18, 2018 meeting minutes. Motion passed unanimously.

Motion by Rossow, second by Klatt, to approve a correction to the April 16, 2018 minutes. Motion passed unanimously.

Jodi Engels has requested to speak during the open session of the Planning Commission

meeting.

During review of the Agenda, Board Member Klatt advised the board his sister has a wind easement. No other potential conflicts of interest were indicated. Amber Christenson objected to Mr. Klatt residing on the board. Objection noted by Chairman Fox, but also found Mr. Klatt still qualified to remain on the Board for this item. (No objection from Board.)

Motion by Johnson, second by Ries, to change the order of the agenda to address the Crowned Ridge Wind Conditional Use Permit request ahead of Mr. Borkhuis' variance applications. Motion passed unanimously.

Chairman Fox advised the audience on how the meeting will be conducted according to the by-laws.

Motion by Klatt, second by Johnson, to approve Crowned Ridge Wind, LLC and Crowned Ridge Wind, II, LLC's Conditional Use Permit application as read by Staff. Muller reviewed Staff Report (attached). If approved, conditions to be agreed to in a Letter of Assurance signed by the applicant includes:

- 1) Effective Date and Transferability:
 - a. Upon issuance of permit by South Dakota Public Utilities Commission.
 - b. This permit shall expire if either no construction as described in the application has commenced within three (3) years of issuance by the County Board of Adjustment; or if a State Permit from the South Dakota Public Utility Commission has not been issued within two (2) years of issuance by the County Board of Adjustment; or any within three (3) years of the final decision regarding any appeal to circuit court relating to the issuance of the permit.
 - c. The applicant may apply for an extension of this permit if the requirements of 1.b above cannot be met.
 - d. The Conditional Use permit is transferable. Subsequent owners/operators shall agree to the same conditions described herein.
- 2) General Requirements:
 - a. There shall be no discharge of industrial processed water on the site
 - b. Storage of petroleum products in quantities exceeding one hundred (100) gallons at one (1) locality in one (1) tank or series of tanks must be in elevated tanks; such tanks larger than eleven hundred (1,100) gallons must have a secondary containment system where it is deemed necessary by the Board of Adjustment.

- c. Grantor shall provide the zoning office with an updated local contact information of plant supervisor with authority to implement dust control and other necessary enforcement of the conditions of this permit.

3) Obligation to Meet Requirements:

- a. Applicant agrees to meet requirements of Section 5.22 of the Codington County Ordinance in reference to remaining obligations including but not limited to: submittal of Soil Erosion and Sediment Control Plans, Haul Road Agreements, Decommissioning Plan, Final site location of towers, building permit application, meeting applicable federal and state requirement as required by Section 5.22
- b. Applicant acknowledges the ability of the Board of Adjustment to require some form of financial assurance to cover the anticipated costs of decommissioning the WES Facility on or before July 16, 2023.

4) Violation and Penalties:

- a. Violations of requirements of the ordinance relating to the operations of a specific tower will result in enforcement/penalties in reference to the specific tower found to be in violation, and will be enforced in the manner as described in Section 4.b below.
- b. Violation of the terms of this conditional use permit will be determined by the Codington County Zoning Officer.
 - (1) The first violation substantiated by the Zoning Officer of this conditional use permit may result in a notification letter stating the violation and a prescribed period of time to remove the violation. A second violation occurring within one calendar year of the previous violation may result in a review of the validity of the conditional use permit and potential revocation of said permit. A third violation within one calendar year of the initial violation may result in revocation of the conditional use permit and cessation of all feeder operations within forty-five days (45) of notice of revocation.
 - (2) The applicant may make appeal from the decision of the Zoning Officer or other agent of the Codington County Board of Adjustment to the Codington County Board of Adjustment. The applicant shall file with the Zoning Officer a notice of appeal specifying the grounds thereof. The Zoning Officer shall forthwith transmit to the Board of Adjustment all papers constituting the record upon which the action appealed from was taken. Such appeal shall be taken within

thirty (30) days. Appeals from the Board of Adjustment shall be taken to Circuit Court.

- (3) Failure to comply with the decision of the Zoning Officer or other agent of the Codrington County Board of Adjustment may be deemed a separate violation.

Tyler Wilhelm, NextEra Energy, provided a presentation of the Crowned Ridge Wind, LLC and Crowned Ridge Wind II, LLC wind energy systems proposed project. Those wishing to speak on this application are as follows:

Proponents:

- Anita Raml, Kranzburg Township – is not concerned about flicker or noise. Is confident our roads will be improved during this project. Additional money for our farmers.
- Yvonne Pauli, Watertown resident with land in Grant County - anxious to see results of this wind energy project development.
- Karen Kasperson, Sheridan Township – revenue dollars; wind production; affordable electrical power.
- Angel Spartz, Kranzburg Township – another form of power that is good for our area.
- Leo Kannas, Leola Township landowner – favors wind power; additional revenue.
- Mark Fransen, Waverly Township – additional revenue for landowners and county.
- Mark Lueck, Leola Township – in favor of wind power.
- Tim Nelson, Leola, Waverly & Rauville Township – in favor of this wind tower project; believes land values will increase; hopes this will in turn grow smaller communities with additional tax income.

Opponents:

- Joan Strang, Waverly Township – concerned about setbacks; landscape view.
- Tom Dage (Neutral) – road conditions and repairs during construction prior to increased tax revenue; existing tile lines and potential interference during installation of feeder lines.
- Greg Wall, Waverly Township – location of towers on shallow aquifers; DENR supervision; ground water protection from leaking oil.
- Diane Redlin – nonparticipants have a right to protect their land just as the participants have a right to do what they wish; does not want to see 50-story towers right over the top of her.
- Bridget Johnson, Waverly Township – Cited Ordinance 65 height restrictions and what would be considered too high to not be allowed to construct; believes this would be considered overcrowding of land.
- Brian Stoltenberg, Elmira Township (neutral) – would like to see a map showing the

- locations of each tower; would like to see where overhead power lines will be placed; concerned with wells located in shallow aquifers.
- Sam Jacobson, Watertown – looking to purchase rural property but will not if it is located within a wind tower project.
 - Kristi Mogen, Grant County – health concerns as related to flicker; concerned about the flicker map; believes flicker and infrasound is trespassing.
 - Wayne Borgheiinck, Waverly Township – concerns about decommissioning; disposal of fuel from a decommissioned tower; environmental impact; flicker; noise; water contamination.
 - Amber Christenson, Waverly Township - concerns with public health and safety; decommissioning; lack of safety information.
 - Myra Dahl – concerns about noise affecting children.
 - Teresa Kaaz, Germantown Township – effects of a shattered blade in crop field; real estate values; transmission lines.
 - John Wiles, attorney representing Paul Johnson – This is an investor owned utility project; the board does not know about the property agreements or relationships that are in place; sound impact estimate; lack of expert verification/validation; flicker.
 - Garry Ehlebracht, Goodwin area – destroying landscape.
 - Patrick Lynch, Rauville Township – effects of small community lifestyle and potential growth.
 - Tracy Rosenberg, Marvin, SD – addressed low level infrasound, cited studies in refereed journals.
 - Al Robish – concerned about ice throw and responsibility for potential damage caused by such; broken blades.
 - Melissa Lynch, Rauville Township – cited World Health Organization recommendations for noise levels as it pertains to sleep disturbance; lack of reference or consideration to noise levels during construction and decommissioning phases; who monitors the noise levels and what is the process for it being checked?
 - Emily Mack, Kranzburg – cited World Health Organization noise level recommendations; distance between a proposed tower and the Waverly/South Shore school; detriment to the growth of the community.
 - Jean Stevens, Clark County – would like to see increased setbacks, and the Board has ability to do as Clark County did with setbacks.
 - Linda Lindgren, South Shore/Waverly resident – opposes wind towers; blade breakage; tower fire; oil leaks.

- Tim Lindgren, South Shore/Waverly resident – opposes wind towers; unstable future income.
- Joe Janssen, Clark County – property value and re-sale decline; continual noise.
- Darryl Crandall, Watertown – Not opposed but does enjoy the current views and quality of life; changed statement to being in opposition.
- Dan Thyen, Waverly Township Supervisor – has questions regarding snow removal and closed roads not being utilized and at this time doesn't know if those roads will be used. Will the tax base decrease? It will be a few years before the township sees any additional money from this wind project for road improvement.
- David Grooh, Kranzburg Township – questions regarding setbacks and specific locations of the towers. Who benefits from the energy created? Trees are being removed for additional farming ground whereas the towers will take away farm land.
- Jeff Lueck, South Shore – would like to see a footprint of the entire project.
- Jared Birk, Waverly Township – questions regarding criteria being used for voting. Feels this Use is dominate and no longer should be considered an Ag Use, perhaps a new district should be created for this project.
- Amy Tuttle, Watertown resident – concerns regarding livestock health, specifically horses.

No one else chose to speak. Public hearing closed. A five-minute recess was taken to compile the questions submitted during the public hearing.

Seeing most questions directed to staff and the applicant, Crowned Ridge representatives were invited by Chairman Fox to address questions brought to the Board by the public hearing. Those questions included:

- Suggested safe distance setback of 1,640 – this is the distance suggested if there were a tower fire and not a recommended setback from homes, etc.
- Who is liable for blade deconstruction or ice throw? Per Tyler, the developer assumes the liability.
- With regard to tile interference, during the construction process there will be in-depth review before locating any underground feeder lines. They will work with landowners and will be response if tile is damaged. Overhead power lines will not be within the existing power lines. They will be outside of the public right-of-way. All transmission lines, approximately 42 miles, is located on private land. Chairman Fox would like to see private contact made with anyone who owns land in which the lines will cross.
- Installation of towers in high water table areas – The deepest they would construct is 12-15'

deep and is well above the aquifer levels. There are federal and state requirements they must follow to protect water quality. Test borings are conducted prior to construction commencing.

- Oil leakage potential – federal permits are required which consists of a spill plan and storage of petroleum products requirements.
- Roads – Haul Road Agreements will be in place. Outside of that, any damage occurring to roads that are in direct relation to construction process or pertains to transportation in the area will be repaired by the applicant.
- Effects on livestock – Vibroacoustic Disease is not a recognized disease of horses or people as a result to infrasound.
- Codington County residents are not subject to Grant County ordinance requirements. Setbacks will be measured to the specific county lines.
- There is no structure currently existing in Codington County that has met the maximum height restriction. There is a tower permitted northeast of Waverly on land owned by the [Paul and Bridget] Johnson's that was permitted at 490' feet along with another one up to 1,000' near South Shore.
- Infrasound – There is low frequency sound (infrasound) created by wind turbines. It would be similar to air conditioning or HVAC noise. Following studies, the conclusion was that adverse effects of infrasound from wind turbines cannot be expected.
- Dogs will not be affected by infrasound as it is a very low frequency sound.
- The PUC has the ability of adding additional conditions to any permit. This does include aircraft detection lighting, detecting and reacting to ice conditions, and avian mortality. The PUC has a lot more resources for research and that is why they can add conditions.
- Meaning of detecting and reacting to ice conditions – turbines can be turned off remotely if ice conditions have occurred on the blades. This purpose is to protect the mechanical structure.
- There are estimated to be four meteorological towers (MET) with this project. They will measure wind speed, temperature, and humidity.
- There is a possibility of less than 164 turbines, although not likely.
- Sound pressure on Waverly School – The World Health Organization recommends the sound level be 35 dBA or less in a classroom. The closest tower will be at least a mile away and will result in less than 35 dBA at the Waverly School.
- Eleven homes (non-participants) are not on the flicker map - Assessments were completed

and are not aware of deviations.

- With regard to shadow flicker and photosensitive epilepsy, research has determined that the turbines would have to be rotating at 60 rpm. The modern turbines being proposed for this project will spin between 15 and 20 revolutions per minute. The spin rate is too low to trigger photosensitive epilepsy seizures.
- Company background – NextEra has been in business as long as or longer than any company based in North America. They came from Florida Power and Light about 15 years ago. There is a relationship with G.E. They have over 100 wind farms in the U.S. and Canada.
- Construction process – cranes and trucks will be used during construction activity. The equipment used should not be any louder than farm equipment. Noise would be similar to any other construction project. The timeline for the entire project will be approximately six months. After a foundation is poured, it will sit for approximately one month. Erection of the turbine is 2-3 days.
- It is estimated this project will be presenting to the PUC by the end of August. Wind projects can be a six months process with PUC.
- Much of the power will not be utilized in this area. However, keep in mind that power is not always used where it is generated.
- The applicant will be responsible for snow removal to and from turbines on access roads if those roads are not generally plowed or maintained by the road authority.
- Individual agreements between the applicant and landowner are not part of the Planning Commission's review as it is a civil issue.
- Plans for where the towers are proposed is located on the website at codington.org/zoning or in the Planning Commission office at 1910 West Kemp Avenue, Watertown.
- With regard to trespass zoning, neither attorney attending the meeting is aware of any trespass zoning cases or laws in the state of South Dakota.
- General compatibility of any Conditional Use Permit within the zoning ordinance is identified in the county's Land Use Plan.
- Latest studies on behalf of PUC Staff regarding real estate values in Brookings did not see negative real estate values associated with properties within wind farms. Wind farms will not insure that property value will go up.
- Board Member Klatt requested clarification regarding underground feeder lines. Information will be obtained from landowners so that interference with existing lines or tile does not occur. Feeder lines are interconnected and arrangements for placement will be

made with the landowner. No feeder lines are proposed on unsigned land.

- Board Member Johnson inquired about lighting on the turbines. This project is designed with Advanced Detection Lighting System (ADLS). This system will protect aircraft and are federal requirements to be approved by the FAA. Lighting will only turn on when required.
- Board Member Rossow inquired about high water tables and construction of concrete foundations. Investigation prior to construction includes looking at high water tables. Those locations will be avoided.
- Vibration – There is no ground level vibration from the turbines. Modern wind turbine design avoids vibration issues.
- Obsolete technology is not being used.
- Board member O’Neill inquired about the relationship with SDSU. They are taking part in creating curriculum used for teaching and after-school programs. A wind application center is on campus as well and can share that data.
- Board member O’Neill inquired about regular, on-site tower maintenance. Routine inspections are once monthly although data is analyzed remotely which can detect problems. Towers can be shut down remotely if a problem is detected.
- Using cranes, an average of 5-6 turbines per week can be erected. Concrete trucks will most likely be the only additional traffic incurred during this time.
- The largest turbines used will contain approximately 180 gallons of oil within itself. There are sensors located all over the turbine which collects data and is shared with the operators on site as well so a leak can be detected quickly.
- Board member O’Neill inquired about blade shatter causing crop failure. Blade failure cannot be predicted. If a blade shattered into fine dust or chunks, they would do a complete clean up and there is a program for reimbursing crop farmers; however, this is a rare incident.
- Board member O’Neill inquired about land values. The studies referenced earlier pertain to studies within wind farm areas and not entire communities. These studies are conducted on properties containing towers and their surrounding properties. This study was in North Dakota and was in the neighborhood of 12-20 different facilities.
- If an oil spill does occur, they will comply with state requirements on reporting and clean up.
- A portion of the turbines used in South Dakota were manufactured out of the Aberdeen, SD office. The applicant is in the initial stages of working with Lake Area Technical Institute. An old, decommissioned turbine will be donated to LATI for learning purposes.

- The role of small town fire departments if a fire begins on a turbine is to protect the land. The sensors within the turbine will allow for immediate alerting of authorities. The expectation is not to put out the fire but rather protect any fire contact with the ground.
- It is expected that 12 full time employees will be needed to operate this wind farm. Temporary employees will be needed during construction. Specific highly skilled workers, such as heavy crane operators, will be brought in. Local hiring will be used for other positions. Drug testing procedures and background checks are required for employment.
- If a nonparticipating and participating household reside closely, the setback distance will be measured using the nonparticipating requirement.
- The towers proposed in the original site plan can move; however, they are still required to meet the requirements of our zoning ordinance with regard to flicker, noise, setback, and there cannot be any more than what would be permitted.
- The locations of these towers, along with the towers already approved through the Dakota Range Wind Conditional Use Permit, are included in the application.
- Two hundred pages of information was submitted to the board for review prior to the deadline for written testimony to be provided and are included in the record. Many of those questions have been addressed through testimony. The Board may ask any questions they deem relevant from that information. Staff reviewed and answered some which may not have been previously addressed:
 - If the company is sold, any new entity would have to agree with the terms of this application.
 - If a wind tower project bankrupts throughout the course of the project, it would be required the towers be removed. This expense would fall on the applicant.
 - Taxation on these structures is not controlled by this board.
 - Validation of noise estimates – They are deliberately modeled with an extra 2 dBA to be conservative.
 - Consultants use accepted software to model the estimated flicker and acoustic would be. They are comfortable with the results that have been submitted. If the results are different in operation then they would address it. If the models are incorrect, they will determine the issue. On-site contact information will be provided.
- Board Member Rossow inquired if the turbines are all running at the same time. All towers can be individually controlled. They are installed with Smart Programming and have the

capability of shutting themselves down, i.e. high winds. There will be times when every single turbine will be operating.

Chairman Fox read questions which would be included in the Findings of Fact. The board concurred. Upon roll call vote, motion passed unanimously.

Motion by Johnson, second by Ries, to approve Larry's Borkhuis' two variance requests. Motion by O'Neill, second by Rossow, to table this item until the August 20, 2018 meeting. Motion passed unanimously.

Motion by O'Neill, second by Ries, to adjourn the Board of Adjustment meeting.

Chairman Fox brought the Planning Commission meeting to order.

Motion by O'Neill, second by Rossow, to approve the Planning Commission agenda. Motion passed unanimously.

Motion by Klatt, second by Johnson, to approve the Plat of L. Borkhuis Addition. Motion by Klatt, second by Johnson, to postpone this request until August 20. Motion passed unanimously.

Jodi Engels was present to address the board regarding parking campers on vacant lots in the Lake Park District. She owns a lot in the Kittelson Addition on Lake Pelican. The old trailer house was removed and improvements have been made to the lot. Neighboring lots still house old trailer homes. Her lot contains a poured pad, septic, sewer, rural water, and electricity and was not aware she was violating current ordinances. She would like the board to consider allowing campers to reside on these lots. Motion by Klatt, second by Johnson, to discuss this item at the August 20 meeting. Motion passed unanimously.

Muller advised the board there was a complaint of campers parked on a lot south of Watertown in the Ag District. It is an illegal lot with only a farm shed on site. It has since been sold and the owner now has approximately four campers on site. Our ordinance does not allow this and a letter will be sent to the owner.

Muller also received a dust complaint near Allen Fannin's property. Clausen Construction was contacted and they already had the water truck on site. There has been conflict with the neighbors in this area. The Highway Superintendent will be contact as well as they use the road too and can assist with water applications for dust control.

Motion to adjourn by O'Neill, second by Ries. Motion passed unanimously. Meeting adjourned at 11:25 p.m.

Respectfully Submitted,

Becky Goens, Secretary

JULY 2018
CODINGTON COUNTY
PLANNING COMMISSION/BOARD OF ADJUSTMENT
STAFF REPORT

MONDAY – JULY 16, 2018 – 6:30 p.m.

CODINGTON COUNTY BOARD OF ADJUSTMENT

ITEM #1 (2) VARIANCES

Applicant/Owner: Larry Borkhuis

Property Description: an 8 acre parcel in Government Lot 4, Section 7-T117N-R54W, Codington County, South Dakota, to be known upon platting as The Plat of L. Borkhuis Addition in Government Lot 4, Section 7-T117N-R54W of the 5th P.M., Codington County, South Dakota. (Richland Township)

Action Items – Variances – Minimum lot size/Existing farmstead exemption (3.04.03.7.b), minimum lot width (3.04.03.2).

Zoning Designation: Agricultural

Request: The applicant seeks variances from the minimum lot width, minimum lot area (by virtue of existing farmstead exemption), to retain building rights on property with an existing farmstead.

History/Issue(s):

1. Mr. Borkhuis seeks to sell the proposed parcel to his son for a house to be constructed and moved on.
2. The property was used as a base for farming operations prior to 1976 and but the residence was destroyed by tornado approximately 50 years ago.
3. Codington County's Zoning Ordinance does allow for variance from the 35 acre-minimum lot requirement if the lot is determined to be an existing farmstead which contains at least five acres and thereby affording building rights.
4. The adjoining property under ownership by Mr. Borkhuis contains an existing farmstead as defined by the Codington County Zoning Ordinance, which may be transferred in addition to the former farmstead in this location.
5. Staff recommendation (Variance) –Existing Farmstead Exemption and variance to Minimum Lot Width- Approve request because 1) The lot does contain at least five acres which meets the terms of the Ordinance. 2) The Zoning Officer after review of anecdotal information, records and site-visit has determined that this parcel is under contiguous ownership of an existing farmstead/residential site prior to October 26, 1976. If approved it should be done so on the condition that the applicant plat a lot of at least five (5) acres in accordance with the Codington County Subdivision Ordinance, and that building permit be applied for on the garage constructed without a permit in the SE1/4 of the Section prior to the issuance of any building permit for a new house at this site.

ITEM #2 CONDITIONAL USE PERMITS

Applicant: Crowned Ridge Wind, LLC; Crowned Ridge Wind II, LLC

Property Description: Certain property in Leola, Germantown, Kranzburg (N&S), Waverly and Rauville Townships

Action Items – Conditional Use – Wind Energy Systems (3.04.02.21)

Zoning Designation: A – Agricultural; Zone B – Aquifer Protection Overlay District; Zone C – Aquifer Protection Overlay District

Request: Crowned Ridge, LLC; Crowned Ridge II, LLC, are requesting to operate a Wind Energy System with up to 164 wind turbines, maintenance and support structures, and associated electrical transmission lines.

History/Issue(s):

Specifics of Request:

1. Crowned Ridge has identified over 40,000 acres of property signed up for easements in its project area that includes approximately 42,000 acres in the above townships for wind towers, electrical transmission lines, substations (2), MET towers, and an operations and maintenance building.
2. The project includes underground electrical lines that collect electricity from the turbines and feed overhead main transmission lines which run for ~9 miles in the county. The electrical lines exit Codington County at the intersection of 160th Street and 466th Avenue.
3. Each turbine will have an access road
4. Each turbine will be connected via fiber optic cable for communications with the tower.
5. Two substations are proposed with this project (27-118-51 and 11-118-51).
6. An operations and maintenance building is proposed in 27-118-51.
7. Up to 4 permanent MET Towers are planned with this project.
8. The project may include temporary concrete batch plant(s) during construction. All activities will meet applicable setbacks for batch plants.
9. The project includes 164 wind towers (See next page):

10.

Leola Township		Waverly Township		Kranzburg (N) Township	
Section Number	Number of Towers	Section Number	Number of Towers	Section Number	Number of Towers
4	2	1N	3	12	4
5	1	2N	4	13	3
7	1	3N	1	14	2
8	3	5N	3	20	2
9	1	8N	3	21	2
17	1	9N	4	22	1
18	4	10N	3	23	1
25	1	11	2	24	1
26	1	12	4	25	2
28	1	14	1	28	2
29	3	15	4	29	2
30	3	16	4	36	1
31	3	17	4	Kranzburg (S) Township	
32	2	18	1	Section Number	Number of Towers
35	3	19	3	12	2
36	2	20*	2	13	2
Germantown Township		21	1	14	1
Section Number	Number of Towers	22	2	15	2
23	1	23	4	20	1
25	4	24	2	21	1
26	2	25	1	23	1
36	3	26	4	27	1
Rauville Township		27	2	28	3
Section Number	Number of Towers	28	1	*discrepancy in maps. Easement for NW1/4 is found on Book 4T Page 4329 at Register of Deeds	
13	1	33	1		
24	3	34	2		
25	1	35	3		
		36	3		
		1S	3		
		2S	1		
		3S	2		
		4S	2		

Ordinance and Comprehensive Land Use Plan regarding this request:

1. The Comprehensive Land Use Plan lists considerations for Wind Energy Systems on page 71.
2. Portions of the project area are located over Zone A and Zone B of the Aquifer Protection District.
3. Wind Energy Systems are an allowable use in Zone A provided performance standards are met.
4. The applicant proposes to meet the requirement that storage of petroleum products in quantities exceeding one hundred (100) gallons at one (1) locality in one (1) tank or series of tanks must be in elevated tanks; such tanks larger than eleven hundred (1,100) gallons must have a secondary containment system where it is deemed necessary by the Board of Adjustment.
5. The applicant does not intend to discharge industrial processed water on the site.
6. The zoning ordinance lists numerous requirements of Wind Energy Systems. Below is a breakdown of the review of compliance with those requirements.

Section	Title	Reference Page	Notes
5.22.02	Federal and State Requirements	Intro: Page 4	
5.22.03.1(a)	Site Clearance	Intro: Page 10	
5.22.03.1(b)	Topsoil Protection	Intro: Page 10	
5.22.03.1(c)	Compaction	Intro: Page 10	
5.22.03.1(d)	Livestock Protection	Intro: Page 10	
5.22.03.1(e)	Fences	Intro: Page 10	
5.22.03.1(f.i)	Public Roads	Intro: Page 11	Applicant is expected to provide local contact to mitigate maintenance issues for roads and structures, during construction, operation, and decommissioning
5.22.03.1(f.ii)	Haul Roads	Intro: Page 11	Applicant is expected to provide local contact to mitigate maintenance issues for roads and structures, during construction, operation, and decommissioning
5.22.03.1(f.iii)	Turbine Access Roads	Intro: Page 11	Applicant is expected to provide local contact to mitigate maintenance issues for roads and structures, during construction, operation, and decommissioning
5.22.03.1(f.iv)	Private Roads	Intro: Page 11	Applicant is expected to provide local contact to mitigate maintenance issues for roads and structures, during construction, operation, and decommissioning
5.22.03.1(f.v)	Control of Dust	Intro: Page 11	Applicant is expected to provide local contact to mitigate maintenance issues for roads and structures, during construction, operation, and decommissioning
5.22.03.1(g)	Soil erosion and Sediment Control Plan	Intro: Page 11-12	To be submitted prior to commencement of construction activities
5.22.03.2	Setbacks	Intro: Page 12; Appendix D	Proposed tower locations meet or exceed setbacks for off-site uses, participating residences, property lines and rights of way.
5.22.03.3	Electromagnetic Interference	Intro: Page 12	Will conduct a beam study

Section	Title	Reference Page	Notes																		
5.22.03.4	Lighting	Intro: Page 12	Request alternative means of lighting including ADLS but will adhere to requirements of FAA for each tower.																		
5.22.03.5	Turbine Spacing	Intro: Page 12-13; Appendix D	Rotor diameter specified per tower location (from 338' to 381').																		
5.22.03.6	Footprint minimization	Intro: Page 13	Turbines are concentrated rather than spread across easement area; but had to be spread to avoid towns. Towers and ancillary electric (boxes, transformers, etc, to be combined as much as possible.																		
5.22.03.7	Collector Lines	Intro: Page 13; Appendix D																			
5.22.03.8	Feeder Lines	Intro: Page 13; Appendix D																			
5.22.03.9	Decommissioning/Restoration/Abandonment	Intro: Page 13-14; Appendix G	Final Decommissioning Plan to be submitted when required by ordinance																		
5.22.03.10	Height from Ground Surface	Intro: Page 14; Appendix E	GE 2.3 = 486'; GE 2.1 = 453'; GE 1.7 = 432'																		
5.22.03.11	Towers	Intro: Page 14																			
5.22.03.12	Noise	Intro: Page 14-15; Appendix F	<p>Noise not to exceed 50dBA at the property line of a residence. (Note: CR2-C25-NP had typo in initial report. Should be: 33.8 dBA not 51.6)</p> <table border="1"> <thead> <tr> <th>Realistic Sound (dBA)</th> <th>Non-Participating Property Boundary</th> </tr> </thead> <tbody> <tr> <td>0 to 25</td> <td>0</td> </tr> <tr> <td>25 to 30</td> <td>0</td> </tr> <tr> <td>30 to 35</td> <td>11</td> </tr> <tr> <td>35 to 40</td> <td>30</td> </tr> <tr> <td>40 to 45</td> <td>21</td> </tr> <tr> <td>45 to 50</td> <td>35</td> </tr> <tr> <td><u>50+</u></td> <td><u>0</u></td> </tr> </tbody> </table>	Realistic Sound (dBA)	Non-Participating Property Boundary	0 to 25	0	25 to 30	0	30 to 35	11	35 to 40	30	40 to 45	21	45 to 50	35	<u>50+</u>	<u>0</u>		
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5.22.03.13	Flicker	Intro: Page 15; Appendix F	<table border="1"> <thead> <tr> <th>Realistic Shadow Flicker (hrs/year)</th> <th>Number of Occupied Residences</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>69</td> </tr> <tr> <td>0 to 5</td> <td>45</td> </tr> <tr> <td>5 to 10</td> <td>32</td> </tr> <tr> <td>10 to 15</td> <td>23</td> </tr> <tr> <td>15 to 20</td> <td>11</td> </tr> <tr> <td>20 to 25</td> <td>13</td> </tr> <tr> <td>25 to 29.9</td> <td>11</td> </tr> <tr> <td><u>30+</u></td> <td><u>0</u></td> </tr> </tbody> </table>	Realistic Shadow Flicker (hrs/year)	Number of Occupied Residences	0	69	0 to 5	45	5 to 10	32	10 to 15	23	15 to 20	11	20 to 25	13	25 to 29.9	11	<u>30+</u>	<u>0</u>
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5.22.03.14	Permit Expiration	Intro: Page 15;	Acknowledges county requirement																		

Section	Title	Reference Page	Notes
5.22.03.15.b	Required Information [Easements/ Affidavit]	Appendix B	
5.22.03.15.c	Required Information [Receptor Map]	Appendix D & E	
5.22.03.15.d	Required Information [Preliminary site map]	Appendix D & E	
5.22.03.15.e	Required Information [Other WES Sites]	Appendix D	
5.22.03.15.f	Required Information [Project Schedule]	Intro: Page 3	Commercial operation in Winter 2019
5.22.03.15.g	Required Information [Mitigation Measures]	Throughout Report; Appendices E, F, G, H, I	
5.22.03.15.h&i	Required Information [Haul Roads and easements for transmission]	Intro: Page 15	
5.22.03.15.j	Required Information [USFWS Consultation]	Appendix I	

Section	Title	Reference Page	Notes
4.05.01.1	Application Submitted	June 4, 2018	
4.05.01.2	Notification of Adjacent Property Owners	Mailed July 5, 2018	Sent to owners of property in Codrington County identified as adjacent to land shown to hold easements in Appendix D.
4.05.01.3	Notice Published in a paper	Published July 6, 2018	
4.05.01.4	Public hearing held	July 16, 2018	
4.05.01.5	Empowered to issue permit	Intro: Page 17; Findings of Fact	
4.05.01.6.a	Access	By-Laws [Art. 12]; Appendix E; Intro: Pages 11, 15, 17	
4.05.01.6.b	Parking and Internal Traffic	By-Laws [Art. 12]; Appendix E; Intro: Page 17	
4.05.01.6.c	Utilities and Refuse	By-Laws [Art. 12]; Appendix E; Intro: Pages 12 & 18	
4.05.01.6.d	Screening, buffering, open space	By-Laws [Art. 12]; Appendix E; Appendix F; Intro: Page 12	
4.05.01.6.e	Lighting	By-Laws [Art. 12]; Appendix ; Intro: Page 12	
4.05.01.6.f	General Compatibility	By-Laws [Art. 12]; Appendix E; Intro: Page 18	Used to apply conditions. Similar use to previously approved WES (this meets more stringent requirements.) Towers shorter than BOA approved Telecommunications Towers in: 21-118-51; and
4.05.01.7	Prescription of Conditions	Based upon Hearing and policies of board	
4.05.01.8	Voting Standard	2/3 of members present and voting	
4.05.01.9	Permit Expiration	Ord Section 5.22.03.14	

7. Other items:

- a. Applicant provided information regarding future locations of permanent meteorological towers. These should be considered accessory with no further conditional use permit necessary if within the area described in the application.
- b. Applicant agrees to submit decommissioning plan and haul road agreements as required by ordinance.
- c. Applicant agrees to obtain building permits prior to commencing construction on any towers.
- d. Applicant agrees to meet State and Federal requirements regarding permitting and interference with communications.

Staff Summary and Recommendation:

- The motion approves construction of the wind energy facilities on properties referenced in the application in a manner that meets the terms of the ordinance. The specific information provides the Board with more detail to make the decision, but final siting is allowed to change as long as it is done in conformance with the requirements of the ordinance and upon the properties described in the application.
- The applicant has provided documentation of its ability to meet the requirements of the zoning ordinance in reference to the proposed wind energy system. The Board may attach conditions to this request provided there is a logical reason to do so. Staff expects significant public comment. Any conditions recommended by staff are primarily references to continuing obligations of the applicant from the zoning ordinance.
- Staff recommends:

Conditional Use Permit – Wind Energy Systems. The Board may postpone the request, deny the request or approve the request. If approved staff recommends the following conditions be agreed to in a letter of assurance signed by the applicant(s):

5) Effective Date and Transferability:

- a. Upon issuance of permit by South Dakota Public Utilities Commission.
- b. This permit shall expire if either no construction as described in the application has commenced within three (3) years of issuance by the County Board of Adjustment; or if a State Permit from the South Dakota Public Utility Commission has not been issued within two (2) years of issuance by the County Board of Adjustment; or any within three (3) years of the final decision regarding any appeal to circuit court relating to the issuance of the permit.
- c. The applicant may apply for an extension of this permit if the requirements of 1.b above cannot be met.
- d. The Conditional Use permit is transferable. Subsequent owners/operators shall agree to the same conditions described herein.

6) General Requirements:

- a. There shall be no discharge of industrial processed water on the site
- b. Storage of petroleum products in quantities exceeding one hundred (100) gallons at one (1) locality in one (1) tank or series of tanks must be in elevated tanks; such tanks larger than eleven hundred (1,100) gallons must have a secondary containment system where it is deemed necessary by the Board of Adjustment.

- c. Grantor shall provide the zoning office with an updated local contact information of plant supervisor with authority to implement dust control and other necessary enforcement of the conditions of this permit.
- 7) Obligation to Meet Requirements:
- c. Applicant agrees to meet requirements of Section 5.22 of the Codington County Ordinance in reference to remaining obligations including but not limited to: submittal of Soil Erosion and Sediment Control Plans, Haul Road Agreements, Decommissioning Plan, Final site location of towers, building permit application, meeting applicable federal and state requirement as required by Section 5.22
 - d. Applicant acknowledges the ability of the Board of Adjustment to require some form of financial assurance to cover the anticipated costs of decommissioning the WES Facility on or before July 16, 2023.
- 8) Violation and Penalties:
- c. Violations of requirements of the ordinance relating to the operations of a specific tower will result in enforcement/penalties in reference to the specific tower found to be in violation, and will be enforced in the manner as described in Section 4.b below.
 - d. Violation of the terms of this conditional use permit will be determined by the Codington County Zoning Officer.
 - (4) The first violation substantiated by the Zoning Officer of this conditional use permit may result in a notification letter stating the violation and a prescribed period of time to remove the violation. A second violation occurring within one calendar year of the previous violation may result in a review of the validity of the conditional use permit and potential revocation of said permit. A third violation within one calendar year of the initial violation may result in revocation of the conditional use permit and cessation of all feeder operations within forty-five days (45) of notice of revocation.
 - (5) The applicant may make appeal from the decision of the Zoning Officer or other agent of the Codington County Board of Adjustment to the Codington County Board of Adjustment. The applicant shall file with the Zoning Officer a notice of appeal specifying the grounds thereof. The Zoning Officer shall forthwith transmit to the Board of Adjustment all papers constituting the record upon which the action appealed from was taken. Such appeal shall be taken within thirty (30) days. Appeals from the Board of Adjustment shall be taken to Circuit Court.
 - (6) Failure to comply with the decision of the Zoning Officer or other agent of the Codington County Board of Adjustment may be deemed a separate violation.

CODINGTON COUNTY PLANNING COMMISSION

ISSUE #1 PLAT

Applicant/Property Owners: Larry Borkhuis

Property Description: The Plat of L. Borkhuis Addition in Government Lot 4, Section 7-T117N-R54W of

the 5th P.M., Codington County, South Dakota. (Richland Township)

Zoning Designation: A-Agricultural District

Request: Plat an 8 acre parcel at the site of an existing farmstead as required as a condition of variance.

ISSUE #2 OPEN/STAFF REPORT

- Jody Engels requests to address the Board regarding willingness to allow campers to be occupied on a lot with no primary use.

ISSUE #3 EXECUTIVE SESSION