

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

**IN THE MATTER OF THE
APPLICATION OF DEUEL HARVEST
WIND ENERGY LLC FOR A PERMIT
OF A WIND ENERGY FACILITY AND
A 345-KV TRANSMISSION LINE IN
DEUEL COUNTY**

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* **APPLICANT’S RESPONSES TO**
* **CHRISTINA KILBY’S SECOND SET**
* **OF DATA REQUESTS TO APPLICANT**
*
* **EL18-053**
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Below, please find Applicant’s responses to Christina Kilby’s Second Set of Data Requests to Applicant.

2-1) In Michael Svedeman’s response to Christina Kilby’s First Set of Data Requests 1-19, he stated the number of Deuel County residents that will be hired to work on some aspect of Project construction depends on the qualifications and expertise of local residents. Please describe the qualifications and expertise required to work on construction of the Project.

Lisa Agrimonti: Deuel Harvest objects to this request as vague and overbroad. Deuel Harvest further objects to this request as not reasonably calculated to lead to the discovery of admissible evidence.

Michael Svedeman: Subject to and without waiving the foregoing objections, the job classifications anticipated generally for construction of the Project are set forth in Table 21-1 of the Application. The Project and its contractors will seek to hire personnel with the qualifications and expertise necessary for these job classifications.

2-2) Provide names of all individuals who have received gifts from Invenergy or Deuel Harvest for speaking in favor of the Project or in favor of wind energy at any meeting or hearing held in Deuel County in the last seven years.

Lisa Agrimonti: Deuel Harvest objects to this request as not reasonably calculated to lead to the discovery of admissible evidence.

Michael Svedeman: Subject to and without waiving the foregoing objections, Deuel Harvest has made no payments to any individual for speaking in favor of the Project or in favor of wind energy at any meeting, and I am unaware of any of the same by Invenergy, as well.

2-3) Does Invenergy or Deuel Harvest release landowners from their lease or easement agreements upon request of the individual?

Lisa Agrimonti: Deuel Harvest objects to this request as vague and overbroad because it does not specify any time limitations. Deuel Harvest further objects to this request as not reasonably calculated to lead to the discovery of admissible evidence.

Michael Svedeman: Subject to and without waiving the foregoing objections, Deuel Harvest considers releasing a landowner from his/her lease or easement agreement on a case-by-case basis, and has released landowners from a lease or easement upon request.

2-4) Name all individuals released from agreements with Deuel Harvest within two weeks of the date Deuel County Zoning Board Member Mike Dahl was released from his agreement with Deuel Harvest.

Lisa Agrimonti: Deuel Harvest objects to this request as not reasonably calculated to lead to the discovery of admissible evidence.

2-5) Name all individuals representing Deuel Harvest or Invenergy who communicated with Mike Dahl regarding the release of his agreement.

Lisa Agrimonti: Deuel Harvest objects to this request as not reasonably calculated to lead to the discovery of admissible evidence.

2-6) Describe all communication of any kind, whether oral, written, or electronic between any employee, agent, representative, contractor or attorney of Invenergy or Deuel Harvest with John Knight in the last seven years.

Lisa Agrimonti: Deuel Harvest objects to this request as overbroad, not reasonably calculated to lead to the discovery of admissible evidence, and duplicative.

2-7) Does Deuel Harvest hold any agreements with individuals who reside in or own land in Deuel County that have not been recorded in the Deuel County Registrar's Office?

Lisa Agrimonti: Deuel Harvest objects to this request as vague and not reasonably calculated to lead to the discovery of admissible evidence.

Michael Svedeman: Subject to and without waiving the foregoing objections, and assuming that "agreements" is intended to mean "easements, I understand that Deuel Harvest has recorded memorandums of agreement for all easements, and there are no easements that have been executed, but not recorded.

2-8) Describe in detail Mr. Hankard's role in Invenergy's Willow Creek Project.

Lisa Agrimonti: Deuel Harvest objects to this request as vague, not reasonably calculated to lead to the discovery of admissible evidence, and to the extent it seeks information protected as work product and/or attorney-client privileged.

Mike Hankard: Subject to and without waiving the foregoing objections, I was not involved in modeling or other pre-construction activities with respect to the Willow Creek Project. After operations, I conducted multiple years of sound measurements at that project and designed a system to shut down certain turbines under certain conditions.

2-9) How would Deuel Harvest advise local fire departments to handle a potential turbine fire?

Jacob Baker: As I have testified, a turbine fire is a rare occurrence. Deuel Harvest will advise local fire departments that should a fire occur, firefighters should be focused on protecting the public and would monitor the fire until it self-extinguishes. In the rare case of a ground fire, Deuel Harvest anticipates that local fire departments would respond in accordance with their training and experience, which is often related specifically to ground fires. See also response to Request Nos. 2-10 and 2-11.

2-10) In Applicant's Responses to Christina Kilby's First Set of Data Requests 1-46, Jacob Baker responded "Deuel Harvest will coordinate fire emergency plans and hold emergency response drills at the Project with local fire departments both before the Project becomes operational and annually thereafter." Has Deuel Harvest created a fire emergency plan previously? If so, please provide.

Jacob Baker: Invenergy develops site-specific emergency response plans for each project. A specific plan for Deuel Harvest has not yet been developed. A copy of Invenergy's Emergency Response Plan template is included as Attachment 2-10.

2-11) Describe the emergency response drills Deuel Harvest or Invenergy will conduct with local fire departments referenced in Applicant's Response 1-46.

Jacob Baker: Each site Manager engages with the local EMS and sets up a time and place with the Fire Chief where a simulated emergency will take place. This emergency can be any number of items, but for this response, we will discuss a turbine fire. The emergency drill is normally not announced to either the site staff or fellow firefighters at the local fire department. On the day of the drill, during normal day-to-day activities, the Manager will announce over the radio that a fire is in progress at a specific turbine and that a drill is in progress. The technicians in the field will place a call to the local EMS. The technicians and Manager will head to the affected turbine and set up direction points to help guide EMS to the turbine (turbine GPS coordinates are always shared with local EMS, too). Once EMS is on the scene, the Fire Chief and Manager give instruction on

the situation and run through several simulations (ground fire, debris falling, public onlookers, etc.) and how each party will respond to a given situation. After the drill is completed, a debrief is given to the entire fire department and Site team – reviewing lessons learned and observations made by the Fire Chief and Manager during the drill.

2-12) Describe the qualifications of whomever will be conducting the emergency response drills referenced in Response 1-46.

Jacob Baker: During the initial site startup the drills and training will be conducted by the Regional Environmental Health and Safety (“EHS”) Manager, Regional Director of Operations, and the onsite Manager. The EHS Manager and Regional Director have been involved with numerous drills throughout their careers and have been heavily involved in developing Invenergy’s emergency response policies and procedures. Future drills will be initiated by the Manager, with assistance from the EHS Manager.

2-13) Does Invenergy maintain records of complaints made regarding its wind energy projects? If so, provide all such complaints regarding wind energy facilities.

Lisa Agrimonti: Deuel Harvest objects to this request as overly broad, unduly burdensome, and vague with respect to “complaints.” Deuel Harvest further objects to this request as not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objections, see response to Intervenor’s Request Nos. 54 and 55.

2-14) Please provide the amounts of economic benefits to Deuel County claimed by any employee, agent, or representative of Deuel Harvest or Invenergy in the last seven years.

Lisa Agrimonti: Deuel Harvest objects to this request as vague and is unable to discern what is being requested.

2-15) What is the amount of infrasound the project will cause at non-participating residences?

Mike Hankard: Infrasound is not typically measured at wind projects because the levels emitted by wind turbines are below the threshold of human hearing, and the turbines at this Project are anticipated to create infrasound levels similar to that of existing, similarly sized turbines. Specifically, wind turbine infrasound sound levels are around 40 dB (four orders of magnitude) below the human hearing threshold, which is over 100 dB at 5 Hz. See also Hankard Rebuttal, page 5 lines 125 to 137.

- 2-16) Provide a copy of any agreement Deuel Harvest or Invenergy has with the Deuel County Zoning Officer Jodi Theisen.**

Lisa Agrimonti: Deuel Harvest objects to this request as not reasonably calculated to lead to the discovery of admissible evidence and as seeking confidential information. Subject to and without waiving the foregoing objections, Deuel Harvest provides the following response:

Michael Svedeman: The only agreement Deuel Harvest has with Ms. Theisen is a wind lease and easement agreement, which the requesting Intervenor has in her possession.

- 2-17) Describe in detail all communication of any kind in the last two years between Deuel Harvest or Invenergy, or any of either's affiliates, agents, representatives, employees, attorneys or contractors and Jodi Theisen pertaining to the setback from Lake Alice. Provide copies of any written or electronic communication.**

Lisa Agrimonti: Deuel Harvest objects to this request as not reasonably calculated to lead to the discovery of admissible evidence and to the extent that it misstates the Deuel County Zoning Ordinance.

Michael Svedeman: Subject to and without waiving the foregoing objections, none. Until Intervenor raised an alleged alternative interpretation of the Lake Park District setback in this proceeding, based upon the Zoning Ordinance, zoning map, and applicable meeting minutes, there was no question regarding the intent or scope of the setback in the Deuel County Zoning Ordinance § 1215.03(2) and, as such, Deuel Harvest had no occasion to correspond with Ms. Theisen regarding this issue.

- 2-18) During what months did Deuel Harvest, Invenergy, or any of either's affiliates, employees, agents, representatives, attorneys, or contractors participate in negotiations with States Attorney John Knight regarding any lease or easement agreements with any landowners?**

Lisa Agrimonti: Deuel Harvest objects to this request as not reasonably calculated to lead to the discovery of admissible evidence.

- 2-19) Describe all communications of any kind, including but not limited to written, oral, electronic or telephonic between Deuel Harvest's agent (or contractor) Gene May and either Mike Dahl, Kevin DeBoer, Jodi Theisen, John Knight, Gary Jaeger or Lynn Pederson in the last four years. Provide copies of all such communication that is in written or electronic form.**

Lisa Agrimonti: Deuel Harvest objects to this request as not reasonably calculated to lead to the discovery of admissible evidence. Deuel Harvest further objects to this request to

the extent that the requested information was already produced in Docket No. 19CIV18-00019.

2-20) Provide a diagram of the foundations that will be utilized for the Project turbines.

Michael Svedeman: At this time, Deuel Harvest only has a preliminary foundation design for the turbine models, which is confidential and not specific to this Project. Final design is specific to each turbine location and is based off currently ongoing geotechnical investigation at each potential turbine site, along with foundation loading information that is provided by the turbine manufacturer.

2-21) Provide all material safety data sheets for the turbines that are being considered or proposed for the Project.

Jacob Baker: There are no “material safety data sheets for the turbines that are being considered or proposed for the Project.”

2-22) Provide evidence to substantiate Deuel Harvest’s claim that the life of the project is 30 years.

Michael Svedeman: To be clear, Deuel Harvest does not claim that each and every Project component will last 30 years without replacement or repair. This Project, like many other wind projects, is planned to operate at least 30 years. This is a common timeframe for power purchase agreements and interconnection agreements, and the Project will be subject to routine maintenance and inspections so that its operation may be consistent with this timeframe.

2-23) What is the expected lifetime of a blade once in operation? Provide evidence for your response.

Jacob Baker: Based on Invenegy’s fleet history, there is a 0.25 percent chance that a turbine will need a blade replacement in a given year; that equates to a 0.09 percent chance per year on a per blade basis.

2-24) Is Deuel Harvest aware of any records regarding the number of turbine fires that have occurred in the United States in the last five years?

Lisa Agrimonti: Deuel Harvest objects to this request as overly broad, not reasonably calculated to lead to the discovery of admissible evidence, and to the extent it seeks information not in the custody or control of Deuel Harvest.

Jacob Baker: Turbine fires are rare. Invenergy has experienced a fire at one turbine in its fleet in approximately 15 years of owning and operating wind projects; at this time, Invenergy operates over 4,800 MW of wind turbines. Invenergy staff and local emergency responders responded to the incident, and the fire extinguished on its own. There were no injuries or property damage as a result of this incident. The fire occurred in 2013 at the Forward Energy Wind Center, which was constructed in 2008 and is located in Dodge and Fond du Lac counties, Wisconsin.

2-25) As follow-up to Deuel Harvest's response to my data request 1-44, do different turbine models contain different flammable materials?

Lisa Agrimonti: Deuel Harvest objects to this request as ambiguous, overbroad, and not reasonably calculated to lead to the discovery of admissible evidence.

2-26) Are any petroleum products contained within the proposed turbines? If so, what is the amount of petroleum products contained within each turbine?

Jacob Baker: See Deuel Harvest's responses to Garrett Homan's Request 1-10(o).

2-27) Regarding Deuel Harvest's response to my data request 1-44, what is Jeff Kopp's role in the Project and what are his qualifications?

Jeff Kopp: I am the Project Manager for the decommissioning planning and estimating portion of the Project. With 17 years of experience providing consulting services to electric utilities, I have been involved in the preparation of decommissioning cost estimate reports for over 150 plants. I have also presented at several conferences on the topic of decommissioning cost estimating.

2-28) If a blade needs to be replaced prior to decommissioning, where will the blade be disposed of?

Lisa Agrimonti: Deuel Harvest objects to this request as seeking speculation and being vague and ambiguous with respect to timeframe.

Jacob Baker: Subject to and without waiving the foregoing objections, if a blade needs to be replaced prior to decommissioning it will first be evaluated if a repair possible. If repair is not possible, it will be removed from the turbine, treated as solid waste, and cut down then disposed of at an appropriate trash disposal site.

2-29) Has Deuel Harvest, Invenergy, or any of either's affiliates, employees, contractors, agents, representatives or attorneys ever provided gifts including but not limited to

tickets to any sporting event to any Deuel County County Commissioner, Zoning Board member, or Zoning Officer in the last seven years?

Lisa Agrimonti: Deuel Harvest objects to this request as not being reasonably calculated to lead to the discovery of admissible evidence.

Michael Svedeman: Subject to and without waiving the foregoing objection, none of which I am aware. Deuel Harvest has been a sponsor of the Crystal Springs Rodeo since 2015 and Gary Rodeo since 2017, and purchased tickets to these local rodeos which were given to some Project participants and community members as part of Deuel Harvest's sponsorship and commitment to the local community; the tickets were distributed by Deuel Harvest's land agents, and I am not aware of any of those tickets being provided to "any Deuel County Commissioner, Zoning Board member, or Zoning Officer."

2-30) How many *individuals* residing in Deuel County are currently bound by confidentiality agreements with Deuel Harvest or Invenergy?

Lisa Agrimonti: Deuel Harvest objects to this request as not being reasonably calculated to lead to the discovery of admissible evidence and overly broad and unduly burdensome. Deuel Harvest further objects to this request to the extent it mischaracterizes the scope and/or content of any contractual provision.

Michael Svedeman: Subject to and without waiving the foregoing objections, information concerning the number of wind lease and easement agreements in Deuel County is already provided in this docket, and the leases contain a confidentiality provision. There are no "confidentiality agreements" as referenced in the question. The confidentiality provision from Deuel Harvest's lease is below:

The Parties acknowledge that prior to the execution of this Agreement, neither party may require the other party to maintain the confidentiality of any negotiations or the terms of the Agreement. After the Effective Date, however, both Parties shall maintain in confidence, for the benefit of the other party, all information pertaining to the financial terms of or payments under this Agreement. Neither party will use such information for its own benefit, publish or otherwise disclose it to others, or permit its use by others for their benefit or to the detriment of the other party. Notwithstanding the foregoing, each party may disclose such information to such party's lenders, attorneys, accountants and other advisors; any prospective purchaser or lessee of such party's interests in Property; or pursuant to lawful process, subpoena or court order requiring such disclosure, provided the party making such disclosure advises the party receiving the information of the confidentiality of the information.

2-31) Would the viability of the project be threatened if no turbines would be constructed within two-miles of the Homan runway? If so, provide evidence.

Lisa Agrimonti: Deuel Harvest objects to this request because it is argumentative, seeks speculation, and is vague with respect to “viability.”

Michael Svedeman: Subject to and without waiving the foregoing objections, see response to Intervenor’s Request No. 1-52, where I explained that removing all turbines within two miles of the grass airstrip on the Homan Construction property would result in the removal of 16 turbines. Removing 16 turbines from the Project at this stage would potentially impact the viability of the Project. In addition, there would be corresponding negative impacts on the landowners on whose properties those turbines are proposed and who wish to host Project turbines.

- 2-32) State the farthest distance Invenergy is aware of that ice has been thrown from a turbine.**

Lisa Agrimonti: This request is duplicative of Intervenor’s Request No. 1-67, to which Deuel Harvest has provided a response.

- 2-33) State the farthest distance Invenergy is aware of that a blade piece has been thrown from a turbine.**

Lisa Agrimonti: This request is duplicative of Intervenor’s Request No. 1-68, to which Deuel Harvest has provided a response.

- 2-34) To Mr. Hankard, please provide documentation showing reliability of your prediction studies.**

Mike Hankard: See response to Garrett Homan’s Request 2-25(a).

Directed to Dr. Ellenbogen:

- 2-35) Are you aware of any studies indicating physical effects on animals living in close proximity to wind turbines? If so, please provide such studies.**

Dr. Jeffrey Ellenbogen: Assuming that this request’s reference to “animals” is to animals other than humans, no.

- 2-36) Are you aware of any current research being conducted regarding possible health effects caused by wind turbines? If so, please describe.**

Dr. Jeffrey Ellenbogen: I am not aware of ongoing research, if any, that is currently in progress but not yet published.

2-37) Please describe the Hypocratic Oath.

Lisa Agrimonti: Deuel Harvest objects to this request. The Hippocratic Oath speaks for itself.

2-38) Are you bound by the Hypocratic Oath when testifying on behalf of Deuel Harvest? Please explain.

Dr. Jeffrey Ellenbogen: As a practicing physician of nearly 20 years, I am duty bound by contemporary codes of medicine. When I provide sworn testimony, I am duty bound to “tell the truth, the whole truth and nothing but the truth.”

2-39) Are you aware of any public protections put in place for potentially harmful agents when there is limited epidemiological evidence for a direct causal link? If so, please explain.

Lisa Agrimonti: Deuel Harvest objects to this request as vague and ambiguous with respect to the use of the phrases “public protections” and “potentially harmful agents.” Subject to and without waiving the foregoing objections, Deuel Harvest provides the following response:

Dr. Jeffrey Ellenbogen: No.

2-40) Are you aware of any recommendations by the World Health Organization regarding night-time noise limits? If so, please explain.

Lisa Agrimonti: Deuel Harvest objects to this request as overbroad and as vague with respect to its request to “please explain.” Subject to and without waiving the foregoing objections, Deuel Harvest provides the following response:

Dr. Jeffrey Ellenbogen: Yes. In 2009, the World Health Organization (“WHO”) issued a document, “Night Noise Guidelines for Europe.” This document was silent with respect to wind turbines. The WHO recently produced the document, “Environmental Noise Guidelines for the European Region” (2018). In this updated document of 2018, the WHO states that “[t]he quality of the evidence of night-time exposure to wind turbine noise is too low to allow a recommendation.” (See page xvii).

2-41) Are you aware that the Brown County, WI, Board of Health declared the Shirley Wind Project a Human Health Hazard?

Dr. Jeffrey Ellenbogen: I am not familiar with any declaration by the Board of Health regarding the Shirley Wind Project.

To Dr. Roberts:

2-42) Please explain Exponent Inc.'s business.

Dr. Mark Roberts: Exponent is a California based engineering and scientific consulting firm. Exponent has a multidisciplinary team of scientists, physicians, engineers, and business consultants which performs research and analysis in more than 90 technical disciplines. The company operates 20 offices in the United States and five offices overseas. Exponent professionals investigate, analyze and describe engineering and health occurrences ranging from structural failures and transportation accidents to a variety of health related topics ranging from infectious disease to chemical exposure.

2-43) How many wind energy projects have you testified regarding?

Dr. Mark Roberts: I have not counted them and do not track them by number but I estimate that I have offered testimony in connection with wind farms in approximately 20 states in some form or fashion

2-44) How many other energy facilities have you testified regarding?

Dr. Mark Roberts: In addition to the cases reference above, I recall providing testimony in two cogeneration facilities in Wisconsin and two gas fired facilities.

2-45) Are you aware of any studies showing that infrasound poses no threat to human health? If so, please provide.

Dr. Mark Roberts: There are a number of studies that have included infrasound in the spectrum of sound studied and no health effects were reported. See, for example, the testimony submitted by Dr. Jeffery Ellenbogen in this proceeding. In addition, we are surrounded by infrasound and, in fact, have infrasound emanating from our bodies (heart, lungs, joints).

2-46) Are you aware of any study showing that the “nocebo” effect is the cause of all health complaints of people living in proximity to wind turbines? If so, please provide.

Lisa Agrimonti: Deuel Harvest objects to this request as overbroad and vague with respect to the phrase “all health complaints.” Subject to and without waiving the foregoing objections, Deuel Harvest provides the following response:

Dr. Mark Roberts: Nocebo effect is a well-established observation in medicine and the pharmaceutical world. There is no study or studies that show “**all** health complaints of people living in proximity to wind turbines” are the result of nocebo effect.

- 2-47) Is the list of articles included in your Pre-filed Supplemental Direct Testimony on pages 3-5 a complete list of all articles published on the subject of whether wind turbines cause adverse health effects?**

Dr. Mark Roberts: No. The articles that I listed in the Pre-Filed Supplemental Direct Testimony are the most germane ones to the points or opinions I was discussing. The list in no way represents “all” the articles reflecting on wind turbines and health.

- 2-48) Are you aware of any public protections put in place for potentially harmful agents when there is limited epidemiological evidence for a direct causal link? If so, please explain.**

Lisa Agrimonti: Deuel Harvest objects to this request as vague and ambiguous with respect to the use of the phrases “public protections” and “potentially harmful agents.” Subject to and without waiving the foregoing objections, Deuel Harvest provides the following response:

Dr. Mark Roberts: Public health institutions and agencies do make health recommendations based on early scientific information but continue to refine the public health message as new or additional information becomes available. In contrast, at least 12 health agencies from different countries and 12 state or local health agencies have reviewed the question of health effects associated with wind turbines, and none has linked wind turbines to a specific health effect.

- 2-49) Are you aware of any recommendations by the World Health Organization regarding night-time noise limits?**

Dr. Mark Roberts: Yes. WHO 2018 has a “conditional” guideline for Europe regarding wind turbine noise that includes a night-time guideline. A conditional recommendation is based on “less certainty” and was described as being subject to change based on further research. Even though the WHO document was produced in 2018, it did not include major works such as Health Canada and the Berkeley study. The WHO guideline clearly acknowledges this shortcoming.

- 2-50) Are you aware that the Brown County, WI, Board of Health declared the Shirley Wind Project a Human Health Hazard?**

Dr. Mark Roberts: The proceedings of the Brown County Board of Health (“Board”) October 14, 2014 meeting indicate that during the course of their meeting they took up a discussion of reported health effects and opened the meeting to public comments. Later that evening the Board took a vote indicating wind turbines were a “hazard to health.” This is in direct contradiction to the findings of a report that the Board had requested regarding wind turbine health effects. Subsequently, Ms. Chua Xiong, Director of the

Brown County Health Department, reported that she found a lack of scientific evidence to link the illnesses of some people living near the eight-turbine wind farm in southern Brown County. The Board's action is also contradictory to the results of two separate reviews undertaken by the Wisconsin State Department of Health (2010 & 2015).

**2-51) Are you bound by the Hypocratic Oath when testifying on behalf of Deuel Harvest?
Please explain.**

Dr. Mark Roberts: Yes. There are a number of different oaths recited at medical school graduations but nearly all center on the key point of "do no harm to the patient." I feel that I am following that philosophy and commitment with every health encounter be it concerns about health effects from wind turbines, obesity, or cancer. When a person says "I think I have a brain tumor," I do not immediately agree and recommend surgery or chemotherapy. I assess the person and follow a common practice of evaluating the person for objective signs of what is causing the change in his or her health and make the appropriate referral to a treating physician. That action is entirely consistent with the basic premise that a physician should do no harm. The clear possibility of harm comes from shortcutting the clinical process and just recommending a treatment.

Dated this 11th day of April, 2019.

By /s/ Lisa Agrimonti
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EMERGENCY RESPONSE PLAN – SITE NAME WIND ENERGY CENTER

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LIST OF ACRONYMS AND ABBREVIATIONS

AED	Automated External Defibrillator
SITE NAME	SITE NAME Wind Energy Center
CPR	Cardiopulmonary Resuscitation
CFR	Code of Federal Regulations
EC	Energy Center
EEE	Emergency Escape Equipment
EHS	Environmental, Health, and Safety
EPA	U.S. Environmental Protection Agency
ERP	Emergency Response Plan
WT	Wind Technician
Invenergy	Invenergy Services LLC
SDS	Safety Data Sheet
MW	Megawatt
NRC	National Response Center
O&M	Operation and Maintenance
OSHA	Occupational Safety and Health Administration
PPE	Personal Protective Equipment
RQ	Reportable Quantity
SCBA	Self-Contained Breathing Apparatus
SPCC	Spill Prevention, Control, and Countermeasure
WTG	Wind Turbine Generator

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1. PURPOSE:

- 1.1. The following emergency response procedures are provided so that all SITE NAME Energy Center and expansion (SITE NAME) personnel understand the practices that are to be followed to provide quick and effective response to emergencies that might arise at the facility. Because the safety of employees is of primary concern, the SITE NAME O&M Manager and each member of the SITE NAME staff are committed to providing a safe, healthy, work environment and are responsible for ensuring implementation of these procedures.

2. APPLICABILITY:

- 2.1. SITE NAME Energy Center O&M Manager and SITE NAME Energy Center Staff.

3. REFERENCES:

- 3.1. [Tractel Derope and TSL SRK-11 Use](#)
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4. INTRODUCTION

4.1. Facility Description

SITE NAME Energy Center is located in (XXXXX) county.

Figure 2 provides a site drawing of the SITE NAME facility. Notification information for plant and external support organizations (police, fire department, medical facilities, etc.) that may be called to respond to emergency situations at SITE NAME is included in Tables 1 and 2. Support personnel are available on the plant site Monday through Friday, 7 a.m. to 3:30 p.m. The Plant Manager is available via cellular phone in case of an emergency.

4.2. Plan Organization/Relationship to Other Plans

- 4.2.1. This Emergency Response Plan (ERP) addresses Occupational Safety and Health Act (OSHA) requirements for emergency response management and plans [29 Code of Federal Regulations (CFR) 1910.38 and 1910.120]. Section 5 of the ERP provides a description of the SITE NAME EC Response Management System. This section includes procedures for communicating emergency situations and describes the emergency equipment and resources available for response at the SITE NAME EC. Sections 6 through 10 provide specific procedures for response to fire, medical, chemical release, security threat, and severe weather incidents. Contractor/visitor management and training procedures are described in sections 11 and 12.

A Spill Prevention Control and Countermeasure Plan (SPCC) will be prepared separately after operations begin that addresses oil pollution prevention and spill response requirements as specified in 40 CFR Part 112.

4.3. Plan Review and Revision

- 4.3.1. A review of the SITE NAME EC ERP shall be conducted and documented on an annual basis. The plan will also be reviewed and amended whenever there is a change in facility design, construction, operation, or maintenance that affects emergency response planning.

5. EMERGENCY RESPONSE MANAGEMENT

5.1. Overall Organization

- 5.1.1. Overall responsibility for the ERP lies with the SITE NAME EC O&M Manager. The O&M Manager or Lead Technician is responsible for program implementation, including designating evacuation routes and employee assembly points, coordinating severe weather activities, communicating

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emergency response procedures to site personnel, contracting with emergency response organizations, and contractor coordination.

5.2. Roles and Responsibilities

5.2.1. Specific management personnel will assume leadership roles for emergency responses. The Site Manager and/or Lead Technicians will assist in the implementation of this plan by knowing and communicating evacuation routes to workers during emergency evacuation and reporting the status of the evacuation to the Fire Department. The O&M Manager is responsible for seeing that this plan is implemented and will appoint an adequate number of personnel to enforce the plan, assure everyone is familiar with this plan and act as a liaison with the local Fire Department(s).

All facility personnel have a responsibility to immediately report any emergency situation that has occurred or might occur, to the Lead Technician on duty, who then notifies the O&M Manager and other key personnel of the situation using the SITE NAME EC Emergency Notification Telephone List (refer to Attachment 15.4).

5.3. Preparation and Planning for Emergencies

5.3.1. Pre-planning for emergencies is a crucial element of this plan. The following steps have been taken in planning for emergency situations at the site:

- All main road exits are established and are posted in the SITE NAME EC O&M Building.
- Evacuation route diagrams have been documented and posted in the O&M Building.
- Site personnel receive instruction to keep exits from the site or O&M Building clear and to maintain ready access to fire extinguishers by not blocking them with furniture, or any other means.
- The site O&M Manager and Lead Technicians have been trained in their specific duties. All building occupants have been instructed in actions to take in case of an emergency through their copies of procedures and training, as needed.
- A variety of emergency response drills (such as fire, tornado, bomb threat, etc.) are held on a quarterly basis, and will be documented.

5.4. Communications

5.4.1. Timely and efficient communications are essential to deal with an emergency response situation. For that reason, the following requirements have been established at SITE NAME EC.

- Employees using radios/phones shall yield to individuals who are the most directly involved in an emergency response activity, i.e. emergency response takes priority over all other communication on company network.
- If radio/phone communications are interrupted or unclear, employees should proceed to the O&M Building.
- All hand-held radio/phones should be recharged daily with back-up batteries ready for use.

5.5. Emergency Response Equipment

5.5.1. A list of emergency response equipment that is available at SITE NAME EC is provided below. Chemical spills may require the assistance of an Emergency Response Contractor who can quickly mobilize materials and equipment to address larger spills. SITE NAME EC has made arrangements with contractors to provide emergency response services in the event of spills and releases. Contact information is provided in Attachment 15.4.

5.5.2. Communications Equipment

- Individually issued cell phone for use by site personnel with text weather/lightning alerts.
- Radios for use by crews in field.

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- Land line communication to O&M center: 999-999-4444
- Radio communication and weather monitoring at O&M center.
- Text weather alerts to individual cell phones.

5.5.3. Personal Protective Fall Protection

- Full body harness
- Fall Arrest Lanyards
- Ladder Safety device for the safe climb system

5.5.4. Personal Protective Equipment

- Rubber boots
- Rubber gloves
- Goggles
- Face shields
- Heat resistant gloves
- Leather Gloves
- 40 Cal Suits for ARC Flash
- Safety Toe Boots
- Hard Hats
- Safety Glasses
- Work gloves

5.5.5. Other Equipment maintained in O&M Building and in crew trucks

- Tractel equipment for assisted rescue
- SRK-11 equipment for self and assisted rescue
- Shovels
- Rakes
- Tube absorbents
- Absorbent pads
- Absorbent material
- Fire extinguishers
- First Aid kits

5.6. Emergency Evacuation


5.6.1. Operating Site Drills

- 5.6.1.1. SITE NAME EC will conduct emergency response exercises quarterly to ensure employees are prepared to react and respond appropriately during contingency situations. Guidance for conducting these events can be found in Invenergy's [Procedure Fleet Operating Site Drills](#).

5.6.2. Evacuation Planning

- 5.6.2.1. Proper preparation and planning for emergencies is essential in order for evacuation to be effective and efficient. Quarterly drills are performed at SITE NAME EC to familiarize employees of procedures in the event of a real emergency. The Fire Department will be requested to participate and assist with critique of evacuation drills.

SITE NAME EC personnel are instructed on the following:

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- Know at least two exits whenever possible. Some terrain features on the project do not allow for two exits, and means for egress are to be addressed before tasks start in these areas.
- Be familiar with the evacuation routes posted in the O&M Building.

A SITE NAME EC evacuation sheet must be posted and orally communicated to site personnel. It is recommended that these procedures be discussed at periodic safety meetings in addition to being covered during new employee orientation.

5.6.3. Emergency Routes

- 5.6.3.1. Depending upon the degree of emergency, weather and/or site conditions, roadways as designated on the site drawings (Attachments 15.1 and 15.2) will be used for routes of evacuation. In the event of an evacuation, all personnel will meet at the O&M building or lay down yard for further information. If personnel are unable to make it to the designated assembly area, they should seek shelter wherever possible and contact their supervisor for further instructions.

5.6.4. Evacuation Procedures

- 5.6.4.1. When notified to evacuate, site personnel shall do so in a calm and orderly fashion, keeping the following instructions in mind:
- Walk, don't run. Help others who need assistance.
 - Drive safely through smoke, if you must.
 - Watch for other traffic and farm equipment on access roads and roadways.
 - Be aware of obstructed visibility depending on crop conditions (i.e. tall corn).
 - Be aware of ice/snow and loose gravel conditions, drive safely.

Site personnel shall go to the primary designated assembly area which is the O&M Building. If employees are unable to make it to the assembly area, they should contact their supervisor for further instructions.

During evacuation, the O&M Manager and/or Lead Technicians should insure that every person on his/her crew has been notified and that evacuation routes are clear. Any person with a disability (mobility, hearing, sight) who requires assistance to evacuate is responsible for pre-arranging with someone in their immediate work area to assist them in the event of an emergency. Anyone knowing of a person with a disability or injury who was not able to evacuate will report this immediately to their supervisor.

6. FIRE/EXPLOSION

- 6.1. In the event of an incipient stage (beginning, small) fire, employees should notify adjacent individuals of this situation and exit the area. Only employees trained in the use of fire extinguishers should attempt to use an extinguisher. Employees are not expected or authorized to respond to fires beyond the incipient stage (i.e., fires that are beyond the beginning stage and which cannot be extinguished using a hand-held, portable fire extinguisher). If necessary, the fire department should be immediately notified by dialing 911. Site management shall also be immediately notified of any emergency situation.

The following actions should be taken by area personnel while awaiting the local fire department:

- Make sure the immediate area of the fire is clear of personnel.
- Account for all employees, contractors, and visitors who were working in the area of the fire.
- Remove any obstructions (vehicles, material, etc.) that might impede response to the scene.

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- Station available personnel at road intersections to stop traffic flow into the fire scene.

ICC operators can shut down turbines remotely on demand if necessary. In case of a fire which destroys a power line on a string of turbines, individual strings of turbines may be shut down from the substation by the Site Manager or a qualified electrical contractor.

In the event of an out-of-control fire, employees are to exit the area as quickly as possible and assemble for head count.

6.2. Response to a fire in the WTG tower

6.2.1. When all wind technicians (WTs) are up tower:

- Call the site emergency number immediately if it is safe to do so.
- If it is a small fire, try to extinguish the fire as long as it is safe to do so.
- If not successful or fire is growing quickly, exit the nacelle immediately to the bottom of the tower by the ladder.
- If the ladder is not accessible, exit to the outside, onto the roof of the nacelle. Close the nacelle hatch if possible. Use the SRK-11 or Tractel device to descend off the nacelle or hub to ground level. **NOTE:** The SRK-11 and Tractel must be up tower at all times when personnel are climbing.
- Do not use the hoist for evacuation.
- At the bottom, close/seal the door to stop oxygen from entering the tower if safe to do so.
- Fire department and other personnel should heed wind direction and force.

6.2.2. When only 1 technician is up tower, 2nd technician down tower:

- Technician at the bottom must call the site emergency number immediately.
- Technician at the bottom should use the fire extinguisher (if appropriate).
 - Stop as much oxygen as possible from fueling the fire (ie. close the tower door).
- Uptower tech should use the SRK-11 or Tractel device to descend from the nacelle or hub to ground level. This equipment must be up tower at all times when personnel are climbing or working uptower.
- Close the hatch door of the nacelle if possible to contain the smoke/ fire inside of the tower. Stop as much oxygen from fueling the fire as possible.

6.2.3. When both technicians are at the bottom of WTG Tower:

- Call the site emergency number immediately.
- For a small fire, use the fire extinguisher if possible to put out the fire and stop as much oxygen from fueling the fire as possible.
- If you are able to extinguish the fire, maintain a safe distance and post a fire watch.
- If unable to extinguish, evacuate the area and maintain a safe distance.

7. MEDICAL EMERGENCY

7.1. Medical Emergency Response Procedures

- #### 7.1.1.
- In the event that an employee is injured or an accident has occurred on site and first aid is not enough treatment for the emergency, 911 must be called. The call to 911 can be made by phone by any available site personnel. The caller must state to the dispatch that they are at the “Invenergy SITE NAME Energy Center” and provide the specific tower number. The local emergency response entities should have a cross reference map identifying individual tower locations. A second notification will be made to the O&M Building, to inform others of the situation.

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The nearest emergency response service is from the town of Townsville, which provides both EMS and fire response services.

All SITE NAME EC employees are certified in first aid/cardiopulmonary resuscitation (CPR) and may administer aid if they have completed training. An automated external defibrillator (AED) and trauma bag are stored at the O&M Building and each service truck which should be utilized as necessary. Additionally, the site has a Reeves Sleeve and backboard, litter basket and a Yates Spec Pak to facilitate victim stabilization, tower rescue and transport.

7.2. Tower Rescue Procedures

7.2.1. See [Tractel Derope and TSL SRK-11 Use](#)

8. CHEMICAL RELEASE

8.1. The phases of emergency response may be categorized as follows:

- Discovery.
- Initial response / notification.
- Sustained actions.
- Termination and follow-up actions.

8.2. Discovery

8.2.1. Without entering an immediate hazard area, the employee who first discovers an emergency situation should identify the following:

- Is there a fire, spill, or explosion?
- Does medical assistance appear to be needed?
- Who/what is at risk: people, property, or the environment?
- Where does the released chemical appear to be migrating?
- What are the weather and terrain conditions?

The employee will also isolate the area to keep people away from the scene until trained responders arrive, as long as it is safe to do so. An employee who has not received training in emergency response should take no actions beyond notification, isolation of the area, and personal safety precautions. Any efforts made to rescue persons, protect property, or protect the environment must be weighed against the possibility of becoming part of the problem. Persons at the scene must not walk or touch spilled material or inhale fumes, smoke, and vapors.

8.3. Initial Response/Notification Procedures

8.3.1. The initial response phase starts with notification, which activates the emergency response system. Anyone who observes or receives information regarding an emergency situation at SITE NAME EC should immediately notify available personnel using the SITE NAME EC radio network or their issued cell phones. The O&M Manager and/or Lead Technician will then ensure 911 is notified. At SITE NAME EC, employees are notified of emergencies by cell phone/radio, and word of mouth from the O&M Manager and/or Lead Technicians. Attachment 15.3 provides a list of emergency notification information for SITE NAME EC personnel.

If an event has the potential to impact the local community, SITE NAME EC will contact local fire/police to make community notifications. Attachment 15.3 also provides notification information for the Invenergy Public Affairs team who will provide guidance for instances involving media. Attachment 15.4 provides contact information for external support organizations. The O&M Manager and/or Lead Technicians will coordinate any media efforts through the SITE NAME EC Asset Manager and Invenergy Legal Department.

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Trained responders are called to the scene to begin the process of hazard assessment, establish objectives and priorities, implement a tactical plan, and mobilize resources. Trained responders may enter the area only when wearing appropriate protective gear. Only trained responders are authorized to risk exposure to chemicals for purposes of containing or stopping the material release.

The O&M Manager/Emergency Coordinator or designee will be responsible for notifying the appropriate regulatory agencies and, if necessary, the Emergency Response Contractor and/or Consultant or mutual aid groups. Attachment 15.4 is a list of offsite emergency contacts and agencies that may be notified in the event of an emergency. The incident will be documented using the SITE NAME EC Release Reporting Form and also in the SPCC Plan in the event of an oil spill.

8.4. Sustained Actions

- 8.4.1. The O&M Manager is the designated Emergency Coordinator at SITE NAME EC. In his absence, the Lead Technician assumes the lead as the Emergency Coordinator. In the event both the O&M Manager and Lead Technician are absent, their designee will assume the role of Emergency Coordinator. The Emergency Notification List in Attachment 15.3 details personnel who will assume the Emergency Coordinator role if both the O&M Manager and Lead Technician are absent. The Emergency Coordinator takes control of the emergency and any resources necessary until the emergency has been eliminated and the necessary cleanup and/or restoration are complete.

The Emergency Coordinator will direct the following activities during the evaluation process:

- Evaluate if operations in the affected area should be shut down.
- Take precautions to prevent or limit the spread of fire or explosions.
- Isolate affected area and provides direction for radio announcements.
- Determine the source/cause of the emergency and evaluate the primary and secondary hazards to allow a full-scale, safe response.
- Ensure that appropriate internal and external notifications are made.
- Coordinate outside assistance from public or private organizations.
- Implement other appropriate response provisions as necessary.

Only employees that are properly trained in accordance with 29 CFR Part 1910.120(q)(6) may respond to chemical releases.

In the absence of properly trained and equipped emergency responders, all personnel are to evacuate and meet at a pre-designated assembly area. The Emergency Coordinator must then contact a pre-arranged spill response contractor, or contact a municipal service for hazardous material response. It is the responsibility of the Emergency Coordinator to determine whether the local municipal responders are capable of, or will in fact, respond to a release at the site. If not, a private contractor must be retained.

8.5. Post Emergency Reporting Procedures

- 8.5.1. Following the occurrence of a spill of a reportable quantity or any emergency situation described in this plan, and in compliance with facility permits and other County and/or State requirements, an incident report will be prepared by the O&M Manager and transmitted to the appropriate individuals and agencies after review by the Invenergy Regional EHS Manager. These incidents should be recorded using the Intelix incident management system. Additional Guidance can also be found in the site's SPCC plan.

The O&M Manager shall compile all documentation and perform a post-accident investigation. Immediate performance of this activity will aid in determining the exact circumstances and cause of the incident.

Issues to be determined include:

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- Causes of the incident
- Effectiveness of the emergency response plan
- Need for amendments to the response plan
- Need for additional training programs

8.6. SITE NAME EC Material Inventory

8.6.1. The following paragraphs describe the chemicals that are considered potential sources of release for emergency planning purposes. Additional information on site chemicals is contained on the SDS sheets available in our online 3E database, hardcopies, or in the Tier II report filed annually.

The materials that will be used and stored at SITE NAME EC consist primarily of:

- Lubrication Oil
- Hydraulic Oil
- Transformer Oil

8.7. Response Procedures

8.7.1. The table below provides a spill response reference for general chemical hazards. SDS sheets should be referred to for specific response measures in the event of a release.

Material	Response Measures
Flammable and combustible	Prohibit open flames, sparks, or ignition sources from area. Absorb with absorbent material. Due to viscosity, oils and flammable sludge may require collection by high suction pumps. For large oil spills, use sand as absorbent. Collect all spills in appropriate containers. Cover, label, and store properly.
Solvents (nonflammable)	Absorb with absorbent material. Due to viscosity, solvent sludge may require collection by high suction pumps. Collect spill appropriate container. Cover, label, and store properly.
Acid, caustic, oxidizer, corrosive	<u>Small-Volume Spills:</u> Sprinkle with neutralizer until bubbling reaction ceases. Collect in appropriate container with vacuum or shovel. Cover, label, and store properly. <u>Large-Volume Spills:</u> Contact Emergency Coordinator.
Miscellaneous chemicals	Absorb with absorbent material. Collect in appropriate container. Cover, label, and store properly.

SITE NAME EC personnel are assigned the responsibility of assisting in accomplishing these initial response measures. Only trained responders are authorized to risk exposure to chemicals for purposes of containing or stopping material releases.

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9. SECURITY THREAT

9.1. Bomb Threat

9.1.1. The purpose of this plan is to give direction to all site staff in the event SITE NAME EC is a target of an actual or threatened bomb assault/attack.

Anyone receiving a bomb threat shall:

- Treat the caller with courtesy and respect. Complete the Bomb Threat Report (Attachment 15.5). Use this sheet as a reference while talking with the caller making the threat.
- Attempt to obtain as much information as possible. See the “Bomb Threat Checklist” (Attachment 15.6).
- Immediately notify the SITE NAME EC Emergency Coordinator by phone. Stop all radio transmissions from this point on until cleared by the Emergency Coordinator or other competent authority. Radio transmissions can activate electronic detonating or timing devices.

The Emergency Coordinator will immediately notify 911. The Emergency Coordinator shall:

- Evaluate the threat and determine the appropriate course of action to take.
- Notify law enforcement and/or ambulance.
- Evacuate the facility as necessary.
- Coordinate evacuation of any part of the surrounding community with local authorities as needed.
- Coordinate search of the site with proper authorities.

9.1.2. If any suspicious item(s) are found, they are not to be touched. Barrier tape will be used to mark the area where the suspicious item(s) are by extending a continuous line of tape beginning immediately in front of the suspicious item(s) and extending to just outside the room exit. This will help guide local authorities to the suspicious item.

The Emergency Coordinator will ensure that the “All Clear” message is communicated once the threat has passed or is no longer present.

9.2. Chemical/Biological Agent Threat

9.2.1. The procedures described previously for a bomb threat should be used for a chemical or biological agent threat. Refer to Attachment 15.7 for a copy of the phone report when receiving such a threat and Attachment 15.8 for a checklist.

9.3. Sabotage

9.3.1. The purpose of this plan is to guide site staff in procedures to follow when detecting any intentional act that could cause damage or injury to people or property.

This emergency procedure will be implemented by the Emergency Coordinator when, in his opinion, any act has occurred or is about to occur which could likely cause injury or mass destruction to personnel or property.

- Anyone detecting any act or threat of any act of sabotage will immediately notify the site manager or their designated lead.
- The Emergency Coordinator will be immediately notified of this information. The Emergency Coordinator will evaluate the situation and decide what actions to take.
- The following options should be considered and/or implemented:
 - Notification of 911.
 - Evacuation of the facility.

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- Evacuation of any part of the surrounding community.
- Take corrective action as required, providing that no person will risk injury.

10. SEVERE WEATHER

10.1. Severe weather (thunderstorm, tornado, flash floods) can occur with minimal notice based on local weather conditions. A DTN weather satellite is monitored via computers at the SITE NAME EC O&M Buildings. ICC operators (Chicago) also monitor this system and will contact O&M office if inclement weather is threatening. Employees are immediately notified to evacuate the site, or to take cover. In addition, SITE NAME EC employees are automatically notified via text message when lightning occurs within 50 miles of the site, and again within 30 miles.

In the case of a severe storm approaching SITE NAME EC, the following steps are to be taken:

Severe Storm Warning (1 to 24 hrs notice)

- Employees should make sure that all materials and equipment are secured.
- All crane booms shall be lowered to the ground and secured.
- All small vehicles, welding machines and compressors shall be secured.
- Storm will be monitored and, if necessary, site shall be evacuated.

10.2. Lightning

10.2.1. Once lightning is observed within 50 miles, personnel up tower will start getting tools and equipment together to prepare to evacuate. Towers will be evacuated when lightning is within 30 miles. Lightning can strike from an approaching storm or one that has already passed that is up to 20 miles away.

Employees are to evacuate any towers they are working in when given the signal from the ICC Operator, Lead Technician, or O&M Manager, and take cover in vehicles or trailers. Water, high ground, open spaces, solitary tall trees, and metal objects should be avoided. If shelter is not available, employees should follow these precautions:

- Crouch down with both feet together. Do not lie down or place hands on the ground.
- Do not stand near other people. Keep a minimum distance of 15 feet apart.

If inside a shelter:

- Stay away from doors, windows and avoid water.
- Turn off and unplug electrical appliances (e.g., computers, power tools). If appliances cannot be unplugged (e.g., telephones), stay away from them.

Persons injured by lightning do not carry an electrical charge and can be handled safely. Administer first aid/cardiopulmonary resuscitation (CPR) to a lightning victim if you're qualified to do so. Send for help immediately.

10.2.2. In the event of lightning during substation work, reference [JHA – Inclement Weather](#)

10.3. High Wind

10.3.1. When high winds occur, seek shelter immediately. Remember that loose materials can become airborne. No work is allowed in the hub when there are steady winds of 15m/s (33.5mph), or over a 10-minute average or more. If personnel are uptower, no work is allowed outside the nacelle if there are steady winds of 20m/s or over a 10-minute average. Personnel are not allowed to enter the WTG if there are steady winds of 25 m/s or over a 10-minute average.

10.4. Tornadoes

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10.4.1. Tornadoes can affect the area of the SITE NAME EC project. In the event of a severe storm, work will be stopped. In the event that the National Weather Service alerts a Tornado Warning, employees will take proper shelter. The below ground tornado shelter is located outside of the O&M maintenance shop. If a tornado warning is activated in a neighboring county, and weather service has forecasted the tornado traveling towards the project, employees should secure essential equipment. The O&M Manager and/or Lead Technician may dismiss employees from the site if conditions warrant it.

Tornados can strike with little warning, so prepare before severe weather moves into your area. Learn the tornado warning signals used in your community. The most common warning is a siren, which means you should stay inside and take cover immediately. If warning signals are not available, look for these signs of danger: Dark, greenish skies, large hail, rotating low-altitude cloud, and/or loud roar, like a train.

10.4.1.1. **Tornado Watch** - issued when conditions are favorable for the development of tornadoes, people located in and around the watch area should keep an eye to the sky and listen to a NOAA weather radio and/or local broadcast media for further weather information. The watch is intended to give you time to prepare, time to review safety rules, and the site emergency response plan.

10.4.1.2. **Tornado Warning** - issued when a tornado has been detected by national weather service Doppler radar or a reliable report has been received. A warning is usually issued for portions of one or two counties, for an hour or less. If the warning includes your neighborhood or work place, you should take immediate action to protect your life and the lives of others.

10.4.1.3. **Home/Office:** The safest place to be during a tornado is underground. If there is no basement or cellar in your home, go to a small interior room on the lowest level, such as a bathroom, closet, or hallway; the more walls between you and the outside, the better. Avoid taking shelter in rooms with windows, however keep all windows shut. Mobile/Manufactured homes are not built to weather tornadoes, so seek shelter elsewhere at the first sign of severe weather. For example, go to a prearranged community shelter or make plans to stay with a friend or relative. As a last resort, go outside to a low area and lie flat on the ground with your hands over your head and neck; be alert for flash floods, which often accompany severe storms.

10.4.1.4. **Vehicles:** Do not try to outrun a tornado. If you see a funnel cloud or hear a tornado warning, get out of your vehicle and seek shelter in the nearest sturdy, enclosed building. If such a shelter is not available, lie down in a low area with your hands covering your head and neck; be alert for flash floods.

10.4.2. Plan Ahead

10.4.2.1. To prepare for a tornado, put together a disaster emergency kit and conduct tornado drills at work and in your home. Make sure each family member knows the tornado safety procedures for their workplace or school.

Don't forget to let nearby neighbors and family know where your storm shelter is and how to access it in case the exit is blocked by debris, preventing you from getting out.

Listed below are a few items to keep in your storm shelter:

- **Basic medicine:** Keep a first-aid kit stocked with basic antiseptic gels, pain relievers, antibiotics and other basic medications in the storm shelter. Change out the medicines when they are nearing an expiration date.
- **Drinking water to last for short stay:** Always keep water in the storm shelter. Change it out regularly to prevent stagnation and use options that are designed to maintain a long shelf-life, like bottled water that is treated to last for an extended period of time.

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- **Flashlights and batteries:** Flashlights are useful. Keep several flashlights and a large number of batteries in the storm shelter. These will provide light during a power outage, especially if a backup generator does not work for any reason.
- **Cell phone, battery-operated charger and extra batteries:** Even though cellular service may be down during and after the storm, eventually it will come back up. Keep a cell phone, extra batteries and a battery-operated cellphone charger so that it is possible to send out a call for help if debris, snow or other items are not possible to move.
- **Battery operated radio:** In the case that power is lost, have a battery-operated radio on hand to keep up to date on the local weather surroundings.

10.5. Flash Floods

10.5.1. Flash floods pose potential problems at SITE NAME EC. During a rain event, seek high ground. Flash floods can trap employees at low level areas. Employees are to only travel through minimal moving water if they MUST. Otherwise, if water poses no further danger, they are to stay on high ground until the water subsides. Generally driving near swollen creeks, rivers and natural waterways in the area will be performed with caution.

11. CONTRACTOR/VISITOR COORDINATION

11.1. It is the responsibility of the O&M Manager to work with contractor safety supervisors to ensure that the requirements of this plan are carried out. If the contractor intends to handle spills with an in-house team, copies of applicable training records must be provided by the contractor for review prior to beginning work. Please refer to Chapter 3 of the EHS Manual regarding Contractor and Visitor management for additional guidance.

12. TRAINING

12.1. The SITE NAME EC O&M Manager is responsible for directing annual drills on all shifts and providing ERP training to all SITE NAME EC employees at least annually. The ERP will also be reviewed with each affected employee when: (1) the plan is developed or when the employee is assigned initially to a job, (2) when the employee's responsibilities under the plan change, and (3) when the plan is changed.

Training and/or refresher of the ERP to site personnel shall be conducted annually. Documentation of ERP training is maintained in site files.

13. RESPONSIBILITIES:

13.1. O&M Manager

13.1.1. SITE NAME EC O&M Manager is responsible for understanding and adhering to the procedure.

13.2. SITE NAME Energy Center Staff

13.2.1. All SITE NAME EC Staff are responsible for understanding and adhering to the procedure.

14. DATA RETENTION:

14.1. None

15. ATTACHMENTS:

15.1. Site Location Map

15.2. Site Layout

15.3. SITE NAME Wind Energy Center Emergency Notification List


15.4. External Notification List

Invenergy	(SITE NAME) WIND ENERGY CENTER	Version: 1.0
	EMERGENCY RESPONSE PLAN	Issued: MMDDYY

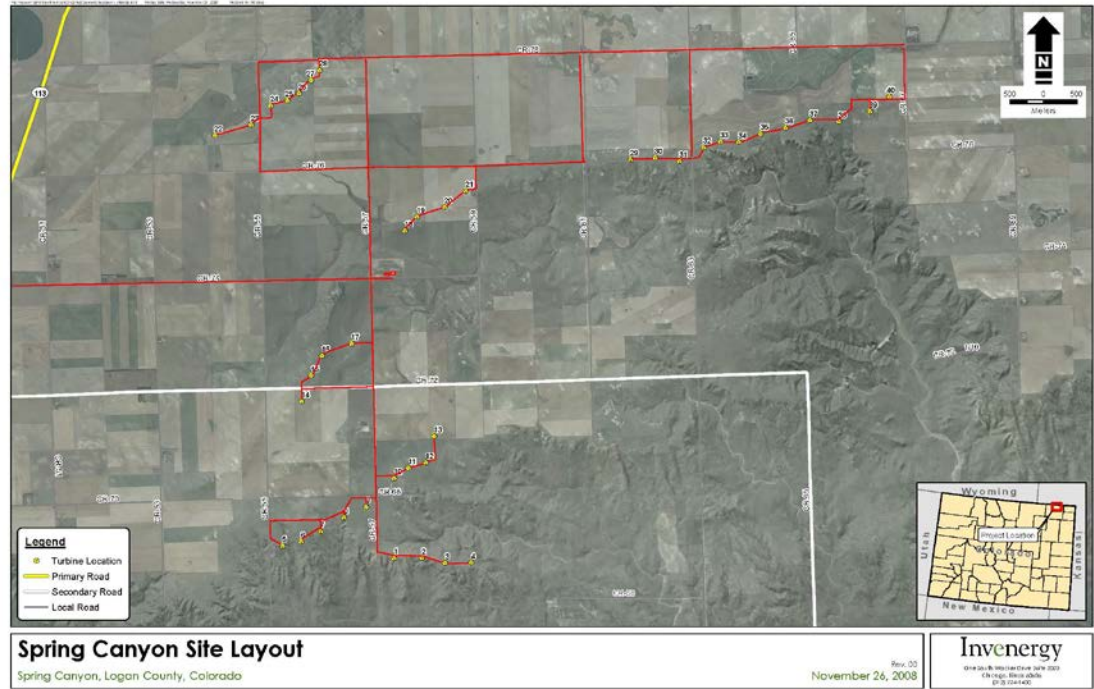
- 15.5. Bomb Threat Report
- 15.6. Bomb Threat Checklist
- 15.7. Chemical/Biological Agent Threat Report
- 15.8. Chemical/Biological Agent Threat Checklist

Attachment 15.1: Site Location Map



	SITE NAME WIND ENERGY CENTER	Version: 1.0
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Attachment 15.2: Site Layout and Facilities Map



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Attachment 15.3: SITE NAME Wind Energy Center Emergency Notification List

TITLE	INDIVIDUAL	TELEPHONE NUMBER
O&M Manager / Emergency Coordinator		(999) 987-7894 - Office (999) 999-7894 - Cell
Site Safety Rep		(999) 999-3411 - Cell
Lead Technician		(999) 999-7624 - Cell
Regional EHS Manager / Alternate Emergency Contact		(999) 999-9673 - Cell
Invenergy Regional Manager		(999) 999-9999 - Office (999) 991-9999 - Cell
Invenergy Asset Manager SITE NAME SITE NAME Expansion		(312) 999-9999 - Office (312) 999-9998 - Office
Invenergy Control Center		(312) 582-1588

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Attachment 15.4: External Notification List

Organization	Telephone Number
<u>OFFSITE EMERGENCY ASSISTANCE</u> Fire/Police/Ambulance	911
State Police	911
Hospital Memorial Health Center	999-999-1115
<u>EMERGENCY SPILL RESPONSE CONTRACTOR</u>	999-888-3150
<u>AGENCY NOTIFICATIONS</u> NRC (24-hour) (Report Oil Spills)	800/424-8802
State Department of Public Health and Environment	877-999-9999
<u>ADDITIONAL ASSISTANCE</u> Sheriff's Department	911 800-999-9999

Attachment 15.5: Bomb Threat Report

***** KEEP CALLER ON THE LINE AS LONG AS POSSIBLE! *****

Exact words of caller:

Questions to ask the caller:

1. When is the bomb going to explode? _____
2. Where is the bomb right now? _____
3. What kind of bomb is it? _____
4. What does the bomb look like? _____
5. Why did you set the bomb? _____
6. Where are you calling from? _____
7. What is your name? _____

Try to determine the following

IDENTITY: male female adult juvenile (age? _____)

VOICE: loud high-pitched deep raspy pleasant

disguised broken Other: _____

ACCENT: local not local foreign regional _____

RACE: Caucasian Black Hispanic Oriental

Other: _____

SPEECH: educated average illiterate obscene

Other: _____

MANNER: calm angry rational irrational coherent

incoherent deliberate self-righteous laughing intoxicated

BACKGROUND NOISES:

office machines factory machines bedlam trains quiet


voices mixed sounds airplanes music traffic

party Other: _____

If the voice is familiar to you, who did it sound like? _____

Additional Information: _____

Date ____/____/____ Time: ____:____ a.m./p.m. Received by: _____

	SITE NAME WIND ENERGY CENTER	Version: 1.0
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Attachment 15.6: Bomb Threat Checklist

Mail Threat:
<p>_____ 1. Handle documents as little as possible to preserve fingerprints.</p> <p>_____ 2. Hand deliver immediately to O&M Manager.</p>
Phone Threat:
<p>_____ 1. Complete Bomb Threat Form.</p> <p>_____ 2. Deliver completed form to O&M Manager.</p> <p>_____ 3. Notify Supervisor immediately.</p>
O&M Manager:
<p>_____ 1. Gather all information regarding threat.</p> <p>_____ 2. Decide upon course of action.</p> <p>_____ 3. Coordinate searches with proper authorities.</p>
Suspicious Objects:
<p>_____ 1. DO NOT TOUCH OR ATTEMPT TO MOVE!</p> <p>_____ 2. Notify County Sheriff—911.</p>
Evacuation:
<p>_____ 1. Announce over radio or phone system, give location where to assemble. Do not use the radio.</p> <p>_____ 2. Enlist volunteers to remain and shut down site.</p>
Re-entry:
<p>_____ 1. Determined based on:</p> <p style="padding-left: 40px;">_____ a. “All-clear” given by bomb disposal unit.</p> <p style="padding-left: 40px;">_____ b. O&M Manager’s judgment that danger is passed.</p> <p>_____ 2. Full report prepared.</p>

Attachment 15.6: Chemical/Biological Agent Threat Report

*****KEEP CALLER ON THE LINE AS LONG AS POSSIBLE*****

Exact words of caller:

Questions to ask the caller:

1. What chemical or biological agent is it? _____
2. When is the agent going to be released? _____
(date) (time)
3. Where is it right now? _____
(Building) (Floor) (Room)
4. Who put it there? _____
5. What does it look like? _____
6. What will cause it to spread? _____
7. What will trigger it? _____
8. Where did you get the agent? _____
9. Why are you doing this? _____
10. What is your name? _____
11. What is your telephone number and address? _____

Try to determine the following

IDENTITY: male female adult juvenile (age? _____)

VOICE: loud high-pitched deep raspy pleasant
 disguised broken Other: _____

ACCENT: local not local foreign regional: _____

RACE: Caucasian Black Hispanic Oriental

Other: _____

SPEECH: educated average illiterate obscene

Other: _____

MANNER: calm angry rational irrational coherent
 incoherent deliberate self-righteous laughing intoxicated

BACKGROUND NOISES:

office machines factory machines bedlam trains quiet
 voices mixed sounds airplanes music traffic
 party Other: _____

If the voice is familiar to you, who did it sound like? _____

Additional Information: _____

Date ___/___/___ Time: ___:___ a.m./p.m. Received by: _____

Invenergy	SITE NAME WIND ENERGY CENTER	Version: 1.0
	EMERGENCY RESPONSE PLAN	Issued: MMDDYY

Attachment 15.7: Chemical/Biological Agent Threat Checklist

Mail Threat:
<p>_____ 1. Handle documents as little as possible to preserve fingerprints.</p> <p>_____ 2. Hand-deliver immediately to O&M Manager.</p>
Telephone Threat:
<p>_____ 1. Complete the Chemical/Biological Threat Report form.</p> <p>_____ 2. Deliver completed form to O&M Manager immediately.</p>
O&M Manager:
<p>_____ 1. Gather all information regarding threat.</p> <p>_____ 2. Decide upon course of action.</p>
Searches:
<p>_____ 1. Comprehensive—To be conducted by trained law enforcement personnel only.</p>
Suspicious Objects:
<p>_____ 1. Do not touch or attempt to move.</p> <p>_____ 2. Notify police.</p>
Evacuation:
<p>_____ 1. Make a site-wide announcement and give location where to assemble.</p> <p>_____ 2. Enlist volunteers to remain and shut down site.</p>
Re-entry:
<p>_____ 1. Determined based on:</p> <p style="padding-left: 40px;">_____ a. “All-Clear” given by competent authority.</p> <p style="padding-left: 40px;">_____ b. O&M Manager’s judgment that danger has passed.</p> <p>_____ 2. Full report prepared.</p>

