FILE

**BEFORE THE OHIO POWER SITING BOARD**

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| **In the Matter of the Application of Hardin Wind LLC, for a Certificate to Construct a Wind-Powered Electric Generating Facility in Hardin and Logan Counties, Ohio** | ) | **Case No. 13-1177-EL-BGN** |
| **In the Matter of the Application of Hardin Wind LLC for a Certificate of Environmental Compatibility and Public Need for a Substation Project in Hardin County** | ) | **Case No. 13-1767-EL-BSB** |
| **In the Matter of the Application of Hardin Wind LLC for a Certificate of Environmental Compatibility and Public Need for a 345kV Transmission *Line in Hardin County*** | ) | **Case No. 13-1768-EL-BTX** |



## DIRECT TESTIMONY OF MICHAEL SPEERSCHNEIDER

**Q.1. Please state your name, title and business address.**

**A.1.** My name is Michael Speerschneider. I am an officer of Hardin Wind LLC and Chief Permitting and Public Policy Officer for EverPower Wind Holdings Inc. which is the parent corporation of Hardin Wind LLC. My business address is 1251 Waterfront Place, 3rd Floor, Pittsburgh, Pennsylvania, 15222.

**Q.2. What are your duties as Chief Permitting and Public Policy Officer?**

**A.2.** I am responsible for all aspects of the permitting necessary to construct and operate EverPower's utility scale wind energy projects in the Mid-Atlantic and Midwest, including management of an internal development team and external consultants. I also am responsible for coordinating the permitting processes with state and federal agencies. I am also responsible for governmental affairs, communicating with state and federal

agencies to development and maintain relationships and manage political risks for EverPower's business. I have previously testified at length before the Ohio Power Siting Board in the Buckeye II Wind Farm proceeding, Case No. 12-160-EL-BGN, and recently in the Buckeye I Wind Amendment proceeding, Case No. 13-0360-EL-BGA.

**Q.3. What is your educational and professional background?**

**A.3.** I received a B.S. in Physics and a B.A. in environmental studies from the University of Pittsburgh. I received a M.S. in Technology and Policy and a M.S. in Materials Science and Engineering from the Massachusetts Institute of Technology. Prior to attending MIT, I worked for Cambridge Energy Research Associates developing models for demand, supply and pricing in North American natural gas markets. I joined EverPower in 2004 and have been involved in all facets of its developed projects and operations. While my focus has been on development, permitting and policies and siting or zoning regulations, I have worked closely with our financial, commercial and operations teams to help ensure efficient development, construction and operation of our projects. I have worked closely with project operators to engage local officials and residents, as well as state federal regulators, regarding what few issues have arisen as a result of project operations.

**Q.4. On whose behalf are you offering testimony?**

**A.4.** I am testifying on behalf of the Applicant, Hardin Wind LLC.

**Q.5. What is the purpose of your testimony?**

**A.5.** The purpose of my testimony is fivefold. First, I would like to provide background information concerning the June 28, 2013 Application in Case No. 13-1177-EL-BGN, and the September 30, 2013 Application for Certificates in Case Nos. 13-1767-

EL-BSB and 13-1768-EL-BTX, consolidated in this proceeding. Second, I will summarize the major items in the applications and sponsor their admission into evidence, along with the exhibits and the various proofs of publication. Third, I will present certain modifications to the project design presented in the applications. Fourth, I will testify on the general benefits of wind energy and a few common misconceptions about utility-scale wind projects. Finally, I will review the conditions suggested by the Board's Staff in the Staff Reports of Investigation filed on December 24, 2013 and respond on behalf of the Applicant.

**Q.6. Would you please provide a summary and overview of the proposed facility?**

**A.6.** Hardin Wind, LLC ("the Applicant" or "Hardin Wind") is proposing to construct the Scioto Ridge Wind Farm, a wind-powered electric generation facility located in Hardin and Logan Counties, which would consist of up to 173 wind turbine generators, along with access roads, underground electric collection cables, a facility substation, up to eight laydown yards for construction staging, an operations and maintenance (O&M) facility, and up to four meteorological towers. Additionally, a 345 kilovolt (kV) transmission line (Transmission Line) and a point of interconnect (POI) substation are proposed to be located adjacent to the existing AEP East Lima – Marysville 345 kV circuit in Hardin County. In my testimony, I will refer to the Scioto Ridge Wind Farm, the Transmission Line and POI substation collectively as the "Facility." The energy generated at the Facility will deliver power to a single point of interconnection on the existing East Lima – Marysville 345 kilovolt (kV) transmission line.

**Q.7. What is the general purpose of the Facility?**

**A.7.** The Facility will use wind energy to produce electricity in order to deliver clean, renewable electricity to the Ohio bulk power transmission system to serve the needs of electric utilities and their customers. The electricity generated by the Facility will be transferred to the transmission grid operated by PJM Interconnection, LLC ("PJM") for sale at wholesale or under a power purchase agreement. The electricity generated by the facility would be available for dispatch within the PJM regional transmission system which services thirteen states. However it is anticipated that the power will be sold within the state of Ohio to assist electricity companies to increase the amount of renewable energy in their generation mix in line with the requirements of the April 2008, Sub Senate Bill 221which introduced a Alternative Energy Portfolio Standard (AEPS) requiring Ohio to secure 12.5% of its electricity usage from renewable sources by 2025. There is also a potential for direct sales of power to third parties.

**Q.8. Would you please describe the power generation potential of the wind farm?**

**A.8.** Each of the 173 turbines will have a nameplate maximum capacity rating of 1.7 to 3.3 MW, depending upon the final turbine model selected. This will result in a total generating capacity that will not exceed 300 MW. The Facility is expected to operate at an average annual capacity factor of 30-38%, generating a total of approximately 788,400 to 998,640 megawatt hours (MWh) of electricity each year, the equivalent annual electrical power consumption of approximately 75,000 Ohio homes.

**Q.9. Are the June 28, 2013 and September 30, 2013 applications including all appendices and exhibits true and accurate to the best of your knowledge and belief?**

**A.9.** Yes, subject to the revisions discussed today in my direct testimony, the Notice Regarding Shift in Preferred Transmission Line Route, filed on December 16, 2013 (a true and accurate copy of which has been marked as Company Exhibit 4) and to clarifications made in Hardin Wind's November 15, 2013 Responses to Staff's First Set of Data Requests and its December 12, 2013 supplemental responses to Staff's First Set of Data Requests, both filed on December 12, 2013, true and accurate copies of which have been marked as Company Exhibit 5.

**Q.10. Has Hardin Wind made any changes to the project design since the filing of the June 28, 2013 and the September 30, 2013 applications?**

**A.10.** Yes. As noted above, Hardin Wind filed a Notice Regarding Shift in Preferred Transmission Line Route filed on December 16, 2013 (the "Notice"). On December 20, 2013, Hardin Wind sent copies of the Notice to all parties in this proceeding and to the public officials and libraries that were served with copies of the applications. The changes in that Notice consist of (1) a minor shift in the preferred transmission line route near the POI substation; (2) two minor shifts of less than 100 feet of the preferred transmission line route necessary to avoid the corners of two non-participating parcels; and (3) a change in the orientation of the preferred POI substation required as a result of the transmission line route shift; to relocate the preferred transmission line route. The Notice contains information on the changes. Importantly, the changes will result in no additional environmental or operational impacts, and the relocations remain within the

original study area for the preferred transmission line route and the preferred POI substation.

**Q.11. Has Hardin Wind made any changes to the project design other than the changes described in the Notice?**

**A.11.** Yes. Hardin Wind is dropping turbines -16, 138 and 125 from the project. In addition, Hardin Wind is also relocating turbine 169 by 399 feet from its current proposed location in order to meet the minimum setback standard now required due to an adjacent landowner decision to nonparticipation in the project. Exhibit A attached to my direct testimony shows the current location of turbine 169 and the proposed new location. The new location remains within the original study area and on the same parcel as originally proposed. The relocation of the turbine will also a require minor shift in the collection line system and access road design, also shown on Exhibit A.

**Q.12. Will the relocation of turbine 169 create any additional impacts?**

**A.12.** No. The relocation of turbine 169 will be on the same property as originally proposed, and there will be no additional impact of operational noise or shadow flicker as a result of the shift given that the distance from the nearest non-participating residence increases as a result of the minor shift. Turbine 169 will now be 1,526 feet from the nearest non-participating residence versus 1,356 as initially proposed. As well, the turbine location will remain in an active agricultural location along with the underground collection line and the access road.

**Q.13. Did Hardin Wind have notices of the Application and of the Hearing published in a newspaper of general circulation in Hardin and Logan Counties?**

**A.13.** Yes, notices were published on May 18, 2013, September 3, 2013, November 9, 2013 and December 27, 2013 in the Bellefontaine Examiner, a newspaper of general circulation in Logan County, Ohio and in The Kenton Times, a newspaper of general circulation in Hardin County, Ohio. The notice published on December 27, 2013 referenced the minor shift in the preferred transmission route. True and accurate copies of the notices have been marked as Company Exhibit 8.

**Q.14. Did the Applicant file and serve a copy of the letter sent to property owners and tenants within the plan site or contiguous to the plan site?**

**A.14.** Yes, on December 17, 2013, the Applicant filed a copy of the letter sent to property owners and tenants. A copy of that filing has been marked as Company Exhibit 9.

**Q.15. Will the Applicant be sponsoring witnesses to support the Application in addition to your testimony?**

**A.15.** Yes, Christopher Ferrell, of UC Synergetic, will testify regarding key aspects of the design for the transmission line and POI substation. Ken Kaliski of Resource Systems Group, Inc. will testify regarding the noise impact assessment performed for the applications and the standards used in designing the facility. Ryan Rupprecht of Cardno Entrix will provide testimony, in part, regarding the ecological assessment and field studies done for the applications.

**Q.16 How will the Scioto Ridge Wind Farm contribute to Ohio's renewable energy targets?**

**A.16.** As indicated previously, the Facility will generate renewable energy which in turn can be sold to utilities or competitive retail electric suppliers through a power purchase

agreement Based on information from counsel, the project will also qualify as a renewable energy generator and every megawatt-hour of production will create a renewable energy credit. Utilities and/or competitive retail electric suppliers can then purchase those renewable energy credits to apply toward their renewable energy portfolio obligations under S.B. 221. The project can also be built as a merchant plant, meaning that the power would then be sold at wholesale on the PJM competitive power spot market.

**Q.17. What made EverPower select Hardin and Logan Counties as an appropriate location for the Scioto Ridge Wind Farm Project?**

**A.17.** Many different factors have to come together for a wind farm to be successfully developed, constructed and operated. For example, a high wind resource (the mean wind speed) is desirable. Hardin County and Logan County are host to some of the best wind resources in the State. The ability to interconnect into the transmission system is very important, and Hardin County has high voltage transmission lines in proximity to the area with available capacity. Also important is the ability to balance local environmental factors such as habitat, cultural resources and property set back requirements. Hardin County and Logan County demonstrated that they met all these key criteria and this has been detailed in the applications and dealings with state and federal resource agencies. Another key factor in site selection is the ability to sell the power generated at a price to make a project financially viable. The Ohio renewable portfolio standard and the fact the wind farm is located in the PJM electricity network – which is the most liquid in the country – was therefore another important factor in EverPower's decision to progress with an application for a wind farm in Hardin and Logan Counties.

**Q.18. Do you believe that the Scioto Ridge Wind Farm Project will have a positive impact on the local community?**

**A.18.** Yes. First of all, the Scioto Ridge Wind Farm Project will provide a positive economic impact to the community. As the socioeconomic study submitted as part of the Application in Case No. 13-1177-EL-BGN indicates, there are various ways in which the region will benefit. The project will contribute to the taxing entities that host the project, primarily school districts, townships and the counties. Assuming a 300 megawatt facility is constructed, the increase in local tax revenues will be between $1,800,000 and $2,700,000 for the Facility annually. Under S.B. 232, additional revenues may go directly to the Counties' general funds. Also, landowners will receive annual lease payments for hosting the Facility. It is expected that a certain portion of these payments will be used to purchases goods and services in the local communities and in the region, which will further stimulate economic activities. During the construction phase of the Facility, approximately 1,300 full-time jobs (direct, indirect and induced) will be created in the local economy, generating $65 million in wages and salaries. This figure includes 884 jobs expected to be generated by the indirect impacts of Additionally, we believe the project will be a source of pride for the community. As a host of a renewable energy project, Hardin and Logan County farmers will be able to use their land to provide clean, domestic energy for the country. Many of the region's farmers see wind energy as a part of the solution to securing our energy needs for future generations.

**Q.19. In your experience, what are some of the common concerns that arise during the development of a utility-scale wind generation facility?**

**A.19.** While it is impossible to predict how certain individuals will react to any new development, I believe that the Scioto Ridge Wind Farm Project is designed to minimize or eliminate any potential complaints arising from these issues. Mr. Kaliski has prepared a Noise Impact Assessment and has helped design a project that employs rigorous standards for sound levels at nearby residences. I think the main point is that all of the turbine positions that were modeled and have been proposed met certain standards that we employed for impacts to area residents, and those standards we think are reasonable, and certainly within the scope of what the Ohio Power Siting Board has approved in other proceedings, and what is general practice for other wind projects throughout the country. We strongly believe that the project is designed with prudence and complaints associated with noise will be minimal.

Shadow flicker is the phenomenon whereby the turbine's blades come between the sun and a receptor. Shadow flicker is characterized by the on/off modulation of the sun's light and can cause a nuisance when the shadow being cast by the blades passes through a window in a residential structure. In my experience, shadow flicker outside buildings, in open fields or along roads is less distinctive and has generally not caused impacts on human activity. The shadow flicker report completed for the Scioto Ridge Wind Farm Project utilizes industry standard modeling methodologies and provides an accurate representation of the potential occurrence of shadow flicker at residential locations.

The model uses conservative assumptions so that the modeled result would err on the side of over-predicting the impact. Factors such as the blocking effect of buildings and trees (landscaping and individual trees are not inputted in the model), the assumed

presence of humans at all times when flicker would occur (the majority of the time shadows would be cast on homes are in daylight morning or evening hours, and in the winter) and omni-direction modeling (shadow flicker impacts are accounted for all sides of a receptor building, with no consideration for location of windows and orientation of more highly used rooms). Also, the design goal of limiting the potential for shadow flicker to 30 hours per year complies with the limit approved by the Board in other wind farm cases (see, e.g., Case No. 08-666-EL-BGN, Buckeye I Wind Farm), and is a reasonable limit that I believe will result in very few, if any, complaints.

Blade and ice throw are also sometimes raised as a concern because of the potential risk to public safety. There are hundreds of thousands of wind turbines operating throughout the world and there has been very low rate of blade failures and thrown debris, and no cases of harm to the public. There are a number of factors that go into the control systems for wind turbines, and there are a number of different barriers between a minor effect in the blade and the turbine breaking. If a minor effect is missed or a safety barrier fails, it is going to trigger some other fault in operations as the effect magnifies. There are a number of different levels that would have to fail before any kind of issue would result in significant damage to a blade. That is the reason it is very rare for blades to fail. The many different safety measures that are in place prevent an issue from getting to the point of a break.

With respect to wind farms operated by EverPower or its subsidiaries, none of the 215 operating turbines has experienced a blade failure. Operating personnel at the Scioto Ridge Wind Farm will conduct regular inspections of the turbines, a standard operating procedure for any wind farm, and conduct any necessary maintenance on blades.

EverPower also takes an active interest in the certification and manufacturing of the turbines purchased for the wind farms in its portfolio. EverPower's operations personnel routinely go to turbine manufacturing facilities to tour the facilities and review conformance with standards.

Ice throw, or ice shedding, can occur when ice accumulates on rotor blades. The ice can break free of the blades and either fall to the ground or, if the rotors are moving, be thrown from the blades. Modern turbines are equipped with many control features that will stop the turbine when icing occurs. Hardin Wind will also employ appropriate operational measures to ensure safety during icing events and at start-up. It is also important to note that field observations and studies of ice shedding indicate that most shedding occurs as air temperatures rise, therefore, the tendency is that ice fragments drop off the rotors and land near the base of the towers. Ice throw is less common, and there has been no reported injury caused by ice being thrown from an operating wind turbine.

Concerns regarding the appropriate distance of setbacks are often raised. The setbacks for the Scioto Ridge Wind Farm all conform with the requirements of OAC Section 4906-17-08(C)(1)(c)(ii) based on the dimensions of the proposed turbines, and this distance from residences and roadways has been determined to be safe in the wind farm cases previously heard by the Board. The turbine locations also conform to turbine manufacturer setbacks, including the setback recommendations by GE during icing conditions. I also think it important to note that GE only recommends application of its setback for icing conditions if ice sensors are not employed on a turbine. All of the Hardin Wind turbines will have control systems to monitor and address icing on blades.

Concerns about health effects have also been raised in other proceedings. This issue was addressed and rejected by the Board in the Buckeye I Wind and Buckeye II Wind proceeding (Case Nos. 08-666-EL-BGN and 12-0160-EL-BGN). Moreover, the Board has approved ten wind farms for construction and operation in Ohio. I am not aware of any credible scientific evidence for the concerns regarding adverse health effects due to sound, shadow flicker or other impacts associated with wind turbines, though some people have reported being annoyed by these impacts. I believe the Scioto Ridge Wind Farm Project has been designed in a prudent and responsible way to minimize any potential adverse impacts.

**Q 20 Are you aware of any studies that have been done evaluating the potential concern about wind energy projects impacting property values?**

**A.20** Yes, a number of studies have been done to address concerns relating to the possible impact of wind energy facilities on property values. Recently, a group of researchers at the Lawrence Berkley National Laboratories for the US Department of Energy conducted an extensive and comprehensive evaluation of this issue (Hoen, et al. 2013. A Spatial Hedonic Analysis of the Effects of Wind Energy Facilities on Surrounding Property Values in the United States). This study found no statistical evidence that the value of homes near wind turbine facilities are affected by construction of the wind turbines or the planned construction of wind turbines. This study reviewed an extensive number of home sales in a wide variety of US locations – more than 50,000 home sales in nine states. Additionally, this study looked at sales before and after construction of wind turbines, and took value changes over time into consideration.

Moreover, this recent Lawrence Berkley study employed a specific approach that avoided shortcomings of other studies, including relying on surveys of homeowners and real estate professionals rather than trying to quantify real price impacts based on empirical market data; using very small sample sizes or simple statistical techniques, or not reporting the statistical significance of their results which make it difficult to determine if results are meaningful or if those results might apply to other places; failing to include field visits to help verify important information; and not being published in peer-reviewed academic journals. This recent Lawrence Berkley study found no statistical evidence that home prices near wind turbines were affected.

**Q.21 Based on your experience in the industry, do you believe that property values will be negatively impacted if the Scioto Ridge Wind Farm Project is constructed and operated?**

**A.21** No. Based on my experience in the industry and the study I reference above, I do not believe that overall property values in the area will be negatively impacted by development, construction, and operation of the Scioto Ridge Wind Farm.

**Q.22. What are the real issues facing the Scioto Ridge Wind Farm Project?**

**A.22.** The Scioto Ridge Wind Farm Project has no real issues. EverPower has been engaged in the Ohio community since very early on, hiring three local employees to aid in development of this and other projects in Ohio, frequent engagement with community groups and leaders (for example, providing information booths at county fairs and regularly attending public meetings of township supervisors and county commissioners to answer questions and provide updates). We have every incentive to be productive members of the community and to resolve any issues before they become truly

problematic, and have been taking the necessary steps to do so from the beginning of the project.

Hardin Wind is also committed to working with local responders to provide adequate training and information that will facilitate efficient and safe operations. Attached as Exhibit B to my direct testimony is a report on a joint training exercise conducted at EverPower's Howard, New York project prepared by EverPower personnel. Hardin Wind will conduct similar exercises for the Scioto Ridge project and will work closely both with local emergency responders, 911 dispatching and local emergency life flight companies to ensure all responders are properly equipped and are properly trained not only on accidents at any turbine site, but also on conducting emergency operations around turbine sites.

**Q.23. Have you reviewed the Staff Report of Investigation issued in Case No. 13-1177-EL-BGN?**

**A.23.** Yes.

**Q.24. Does the Applicant have any concerns with or proposed revisions to any of the 17 conditions recommended by Staff in that Staff Report of Investigation?**

**A.24.** The Applicant is agreeable to the majority of conditions recommended by Staff, but suggests revisions to conditions 4, 6, 11, and 12. Condition 4 has a typographical error, as the second reference to Vestas V110 should be to the Vestas V117. To address the fact that mitigation may not always be required, Condition 6 should be revised to read:

> (6) That prior to the commencement of construction, the Applicant shall conduct an architectural survey of the project area. The Applicant shall finalize the work program that outlines areas to be studied in both Hardin and Logan Counties in coordination with OPSB Staff and the Ohio

> Historic Preservation Office. If the architectural survey discloses a find of cultural or architectural significance, or a structure that could be eligible for inclusion on the National Register of Historic Places, then the Applicant shall ***consult with Staff if needed, and if necessary,*** submit an amendment, modification, or mitigation plan for Staff's acceptance. Any such mitigation effort, if needed, shall be developed in coordination with the Ohio Historic Preservation Office with input from applicable local preservation officials and submitted to Staff for review and acceptance.

Condition 11 should be revised to be consistent with the language for a similar condition in the Staff Report of Investigation issued in Case Nos. 13-1767-EL-BSB and 13-1768-EL-BTX. The language from that report reads "The Applicant shall coordinate with ODNR and Staff on survey efforts for the Eastern massasauga, and if determined necessary by ODNR and Staff, a habitat survey and/or presence/absence survey must be done by a professional herpetologist approved by the DOW." Lastly, Condition 12 should be revised to take into account the extremely low and essentially non-existent risk that a turbine will fall in such a way that the tip of its blade would pierce and rupture an underground gas or hazardous liquid line. As a compromise, Hardin Wind suggests the following language:

> (12) The Applicant shall adhere to a setback distance of at least 1.1 times the total height of the turbine structure, as measured from its tower's base (excluding the subsurface foundation) to the tip of its highest blade, from any natural gas ~~or hazardous liquid~~ ***transmission*** pipeline in the ground and active at the time of commencement of construction.

**Q.25. Does the Applicant have any concerns with any of the 11 conditions recommended by Staff in the Staff Report of Investigation for the Scioto Ridge Transmission Line and Scioto Ridge POI Substation, Case Nos. 13-1767-EL-BSB and 13-1768-EL-BTX?**

**A.25.** The Applicant is agreeable to the conditions recommended by Staff with the exception that Conditions 4 and 5 should be deleted, Condition 6 and 10 should be

clarified, and Condition 11 should be applied only to the turbine portion of the project and not the transmission line and POI substation. Condition 4 requires Hardin Wind to prepare a Phase I cultural resources survey program at turbine locations, access roads, substations, auxiliary lines and laydown areas. Condition 5 requires Hardin to conduct an architectural survey of the project area. These conditions duplicate Conditions 5 and 6 recommended in the Staff Report of Investigation in Case No. 13-1177-EL-BGN. More importantly, the project area and facilities referenced in the recommended conditions all relate to the wind turbine project, and not to the transmission line and substation. Hardin Wind proposes clarifying Condition 6 and Condition 10 as follows:

> (6) That prior to commencement of any construction, the Applicant shall prepare a landscape plan for Staff's review and approval that addresses the *aesthetic impacts of the POI Substation Site, including screening types and* locations. The Applicant shall consult with ~~adjacent~~ property owners ***adjacent to the POI substation parcel that have a residence on their property*** in the development of this plan.
>
> (10) The Applicant shall keep lighting at operation and maintenance facilities and substations, located within one half mile of the turbines, to the minimum required. Additionally, the Applicant shall use lights with motion or heat sensors ~~and~~ ***or*** switches to keep lights off when not required, lights should be hooded downward and directed to minimized horizontal and skyward illuminations, and the Applicant shall minimize the use of high-intensity lighting, steady-burning, or bright lights such as sodium vapor, quartz, halogen, or other bright spotlights.

Condition 11 relates to notices to owners of airports. It appears that this condition was intended to be added to the recommended conditions for the wind turbine application, Case No. 13-1177-EL-BGN and Hardin Wind is agreeable to applying that condition in Case No. 13-1177-EL-BGN. However, given the height of the proposed transmission line and its structures, this condition is not applicable to the transmission and substation applications.

**Q.26. What do you recommend that the Ohio Power Siting Board do in this case?**

**A.26.** I recommend that the Ohio Power Siting Board grant the applications based upon the recommended conditions contained in the December 24, 2013 Staff Reports of Investigation as modified by the revisions in my testimony, and also approve the minor design changes presented in my testimony.

**Q.27. Does this conclude your direct testimony?**

**A.27.** Yes, it does.

## CERTIFICATE OF SERVICE

I certify that a copy of the foregoing document was served by electronically or by regular U.S. mail (as indicated) upon the following this 9th day of January 2014:

Thomas Lindgren
Public Utilities Commission of Ohio
180 E. Broad St.
Columbus, OH 43215
thomas.lindgren@puc.state.oh.us

William A. Adams, Esq.
Bailey Cavalieri LLC
10 West Broad Street, Suite 2100
Columbus, OH 43215
William.Adams@baileycavalieri.com

Chad A. Endsley
Chief Legal Counsel
Ohio Farm Bureau Federation
280 North High Street, P.O. Box 182383
Columbus, OH 43218-2383
cendsley@ofbf.org

Michael A. Shepherd
8922 Township Road 220
Belle Center, OH 43310
Via U.S. Mail

Joe and Deb Grant
20616 State Route 68N
Belle Center, OH 43310
Via U.S. Mail

/s/ Michael J. Settineri
Michael J. Settineri


EXHIBIT A

tabbies

1:9,000
Feet
0 400 800

# REF - D
# TURBINE -16/169 SHIFTS

Note:
Turbine 16 removed
Turbine 169 shifted 396 ft SW

| New Layout | | Old Layout | |
|---|---|---|---|
| TCID 22 | | TCID 21 | |
| Collection Line | | Collection Line | |
| Access Roads | | Access Roads | |

Map created by Everpower Wind Holdings, Inc. on January 9, 2014
using ESRI ArcView 10.1 SP1

Projected Coordinate System:
NAD 1983 UTM Zone 17N

Information on this map is provided for purposes of discussion and visualization only.

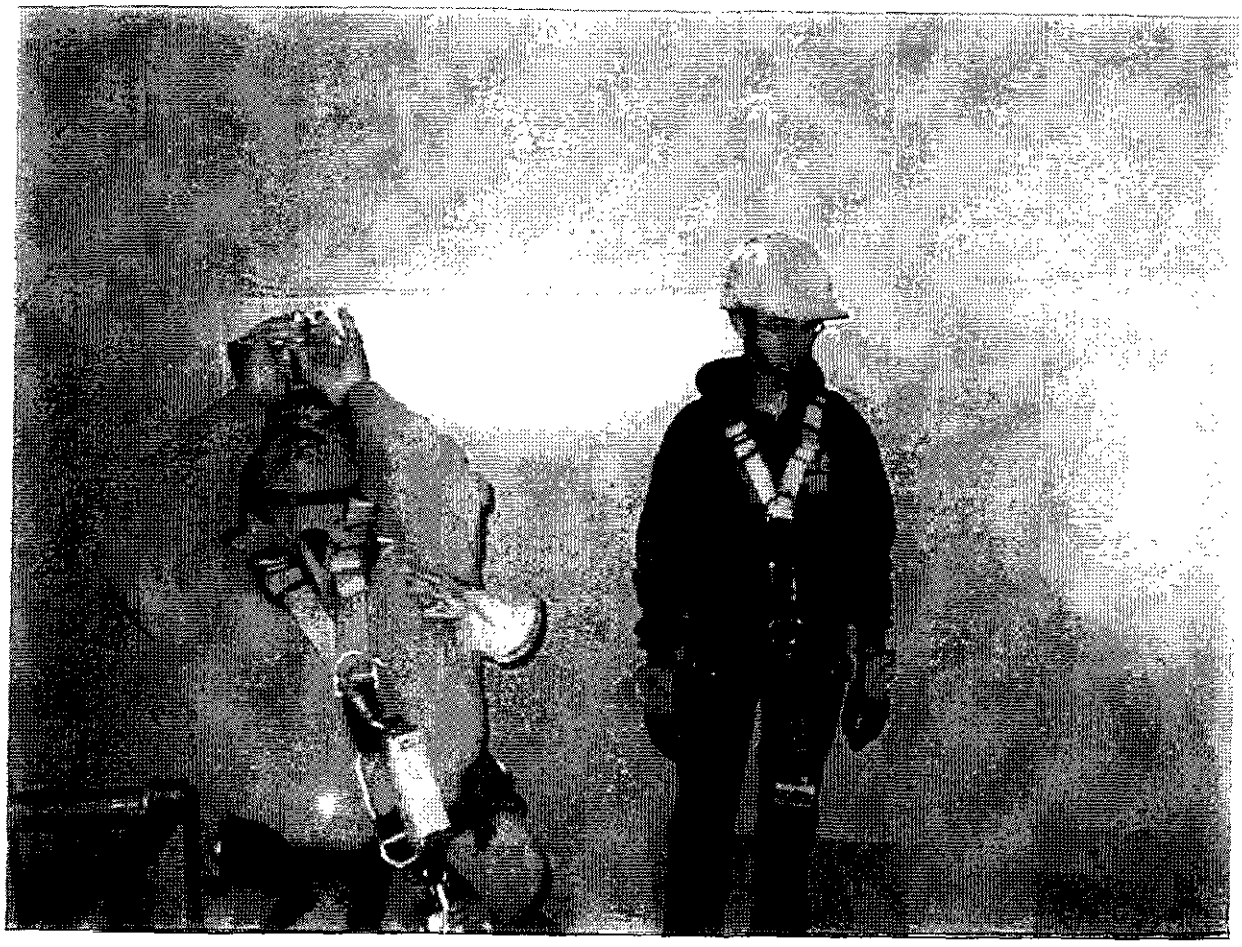
Sources:
ESRI, BING, EverPower

EXHIBIT
tabbies
B

# Tower Rescue Drill Summary 09-29-12

| Up tower Personnel: | Down tower Personnel: |
|---|---|
| John Nichols (Everpower)<br>Lucas Soren (REpower)<br>Buster the Dummy (victim)<br>4-HAR team Members | Steve Sick (Everpower)<br>Kevin Wigell (Everpower)<br>Rob Patrick (Howard Fire)<br>27 Members of the local emergency services organizations |

Everpower met with the Bath High Angle Rescue team on September 15th to go over a tower familiarization and perform a site tour. There were 33 participants from 7 different local service agencies attend this first meeting. We then took the Bath HAR team uptower for a tour of the tower and nacelle to help with their training.



Everpower went over the basic safety procedures of the wind turbine with the HAR team members and discussed tie off points to be used during the drill. The HAR team members took photographs of the nacelle to review a rigging procedure with their team.

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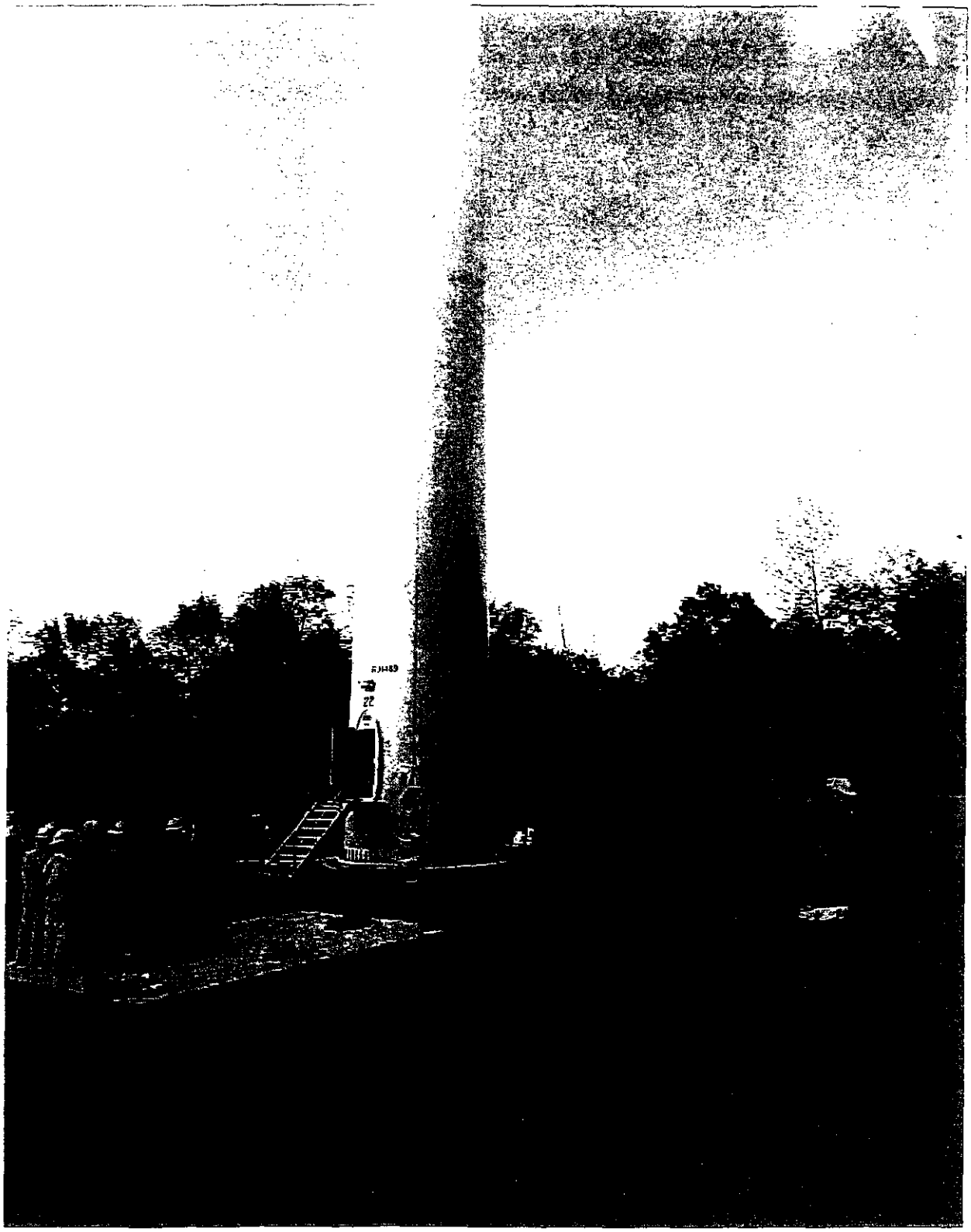
September 29th

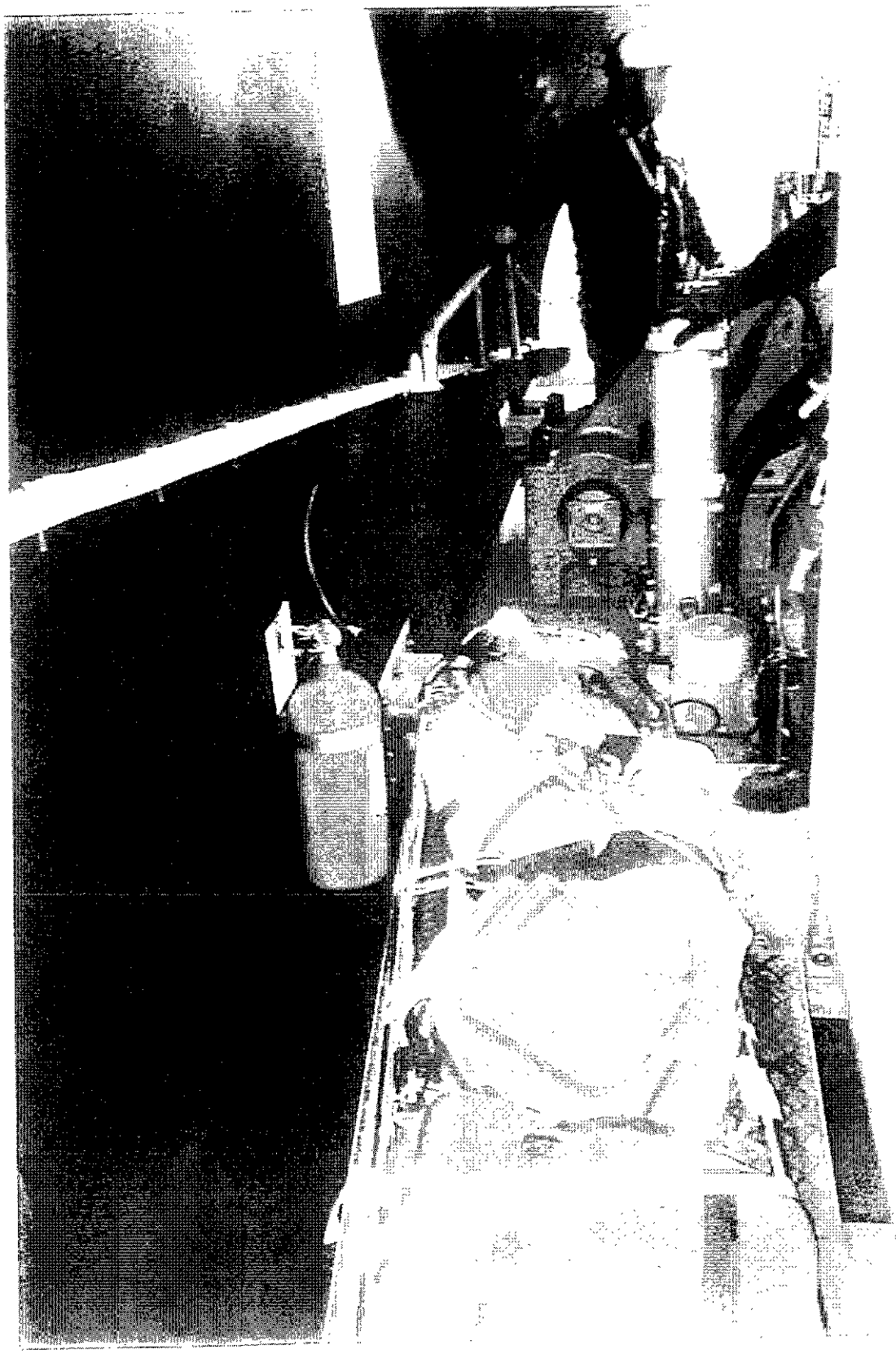
Everpower met with REpower Personnel at WTG 22 at 0700. JN and LS went up the tower, they then utilized the uptower crane to place the rescue dummy (victim) in the nacelle. SS and KW stayed on the ground to escort the HAR team members to the top of the WTG with the service lift.

At 08:19 John Nichols made the 911 call stating that he was an employee at the Howard Wind Farm and we have an employee with a back injury at the top of WTG 22. The 911 operator took some information from John and they got off the phone. Emergency vehicles arrived onsite at 08:34.

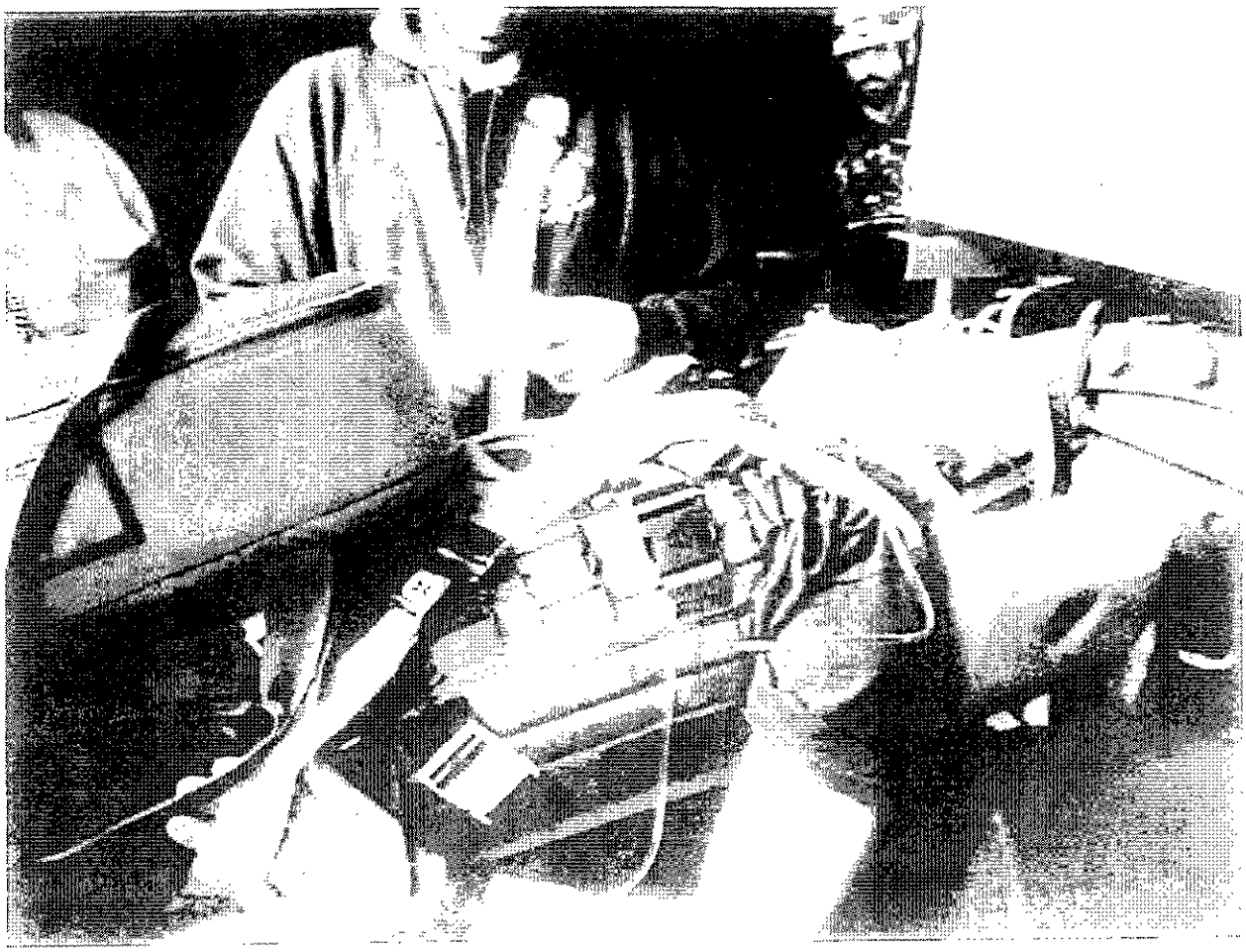
The initial on scene personnel set up a command center at the tower base and also set up a landing area for the LifeNet rescue chopper.

The rescue equipment was set up by the Bath HAR team. Our up tower personnel began lowering the chain hoist down to the ground personnel. The equipment was loaded onto the chain hoist and raised to the nacelle.



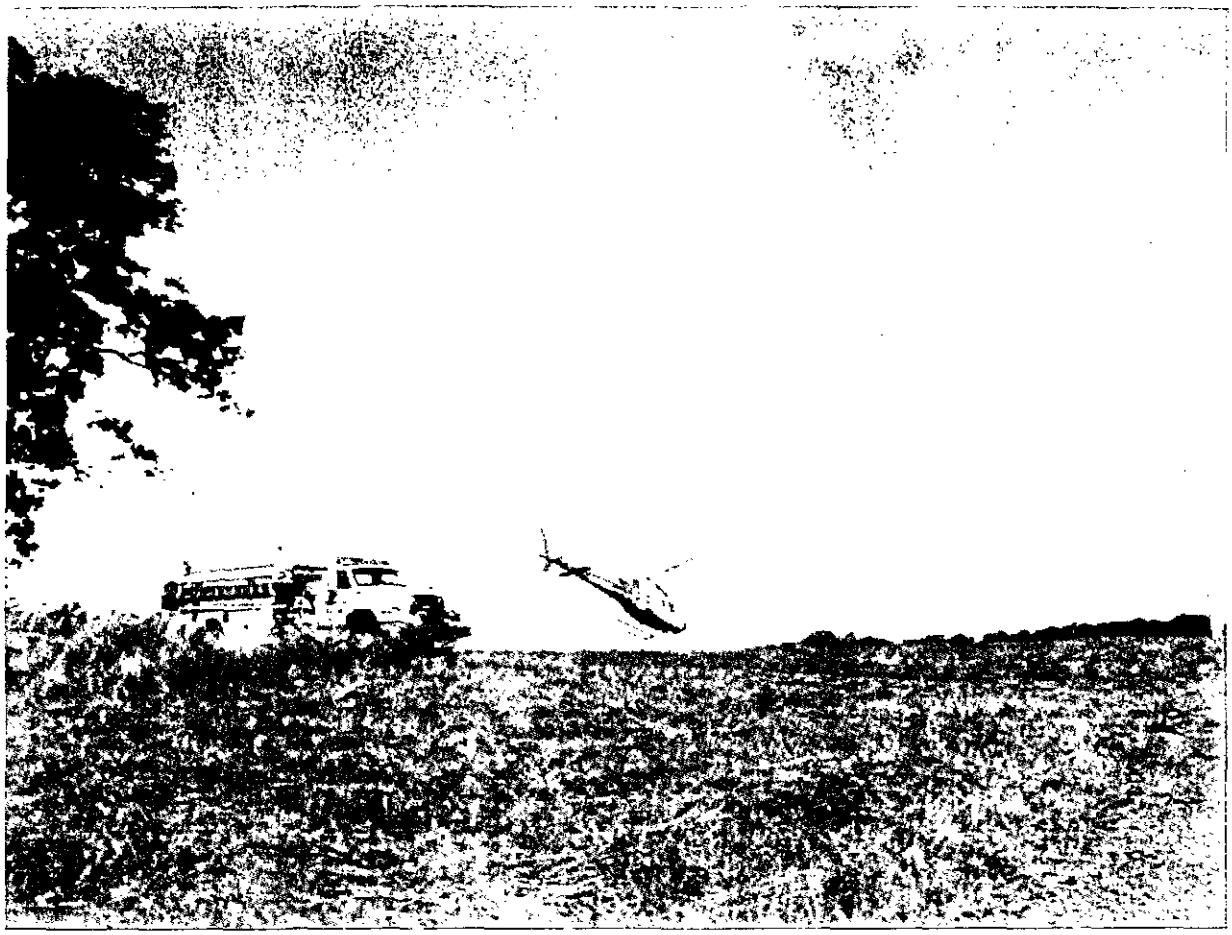


Over the next two hours the rigging was set up and the dummy was secured to the stretcher.



The stretcher was lowered from the back of the Nacelle and lowered with the HAR team's equipment. Time at this point was 11:01 hours, (2 hours and 42 minutes after initial call).


The dummy was removed from the stretcher and the rigging was lowered back down with the chain hoist.



Organizations represented:
Everpower (Howard Wind LLC)
REpower
Howard Fire Dept
Bath High Angle Rescue team
Bath VA Fire Dept.
Canisteo Fire Dept.
LifeNet 7-7
Steuben County 911

An October critique meeting is planned to review the rescue drill and cover any issues or concerns that became apparent during the drill.