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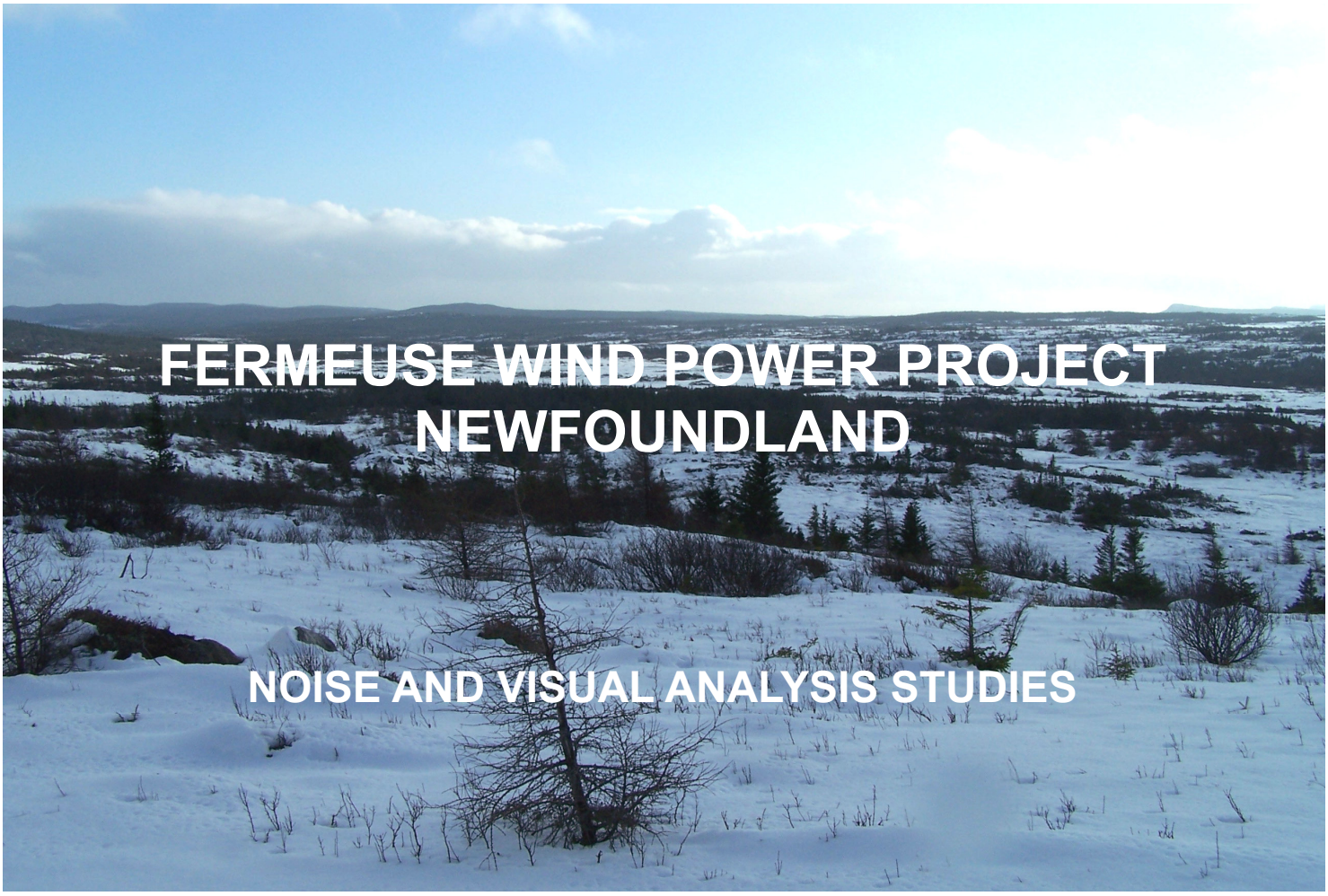

FERMEUSE WIND POWER PROJECT
NEWFOUNDLAND

NOISE AND VISUAL ANALYSIS STUDIES

Submitted to:
Town of Fermeuse and
Department of Environment and Conservation of
Newfoundland and Labrador

March 2008

helimax

MEMBRE GL GROUP MEMBER

MAIN CONTRIBUTORS

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DEFINITIONS AND SYMBOLS

CWS	Canadian Wildlife Service
DEC	Department of Environment and Conservation of Newfoundland and Labrador
CEAA	Canadian Environment Assessment Agency
ha	hectare
km	kilometre
m	metre
MW	megawatt
RFP	Request for proposal

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1 INTRODUCTION AND CONTEXT

SkyPower Corporation (Proponent) is proposing to develop, construct, own and operate a wind energy project on the east coast of the Avalon Peninsula, approximately 75 km south of St. John's, Newfoundland. The targeted area for the Project is located approximately 1 km west of the town of Fermeuse (Appendix A). The Project is expected to have an installed capacity of 27 MW provided by 9 3-MW turbines (Vestas V90*)* and be commissioned by December 2008.

The Fermeuse Wind Power Project was selected by Newfoundland and Labrador Hydro pursuant to its most recent RFP for wind power.

In order to obtain the Provincial Approvals for this Project, a Noise and Visual Analysis Study was prepared pursuant to conditions expressed in a letter received from the DEC (*Office of the Minister*) in September 2006 following the Project's registration. One of the stated conditions was the following:

> *Preparation of a noise impact assessment and viewscape analysis studies, in consultation with the Department of Environment and Conservation and Town of Fermeuse to determine acceptable distance and site locations for the wind turbines from the community is required to be submitted to the Minister for approval.*

This document presents the consultation process and the noise and visual analysis that aims to satisfy to above-mentioned condition.

1.1 Project Proponent

The proponent of the Project is SkyPower Corporation ("SkyPower" or "Proponent"), located in Toronto. The contact information is as follow:

SkyPower Corporation
Mr. Senen Salacup
Environmental Manager
250, Yonge Street, 16th Floor
Toronto, Ontario M5B 2L7
Telephone: 416-979-4625
Email: senens@skypower.com

1.2 Environmental Assessment Team

Helimax Energy Inc. ("Hélimax"), a wind energy consultant, has been retained to lead the environmental assessment effort for the Fermeuse Wind Power Project. The contact information is as follow:

Helimax Energy Inc.
Patrick Henn, M.Sc.
4100, rue Molson, bureau 100
Montréal (Québec) CANADA H1Y 3N1
Telephone: 514-272-2175 x 202
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2 PUBLIC CONSULTATIONS

The consultation program for the Fermeuse Wind Power Project ("Project") involved identifying stakeholders and holding meetings, public events and discussions with local authorities as well as public and regulatory agencies. These activities are generally aimed at informing the various stakeholders of the Project and providing them the opportunity to raise issues and concerns. Stakeholders, consultation activities and issues raised are detailed in the following sections.

The noise and visual analysis was prepared according to information gathered during the consultation process such as meetings and the Open House event.

2.1 Consultations

2.1.1 Identification of Stakeholders

The public stakeholders identified for this Project mainly comprise the public land users in the vicinity of the Project (cabin owners on public lands, ATV and snowmobile trail users and public land users such as fisherman and hunters), as well as the residents of the town of Fermeuse (including the community of Kingman's).

The local authority identified as a stakeholder is the Town of Fermeuse.

2.1.2 Consultation Activities

The following consultation activities were undertaken:

- The Project was initiated by Vector Wind Energy Inc., which held a meeting with the Municipal Council of Fermeuse on 5 July 2006 to present details and information.
- The Project Description Document was submitted to the DEC in July 2006. A revised document was sent in December 2007 with the new Project configuration.
- A municipal council meeting was held in November 2007 by SkyPower to provide updated information on the Project, such as the Project's transfer to a new proponent (SkyPower) and the updated turbine type and configuration. This meeting provided an opportunity for the Mayor and councillors to raise issues and to have questions answered.
- Discussions were held with the DEC in November and December 2007 regarding requirements for the noise and visual analysis that needed to be planned in consultation with the Town of Fermeuse.
- A meeting with the municipal council of Fermeuse, an Environmental Scientist from DEC, (Mr. Peter Madden), SkyPower and the Environmental Assessment team was held on 5 December 2007. The main purpose of this meeting was to outline the Project officially to the Town Mayor, Councillors and the DEC and present the approach to undertake the noise and the visual analysis.
- An on-site visit was conducted on 5-6 December 2007 by the Environmental Assessment team, a Town councilor, Mr. Andrew Kenny and a Fermeuse resident, Mr. Terry Pearson. The purpose of this visit was to identify sensitive areas in terms of potential noise and visual impacts and validate the presence of dwellings, cabins and trails around in the Project area. A number of photos were also taken for preparing visual simulations.
- A consultation with the Department of Government Services and Lands of Newfoundland and Labrador was held on 6 December 2007 to identify officially registered trails and cabins in the Project area.
- An Open house was held on 17 January 2008 at the Fermeuse Hall. A Notice of Commencement (Appendix B) was posted in strategic locations in local communities (church, convenience store, etc.) and sent by mail to 500 houses located in Fermeuse, Kingman's, Port Kirwan, Renews, Cappahayden, Aquaforte and Ferryland to announce the event. Visual material such as maps, general information boards on wind power, visual simulations and a slideshow of the construction phase of wind projects were presented during the event. Two members of the Environmental Assessment team and four

representatives from SkyPower were present to answer questions. According to the attendance sign-sheet, at least 85 individuals attended the event. All were invited to fill out a comment form.

2.1.3 Issues Scoping

A total of 13 comment forms were filled out at the public open house event (Appendix C). All comments received were of positive nature (economic benefits, green energy, etc.) and no comment or issue regarding noise or visual impact was raised. A few questions on noise were asked verbally during the Open House Event and the explanations subsequently given on wind turbines and noise seemed to be satisfactory.

3 NOISE ANALYSIS STUDY

3.1 Baseline Acoustic Environment

The Fermeuse Wind Power Project is located in an area with an acoustical environment that is generally dominated by natural sounds and by trail and road traffic. As such, ambient sound levels originate from residential or cabins activities, ATV, snowmobile and vehicle traffic from Route 10, and ambient noise induced by wind. It is assumed that noise levels on site are low and typical of quiet rural areas.

The Project area is on public land that is mostly used by locals for recreational purposes (ATV and snowmobiling, cabins, hunting and fishing). There is low human activity in the Project area. All cabins located less than 1 km of turbines are not permanent dwellings.

3.2 Assessment of Effects

3.2.1 Potential Effects

Potential effects to the acoustic environment include:

- Increase in ambient noise levels during construction and decommissioning;
- Increase in ambient noise levels during operations.

The noise impact assessment of the Fermeuse Wind Power Project is in accordance with the *Wind Farm Fact Sheet* of Health Canada (2006).

3.2.1.1 Construction and Decommissioning Phases

Activities associated with the construction of a wind energy Project can increase ambient noise levels, which in turn can constitute a disturbance to wildlife and humans. Noise is common to any medium or large scale Project during construction, due to the use of heavy machinery and vehicles. Construction and decommissioning activities will generate noise from the use of heavy machinery and vehicles. The contribution to noise levels is expected on site, where population density is low, and during a short period of time, i.e. the few months of planned work during the construction/decommissioning periods. Increased noise levels will be of medium magnitude on the municipal access roads, but of short duration, intermittent and local. Overall, the effect of construction on ambient noise levels is of low concern and considered not significant.

According to the *Wind Farm Fact Sheet* of Health Canada, maximum permissible noise levels during the construction activities should be 57 dBA (Leq) for receptors in rural areas and for on-site construction activities. In order to minimize any effects during construction, SkyPower will limit construction activities to daytime and early evening hours as much as possible, and implement a construction and traffic management plan. Given these measures and the nature of the construction activities as described above, noise levels should not exceed the Health Canada recommended levels.

Overall, the effect of construction on ambient noise levels is of low concern and considered not significant.

3.2.1.2 Operations Phase

Circulation of vehicles during the operations phase is considered non-significant because it will occur only occasionally for maintenance purposes.

During operations, turbines emit noise that originates from the blades (aerodynamic noise) and from the nacelle's internal electrical and mechanical components (mechanical noise). The effect of operating turbines on ambient noise levels and related disturbance is often raised by the public and regulatory agencies.

The Project was configured to ensure that noise generated from turbines does not exceed permissible levels recommended by Health Canada for quiet rural areas, which is 45 dBA (leq) outside receptors such as dwellings and cabins.

The calculation of noise levels and noise propagation on site was done according to wind industry best practices, i.e. using the ISO-9613-2 standard and the turbine noise emission rating for the V90; a noise isocontour map (Appendix A) presents the results of the modelling exercise, and shows that noise levels outside all dwellings and cabins are within the Health Canada recommended levels. It should be noted that all dwellings are located over 940 m from the turbines, and that cabins are located at least 660 m away. These setback distances are well over the prescribed distances by provincial and local authorities in other provinces such as Ontario and Quebec.

At the base of a Vestas V90 turbine, it is estimated that noise levels could reach approximately 60 dBA, the equivalent of a conversation 1 m away. While these levels decrease with distance, this implies that turbines could be audible on site when operational. Given that the site exhibits low population density and that all permanent dwellings are located at least 1 km from the turbines, the effect is considered of minimal concern and not significant.

Table 3-1 below summarizes the effects of the Project on the acoustic environment.

Table 3-1: Effects Assessment Summary – Acoustic Environment

Effect	Mitigation Measure	Level of Concern	Significance of Effect
Construction and Decommissioning			
Increase in ambient noise levels	1. To the extent possible, limit construction activity between the hours of 07:00 and 22:00 to reduce the potential impact of construction noise 2. Advise nearby residents of significant truck transportation passing through Route 10 and municipal roads 3. Ensure all internal combustion engines are fitted with appropriate muffler systems	Low	Not significant
Operations			
Increase in ambient noise levels	4. Include compliance with Health Canada *Wind Farm Fact Sheet* as criterion for Project layout preparation.	Minimal	Not significant

4 VISUAL ANALYSIS STUDY

4.1 Approach

The Visual Analysis Study is based on a common approach to visual effects assessment, which has been used and accepted in the context of several other wind farms throughout Canada. The approach consists of the following:

- The Project area and its vicinity are described in terms of landscape features, valued landscapes, natural environment and entropic environment. Public consultations are held to consult with the population on valued landscapes.
- The study area is divided into Landscape Units and the "valued" viewscapes and viewpoints are identified in accordance with any input from local authorities.
- Photographs of Landscape Units, viewscapes and viewpoints are taken and visual simulations are realized from selected viewpoints, based on state-of-the-art software which considers the exact Project location, turbine dimensions and position of the sun.
- The magnitude of the visual effect is determined, based on a set of criteria commonly used in landscape effects methodology (distance, number of visible turbines, surrounding visual setting, type of observer).

4.2 Description of Landscape Units

The Fermeuse Project area and its vicinity are composed of various types of landscapes resulting from the different land uses (namely residential and recreational) and from the presence of natural areas.

The study area can be divided into four different Landscape Units which will be used to evaluate visual effects. These Landscape Units are described below.

4.2.1 Town Landscape Unit

The Town Landscape Unit is represented by the municipalities of Fermeuse, Kingman's and Port Kirwan outside the Shoreline Landscape Unit (Section 4.2.2). This unit comprises residential, institutional (school and church), and commercial zones (convenience store) and roads such as Route 10. The Town of Fermeuse is located 1 km east of the Project. Kingman's and Port Kirwan are located approximately 2 km east. Most views from these municipalities are closed due to the topography, the vegetation and the presence of structures such as houses.

4.2.2 Shoreline Landscape Unit

Municipalities of Fermeuse, Kingman's and Port Kirwan are located on the shoreline of Lumley Cove. Therefore, the Shoreline Landscape Unit includes portions of towns along the shore. Most views in the Project direction from the shoreline are closed due to various structures such as the Port of Fermeuse, houses and topography. However, some viewpoints allow observers to have an open view of the Project as they are higher in elevation, especially those located on roads leading to Port Kirwan and to Kingman's. The views towards the cove are considered to be more valuable than those directed towards the Project.

4.2.3 Forest Landscape Unit

Forested zones are mostly located west of the Town of Fermeuse. A few cabins and some trail sections are located in these Landscape Units. Route 10 is mostly considered to be located in this type of Landscape Unit. However, some sections of Route 10 are located in Town and Open Land Landscape Units (Sections 4.2.1 and 4.2.4, respectively). Obviously, views from forested areas toward the Project are mostly closed due to the presence of high and dense vegetation. Few turbines are located in the forested unit.

4.2.4 Open Land Landscape Unit

The Fermeuse Project is mostly located in an Open Land Landscape Unit which includes peatland areas, non-forested zones (bedrock surface), or zones where vegetation allows an open view (small balsam fir forest or ericaceous moor). Approximately five cabins and the ATV and snowmobile trail are located in this Landscape Unit. Views are open but viewpoints from the trail and cabins towards the Project are generally blocked due to the topography. Most valuable viewpoints are towards the shore and not the Project.

4.2.5 Lacustrine Landscape Unit

A few ponds are located in the Project area (Appendix A) and are considered to be part of the Lacustrine Landscape Unit. They are generally located in forested zones. Ten cabins are located in this type of landscape. Some viewpoints allow observers to have an open view on the Project as the water surface is located between the observer and the Project. In some cases, these types of views could be blocked by the topography.

4.3 Viewpoints

Based on this identification of Landscape Units, a number of photos were taken in December 2007 from sensitive viewpoints in order to assess the potential visual effects of the Fermeuse Wind Power Project. The selected sensitive viewpoints are found in Table 4-1 (see also Figure 4-1). The visual assessment of effects is presented in Section 4.4 of this report.

Table 4-1: Selected Viewpoints for Visual Effects Assessment

Landscape Unit	Viewpoint	Comment
Town Landscape Unit	Town of Fermeuse	Looking west
	Port Kirwan	Looking west
	Kingman's	Looking northwest
Shoreline Landscape unit	Port of Fermeuse and shore	Looking east
Forest Landscape Unit	ATV and snowmobile trail	Looking south
Open Land Landscape unit	Route 10	Looking west
	ATV and snowmobile trail	Looking north
Lacustrine Landscape Unit	Cabins at Big Pond	Looking north

Town of Fermeuse - Town Landscape Unit

Port of Fermeuse - Shoreline Landscape Unit

Town of Kingman's - Shoreline Landscape Unit

ATV and snowmobile Trail - Forested Landscape Unit

ATV and snowmobile Trail - Open Land Landscape-Unit

Big Pond - Lacustrine Landscape Unit

Figure 4-1: Photos from Selected Viewpoints

4.4 Assessment of Effects

4.4.1 Potential Effects

The visual impact of wind energy projects is an issue generally raised. Interestingly, public opinion on the aesthetics of wind turbines is divided: some see them as beautiful structures while others feel that they disrupt natural landscapes. The location of turbines, the size of the Project and the surrounding visual setting are key elements that have an impact on the significance of the visual effect.

The effect of the Fermeuse Wind Power Project on the quality of landscapes will be assessed in this section. The effects on landscapes will be assessed for the operations phase only, as this is when turbines will be visible and will potentially alter the visual landscape.

Visual effects are assessed per Landscape Unit on the basis of the presence/absence of visible components of the Project, the distance of these components from the observer, the type of observer (stationary, temporary-stationary and mobile) and the visual proportion of the Project in the environment. Visual simulations are used to illustrate turbine visibility from different viewpoints. The following table presents the results of the visual effects assessment for each viewpoint identified in the previous section. All visual simulations are found in Appendix D.

Table 4-2: Effects Assessment – Landscapes

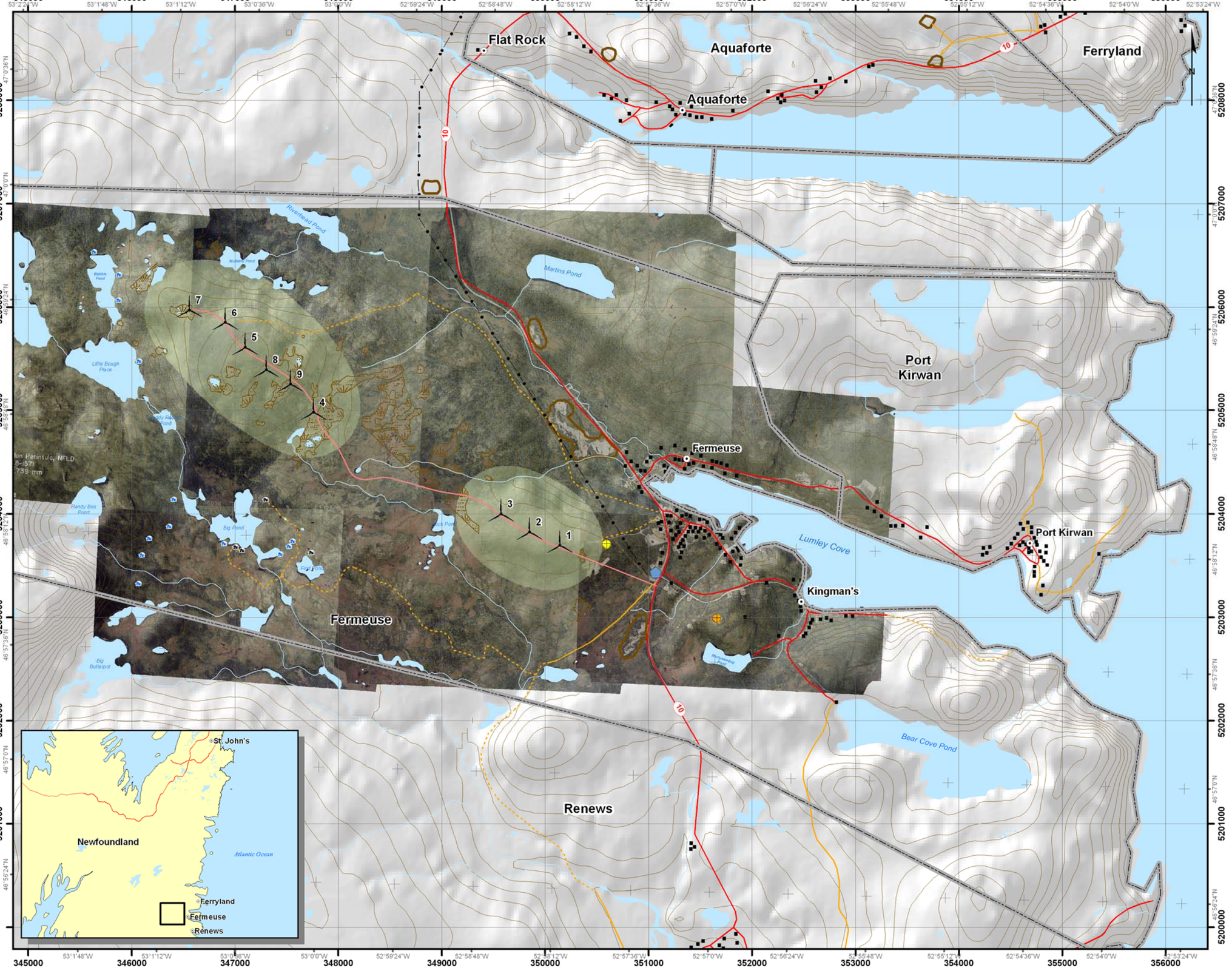
Landscape Unit	Viewpoint	Visual Simulation	Comments	Effect
Town and Shoreline Landscape Unit	View from Town of Fermeuse	1	• Open view from the road. • Nearest turbine is 1.8 km away. • Turbines are proportionally smaller than built structures in the area such as houses.	Low
Open Land Landscape Unit	View from Route 10	2	• Open view from the Route 10. • Nearest turbine is 1 km away • Turbines are proportional with the size of built structures such as the building and the electric power line. • Views from Route 10 are mostly closed due to the topography and the vegetation except for viewpoints on higher altitude. • Observers from Route 10 are generally mobile. • Viewpoints towards the shore (east) are considered to be more valuable than those towards the Project.	Low
Town and Shoreline Landscape Unit	View from Port Kirwan	3	• Open view from Port Kirwan interpretive centre. • Nearest turbine is 3.7 km away and 8 turbines are visible. • Port Kirwan allow a 180º view while the Project represents a maximum of 40º. The most valuable view from this point is more towards the south. • Observers from this point of view are generally stationary.	Minimal
Town Landscape Unit	View from road to Town of Kingman's	4	• Open view from road to Town of Kingman's. • Nearest turbine is 1.6 km. • Turbines are proportional to the size of natural environment components in the foreground such as trees. • Observers from this point of view are generally mobile.	Minimal
Town Landscape Unit	View from Town of Fermeuse	5	• Open view from Town of Fermeuse. • Closest turbine is 1.2 km away. • Turbines are proportional with the size of built structures in the foreground such as houses and streetlights. • Observers from this point of view are generally mobile.	Low

Landscape Unit	Viewpoint	Visual Simulation	Comments	Effect
Town Landscape Unit	View from the Fermeuse Convenience Store	6	• Open view from the convenience store in Fermeuse. • Nearest turbine is 1.5 km away and a maximum of 4 turbines are visible. • Turbines are proportionally smaller than the size of built structures and vegetation in the foreground. • Observers from this point of view are generally stationary or mobile for a short period. • From the convenience store, observers have to be at a specific location to have a view of nearest turbines due to topography and vegetation.	Low
Lacustrine and Forested Landscape Unit	View from a cabin on Big Pond's shore	7	• Open view from Big Pond. • Nearest turbine is 1.5 km away. • Turbines are proportionally smaller than the size of vegetation in the foreground. • Observers from this point of view are generally stationary.	Low
Open Land Landscape Unit	View from Route 10	8	• Open view from the Route 10. • Nearest turbine is 1.7 km away. • Turbines are proportional with the size of electric power line in the foreground. • Views from Route 10 are open for viewpoints at higher elevations. • Observers from Route 10 are generally mobile. .	Minimal

The visual effects of the Fermeuse Wind Power Project are not considered significant namely because the number of turbines is low (9) and it does not allow a high degree of visibility. Topography and built structures will block most views of turbines. Turbines will however be visible from open areas such those shown in the visual simulations. Turbines will not be visible from viewpoints looking towards the Cove, which is considered of significant scenic value.

All visual simulations were presented at the Fermeuse Town Council and at the Open House Event (Section 2.1). No negative comments or issues regarding potential visual impacts were raised and no additional visual simulation was requested.

APPENDIX A PROJECT LOCATION AND NOISE ISO-CONTOURS MAP



Legend

- Wind Turbine
- Wind Monitoring Tower
- Radiocommunication Tower
- Building
- Cabin
- Cabin (Approximate Position)
- Transformer Station
- Transmission Line
- Access Road
- Road
- Limited-use Road
- ATV and Snowmobile Trail
- Contour (interval: 10 m)
- Watercourse
- Mining Site
- Peatland (Site Visit)
- Municipality
- Waterbody

Noise

- 45 + dB(A)

0 0.25 0.5 1 kilometres

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Fermeuse Wind Farm

PROJECT LAYOUT AND NOISE ISO-CONTOURS (WIND TURBINES V90) ON AERIAL PHOTOGRAPHY

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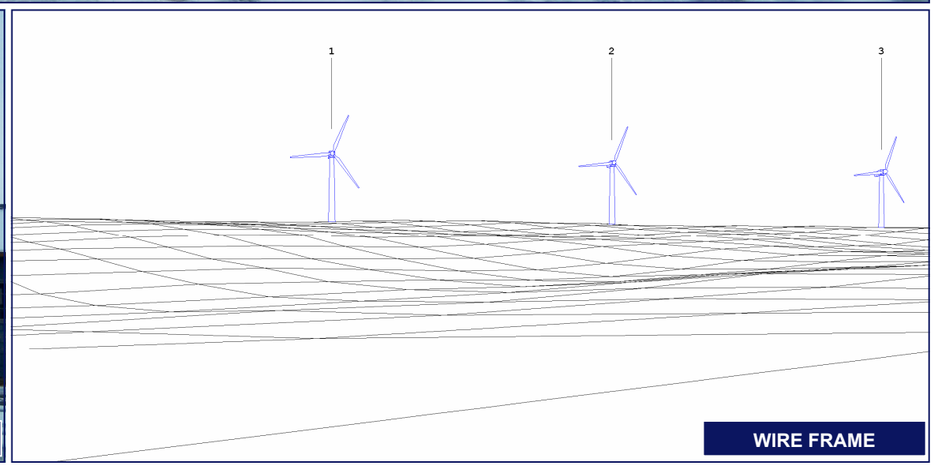
152-210-040308-01-CLA
Layout provided by SkyPower:
Vestas_080304_Fermeuse_turbine_layout
Noise Analysis:
ICB03-152Fermeuse-9ms-20080219-MS00
March 4, 2008

Projection: UTM Zone 22, NAD83
Sources: NTDB 1:50 000, Geobase and Envirotel 3000

APPENDIX C SIGN-IN SHEET AND COMMENT FORMS

APPENDIX D VISUAL SIMULATIONS



Note:
* The Wire Frame Technical drawing does not take into consideration vegetation. It is possible that wind turbines are visible on the wire frame drawing but not on the visual simulation.

TECHNICAL DATA

PHOTOGRAPH - VIEW POINT

Photograph Number:		207
Coordinates (UTM 17 NAD83) :	350686 W	5204612 N
Altitude with respect to mean sea level:		13 m
Date Photograph was taken :		December 06, 2007
Direction :		219 degrees T.N.
Focal Length :		38 mm
View span :		50 degrees
Altitude of photograph with respect to ground :		1,8 m

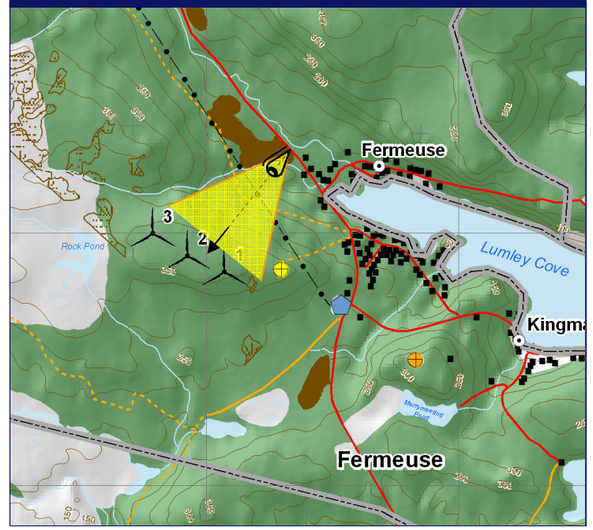
WIND TURBINES USED

Model :	V90 - 3MW
Height of nacelle—mid point :	80 m
Rotor Diameter :	90 m

SIMULATION

Visual Simulation No. :	PM10-152FER-207-E350686-N5204612-L08-T12-D219-SB00.WFV
Configuration No. :	L08-152FER(VW22901)-20080215-SD00.WFL
Total number of wind turbines for the project:	9
Total number of visible wind turbines in visual simulation:	3
Closest visible wind turbine :	No 1 à 1.0 km
Furthest visible wind turbine :	No 3 à 1.2 km

MAP



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Date : February 28, 2008
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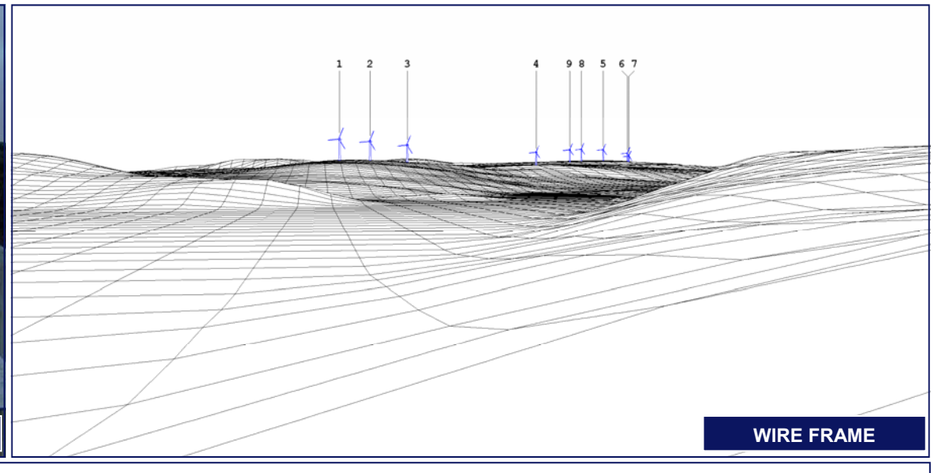
VISUAL SIMULATION 2

View from Route 10
1 km North of Fermeuse Town Hall

Fermeuse Wind Farm



Note:
* The Wire Frame Technical drawing does not take into consideration vegetation. It is possible that wind turbines are visible on the wire frame drawing but not on the visual simulation.

TECHNICAL DATA

PHOTOGRAPH - VIEW POINT

Photograph Number:		174
Coordinates (UTM 17 NAD83) :	353858 W	5203629 N
Altitude with respect to mean sea level:		51 m
Date Photograph was taken :		December 06, 2007
Direction :		273 degrees T.N.
Focal Length :		38 mm
View span :		50 degrees
Altitude of photograph with respect to ground :		1,8 m

WIND TURBINES USED

Model :	V90 - 3MW
Height of nacelle—mid point :	80 m
Rotor Diameter :	90 m

SIMULATION

Visual Simulation No. :	PM04-152FER-174-E353858-N5203629-L08-T12-D273-SB00.WFV
Configuration No. :	L08-152FER(VW22901)-20080215-SD00.WFL
Total number of wind turbines for the project:	9
Total number of visible wind turbines in visual simulation:	8
Closest visible wind turbine :	No 1 à 3.7 km
Furthest visible wind turbine :	No 7 à 7.7 km

MAP

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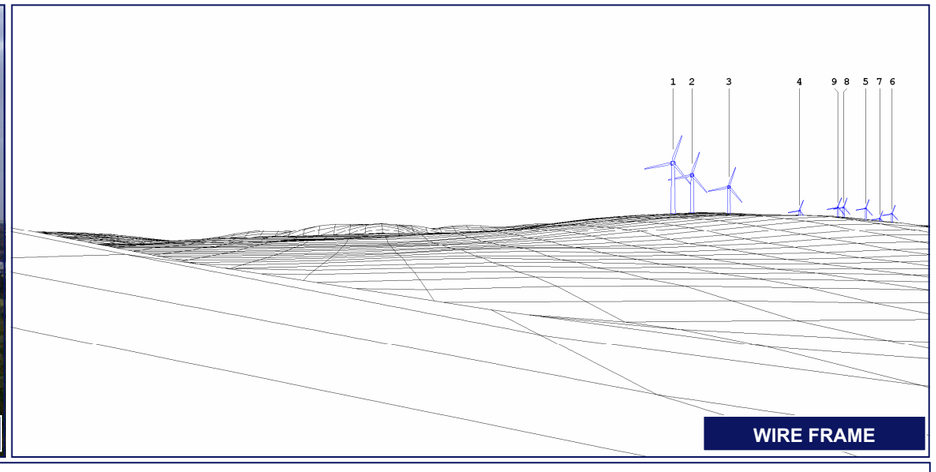
VISUAL SIMULATION 3

View from Port Kirwan

Fermeuse Wind Farm



Note:
* The Wire Frame Technical drawing does not take into consideration vegetation. It is possible that wind turbines are visible on the wire frame drawing but not on the visual simulation.

TECHNICAL DATA

PHOTOGRAPH - VIEW POINT

Photograph Number:		184
Coordinates (UTM 17 NAD83) :	351686 W	5203178 N
Altitude with respect to mean sea level:		65 m
Date Photograph was taken :		December 06, 2007
Direction :		276 degrees T.N.
Focal Length :		38 mm
View span :		50 degrees
Altitude of photograph with respect to ground :		1,8 m

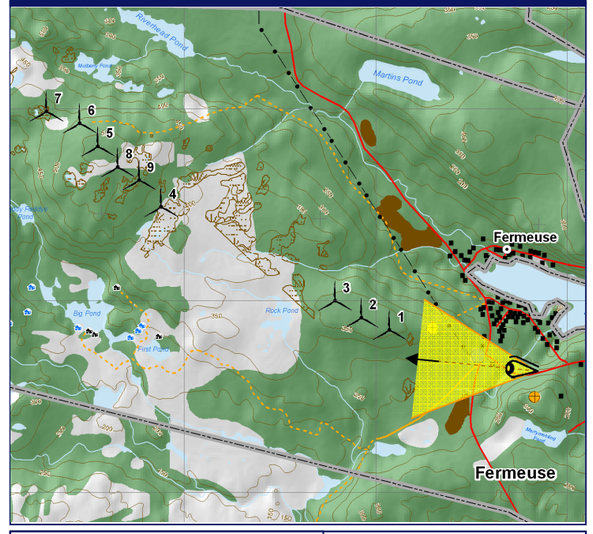
WIND TURBINES USED

Model :	V90 - 3MW
Height of nacelle—mid point :	80 m
Rotor Diameter :	90 m

SIMULATION

Visual Simulation No. :	PM06-152FER-184-E351686-N5203178-L08-T12-D276-SB00.WFV
Configuration No. :	L08-152FER(VW22901)-20080215-SD00.WFL
Total number of wind turbines for the project:	9
Total number of visible wind turbines in visual simulation:	9
Closest visible wind turbine :	No 1 à 1.6 km
Furthest visible wind turbine :	No 7 à 5.8 km

MAP



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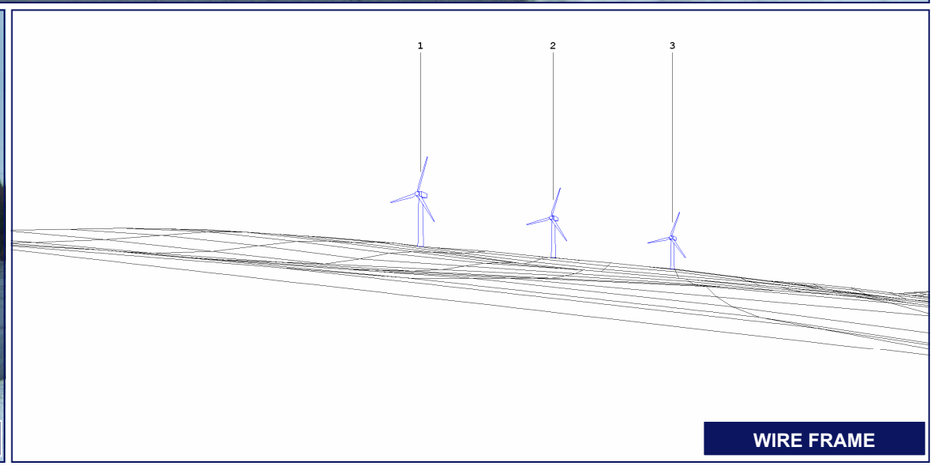
helimax

Date : February 28, 2008
Version 01

VISUAL SIMULATION 4

View from road to Town of Kingman's

Fermeuse Wind Farm



Note:
* The Wire Frame Technical drawing does not take into consideration vegetation. It is possible that wind turbines are visible on the wire frame drawing but not on the visual simulation.

TECHNICAL DATA

PHOTOGRAPH - VIEW POINT

Photograph Number:		203
Coordinates (UTM 17 NAD83) :	351292 W	5204612 N
Altitude with respect to mean sea level:		18 m
Date Photograph was taken :		December 06, 2007
Direction :		260 degrees T.N.
Focal Length :		38 mm
View span :		50 degrees
Altitude of photograph with respect to ground :		1,8 m

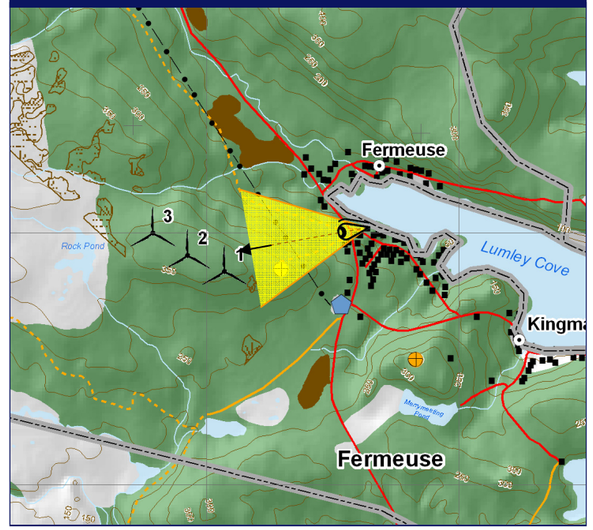
WIND TURBINES USED

Model :	V90 - 3MW
Height of nacelle—mid point :	80 m
Rotor Diameter :	90 m

SIMULATION

Visual Simulation No. :	PM09-152FER-203-E351292-N5204612-L08-T12-D260-SB00.WFV
Configuration No. :	L08-152FER(VW22901)-20080215-SD00.WFL
Total number of wind turbines for the project:	9
Total number of visible wind turbines in visual simulation:	3
Closest visible wind turbine :	No 1 à 1.2 km
Furthest visible wind turbine :	No 3 à 1.7 km

MAP



Prepared for :

SKYPOWER
GENERATING A BRIGHTER FUTURE

Prepared by :

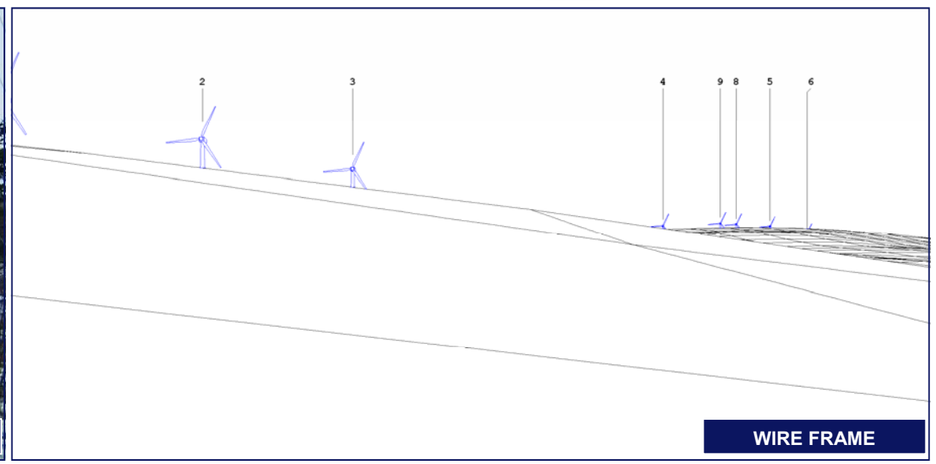
helimax

Date : February 28, 2008
Version 01

VISUAL SIMULATION 5

View from Town of Fermeuse On road to Kingman's

Fermeuse Wind Farm



Note:
* The Wire Frame Technical drawing does not take into consideration vegetation. It is possible that wind turbines are visible on the wire frame drawing but not on the visual simulation.

TECHNICAL DATA

PHOTOGRAPH - VIEW POINT

Photograph Number:		193
Coordinates (UTM 17 NAD83) :	351113 W	5204085 N
Altitude with respect to mean sea level:		22 m
Date Photograph was taken :		December 06, 2007
Direction :		274 degrees T.N.
Focal Length :		38 mm
View span :		50 degrees
Altitude of photograph with respect to ground :		1,8 m

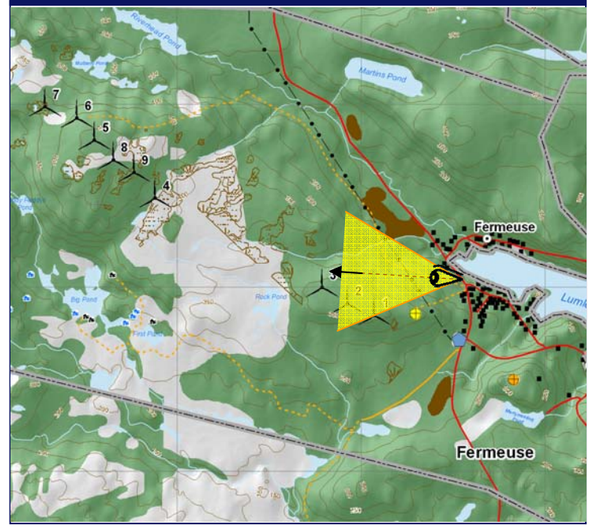
WIND TURBINES USED

Model :	V90 - 3MW
Height of nacelle—mid point :	80 m
Rotor Diameter :	90 m

SIMULATION

Visual Simulation No. :	PM07-152FER-193-E351113-N5204085-L08-T12-D274-SB00.WFV
Configuration No. :	L08-152FER(VW22901)-20080215-SD00.WFL
Total number of wind turbines for the project:	9
Total number of visible wind turbines in visual simulation:	5
Closest visible wind turbine :	No 3 à 1.5 km
Furthest visible wind turbine :	No 5 à 4.3 km

MAP



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Prepared by :

helimax

Date : February 28, 2008
Version 01

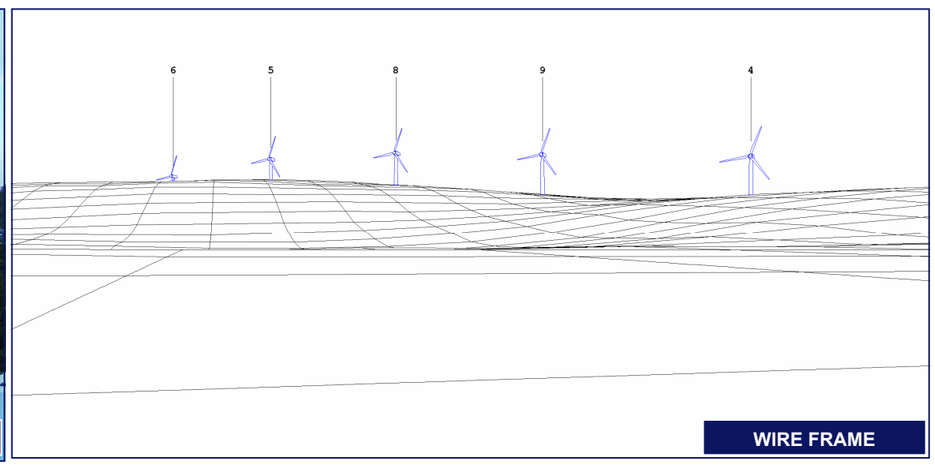
VISUAL SIMULATION 6

View from the Fermeuse Convenience Store

Fermeuse Wind Farm

VISUAL SIMULATION

ORIGINAL PHOTO



WIRE FRAME

Note:
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TECHNICAL DATA

PHOTOGRAPH - VIEW POINT		
Photograph Number:		139
Coordinates (UTM 17 NAD83) :	347006 W	5203681 N
Altitude with respect to mean sea level:		73 m
Date Photograph was taken :		December 06, 2007
Direction :		14 degrees T.N.
Focal Length :		38 mm
View span :		50 degrees
Altitude of photograph with respect to ground :		1,8 m
WIND TURBINES USED		
Model :		V90 - 3MW
Height of nacelle—mid point :		80 m
Rotor Diameter :		90 m
SIMULATION		
Visual Simulation No. :	PM03-152FER-139-E347006-N5203681-L08-T12-D014-SB00.WFV	
Configuration No. :	L08-152FER(VW22901)-20080215-SD00.WFL	
Total number of wind turbines for the project:		9
Total number of visible wind turbines in visual simulation:		5
Closest visible wind turbine :		No 4 à 1.5 km
Furthest visible wind turbine :		No 6 à 2.2 km

MAP

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Prepared by :

helimax

Date : February 28, 2008
Version 01

VISUAL SIMULATION 7

View from Big Pond

Fermeuse Wind Farm

TECHNICAL DATA

PHOTOGRAPH - VIEW POINT

Photograph Number:		195
Coordinates (UTM 17 NAD83) :	351173 W	5202334 N
Altitude with respect to mean sea level:		72 m
Date Photograph was taken :		December 06, 2007
Direction :		330 degrees T.N.
Focal Length :		38 mm
View span :		50 degrees
Altitude of photograph with respect to ground :		1,8 m

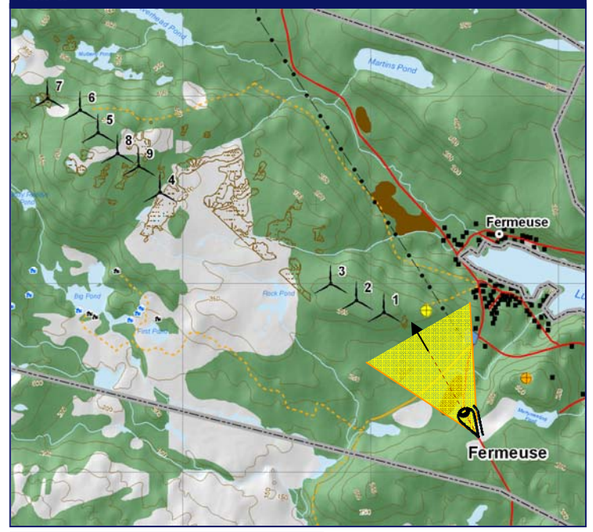
WIND TURBINES USED

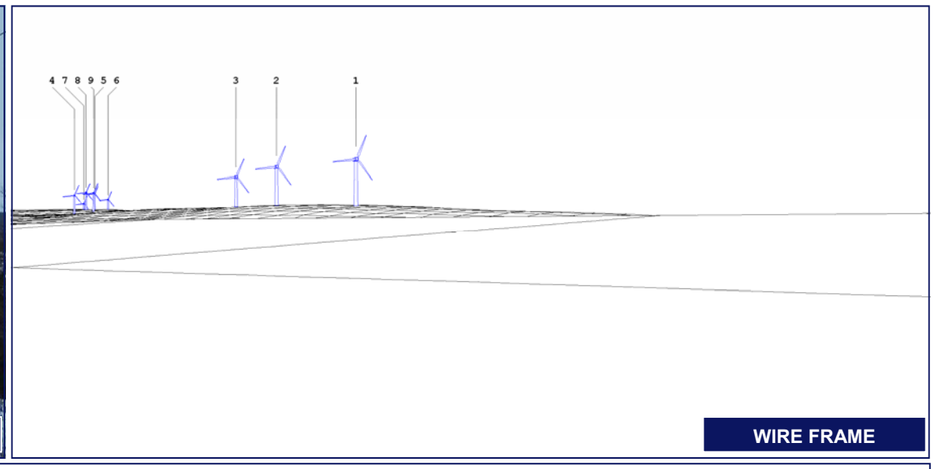
Model :	V90 - 3MW
Height of nacelle—mid point :	80 m
Rotor Diameter :	90 m

SIMULATION

Visual Simulation No. :	PM08-152FER-195-E351173-N5202334-L08-T12-D330-SB00.WFV
Configuration No. :	L08-152FER(VW22901)-20080215-SD00.WFL
Total number of wind turbines for the project:	9
Total number of visible wind turbines in visual simulation:	9
Closest visible wind turbine :	No 1 à 1.7 km
Furthest visible wind turbine :	No 7 à 5.9 km

MAP





Note:
* The Wire Frame Technical drawing does not take into consideration vegetation. It is possible that wind turbines are visible on the wire frame drawing but not on the visual simulation.

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helimax

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Version 01

VISUAL SIMULATION 8

View from Route 10
2 km South of Fermeuse Town Hall

Fermeuse Wind Farm