



Vorys, Sater, Seymour and Pease LLP
Legal Counsel

52 East Gay St.
PO Box 1008
Columbus, Ohio 43215

614.464.6400 | www.vorys.com

Founded 1909

Michael J. Settineri
Direct Dial (614) 464-5462
Direct Fax (614) 719-5146
Email mjsettineri@vorys.com

April 8, 2016

Ms. Barcy F. McNeal, Secretary
Public Utilities Commission of Ohio
180 E. Broad St., 11th Floor
Columbus, OH 43215-3793

Re: Ohio Power Siting Board - Case No. 16-0725-EL-BGA
Hardin Wind LLC
Application for a Second Amendment

Dear Ms. McNeal:

Accompanying this letter are hard and electronic copies of an application by Hardin Wind LLC, for a second amendment to its Certificate of Environmental Compatibility and Public Need issued in Case No. 13-1177-EL-BGN. This second amendment seeks only to use the 2.5 MW version of the Gamesa G114 wind turbine model that was previously approved for the project at 2.0 MW. The original Application for a Second Amendment was electronically filed.

In accordance with Rule 4906-2-04 of the Ohio Administrative Code, we make the following declarations:

Name of the applicant:

Hardin Wind LLC
1251 Waterfront Place, 3rd Floor
Pittsburgh, PA 15222

Names and location of the facility:

Scioto Ridge Wind Farm
Roundhead, McDonald, Lynn and Taylor Creek Townships, Hardin County, Ohio
Richland and Rush Creek Townships, Logan County, Ohio

Name of the authorized representative:

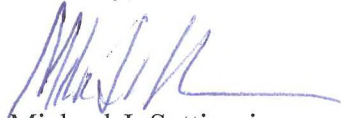
Michael J. Settineri
Vorys Sater Seymour and Pease LLP
52 East Gay Street
Columbus, Ohio 43215
614-464-5462
mjsettineri@vorys.com

Notarized Statement:

See attached Affidavit of Chris Shears
Senior Vice President and Chief Development Officer, Hardin Wind LLC

Hardin Wind LLC is requesting a waiver from the Ohio Power Siting Board Rule 4906-3-11(B)(2)(a)(iii) to allow for newspaper notice of this application.

Sincerely,



Michael J. Settineri
Attorney for Hardin Wind LLC

BEFORE THE OHIO POWER SITING BOARD

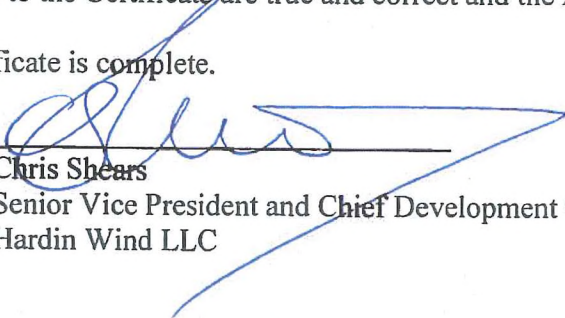
In the Matter of the Application of)
Hardin Wind LLC for a Second)
Amendment to its Certificate Issued in) Case No. 16-0725-EL-BGA
Case No. 13-1177-EL-BGN)

OFFICER'S AFFIDAVIT

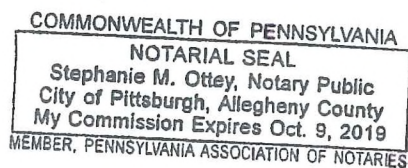
STATE OF PENNSYLVANIA)
) SS:
COUNTY OF ALLEGHENY)

Now comes Chris Shears, Senior Vice President and Chief Development Officer of Hardin Wind LLC, having been first duly sworn, declares and states as follows:

1. He is the highest ranking executive officer in charge of the Scioto Ridge Wind Farm project in the Townships of Roundhead, McDonald, Lynn and Taylor Creek in Hardin County, Ohio, and the Townships of Richland and Rush Creek in Logan County, Ohio.
2. He has reviewed the Application for a Second Amendment to the Certificate to Construct a Wind-Powered Electric Generating Facility in Hardin County and Logan County, Ohio that was issued in Case No. 13-1177-EL-BGN.
3. To the best of his knowledge, the information and statements contained in the Application for a Second Amendment to the Certificate are true and correct and the Application for a Second Amendment to the Certificate is complete.


Chris Shears
Senior Vice President and Chief Development Officer
Hardin Wind LLC

Sworn to before me and signed in my presence this 7th day of April 2016.




Notary Public
My Commission Expires 10/9/19

BEFORE THE OHIO POWER SITING BOARD

In the Matter of the Application)	
of Hardin Wind LLC for a Second)	Case No. 16-0725-EL-BGA
Amendment to its Certificate)	
Issued in Case No. 13-1177-EL-BGN)	

Application for a Second Amendment

to the Hardin Wind LLC Certificate

Granted March 17, 2014 in Case No. 13-1177-EL-BGN

Capacity Increase of Gamesa G114 from 2.0 Megawatts to 2.5 Megawatts

Hardin Wind LLC (hereinafter referred to as the “Applicant”), a wholly-owned subsidiary of EverPower Wind Holdings, Inc., holds a certificate to construct a wind-powered electric generation facility (the Scioto Ridge Wind Farm) consisting of up to 105 wind-powered electric turbines, along with access roads, electrical interconnect, construction staging areas, operations and maintenance facilities, and a collection substation (collectively, the “Facility”) to be located in Lynn, McDonald, Roundhead, and Taylor Creek Townships (Hardin County) and Richland and Rushcreek Townships (Logan County). The Ohio Power Siting Board (the “Board” or “OPSB”) issued an Opinion, Order and Certificate in Case No. 13-177-EL-BGN on March 17, 2014 (the “Certificate”) approving the Facility for construction and operation. The Board approved an amendment to the Certificate on November 12, 2015 in Case No. 14-1557-EL-BGA consisting of minor changes to a meteorological tower, a collector substation, seven access roads and twelve collection lines.

The project was originally approved for up to 172 turbine sites with the final number of installed turbines dependent on the megawatt (“MW”) capacity of the final turbine model selected for the project. Since the original approval, the Applicant has provided notice to the Board of dropping 67 turbine sites, leaving only 105 approved turbine sites for this project. The turbine models currently approved for this project are the: REpower MM100 (2.05MW); REpower M122 (3.0 MW); Nordex N117 (2.4 MW); Vestas V110 (2.0 MW); Vestas V117 (3.3 MW); Gamesa G97 (2.0 MW); Gamesa G114 (2.0 MW); General Electric GE100 (1.7 MW); Suzlon S111 (2.1 MW); and the GE103 (1.7 MW).

Through this application, the Applicant is proposing a capacity increase to the already approved Gamesa G114 turbine model. The manufacturer of that turbine model has successfully made technological improvements to the turbine, including its gearbox, allowing the capacity to increase from 2.0 MW to 2.5 MW. Importantly, the G114 turbine’s dimensions including rotor diameter and hub height remain the same. Both turbines will have a 93 meter hub height with a rotor diameter of 114 meters. The 2.5 MW version of the G114 model has the same operational maximum sound power output as the 2.0 MW version of the G114 model. The only change to the project, therefore, is the use of the G114 turbine at a 2.5 MW capacity rather than the 2.0 MW design.

Because this application only seeks Board approval for a capacity rating increase (2.0 MW to 2.5 MW for the G114 model), no other aspects of the approved project are being modified. All approved turbine sites remain unchanged as well as the location of the project’s collector substation, access roads and collection lines. The only change is the capacity increase for the G114 model. Of the currently approved turbines, the Vestas V117 has the highest nameplate capacity at 3.3 MW and if selected would result in a 91 turbine project. The turbines with the lowest nameplate capacity are the GE 100 and GE 103 at 1.7 MW and if selected would result in a 105 turbine project. As with the already approved G114 2.0 MW turbine, selection of the G114 2.5 MW turbine would also result in a 105 turbine project.

The below information on the G114 2.5 MW turbine is being submitted in accordance with Board rules 4906-4-03, 4906-17-05 and 4906-17-08. The only change to the project is the capacity increase from 2.0 MW to 2.5 MW for the G114 turbine model. All other information regarding the project previously submitted to the Board remains unchanged.

General Overview of the G114 2.5 MW Turbine

The G114 2.5 MW turbine represents advancements in Gamesa's 2.0 MW platform of turbines. The G114 2.5 MW turbine incorporates technology enhancements that include a 2.5 MW generator along with a 56 meter reinforced blade. General information on both the G114 2.0 MW turbine and the G114 2.5 MW turbine is provided in Appendix A (turbine brochures) and Appendix B (manufacturer correspondence). The benefit of the 2.5 MW turbine is improved energy production, which will lower the cost of energy for the project and improve its competitiveness.

Comparison Between G114 2.0 MW and 2.5 MW Turbines

The technical specifications for the G114 2.0 MW turbine and the G114 2.5 MW turbine are listed in the below table. The turbines are virtually identical with the exception of nameplate capacity.

Turbine Detail	G114 2.0 MW Turbine	G114 2.5 MW Turbine
Rated power	2.0 MW	2.5 MW
Wind class	IIIA	IIA
Rotor diameter	114 meters	114 meters
Swept area	10,207 square meters	10,207 square meters
Power density	195.95 watts per square meter	244.93 watts per square meter
Gearbox	3 stages	3 stages
Generator	Doubly fed	Doubly fed
Frequency	50 Hz / 60 Hz	50 Hz / 60 Hz
Hub Height	93 meters (305 feet)	93 meters (305 feet)

Importantly, because the G114 2.0 MW and 2.5 MW turbines have the same rotor diameter and hub height (total tip height of 492 feet), the setback calculation for the G114 turbine model remains the same (541 feet to the nearest property line and 937 feet to the nearest non-participating residential structure). The tallest hub height under consideration for the project remains at 328 feet (100 meters), found on the REpower MM100 and Gamesa G97; the largest rotor diameter under consideration for the project is still 400 feet (122 meters), found on the REpower M122. The maximum total turbine height (i.e., height at the highest blade tip position) of all the models under consideration

remains 492 feet (150 meters), which is associated with the MM100, M122, N117, V110, V117 and G114 models. The Certificate allows for a property line setback of 541 feet and a non-participating residential structure setback of 950 feet. Like the approved G114 2.0 MW turbine and because it has the same overall dimensions, the G114 2.5 MW turbine will satisfy the approved project setbacks. The identical overall dimensions also means that shadow flicker produced by the G114 2.5 MW turbine will be identical to the already approved G114 2.0 MW turbine.

Sound Power Output Comparison

The maximum operational sound power output from the G114 2.5 MW turbine is the same as the already approved G114 2.0 MW turbine, both having a maximum sound power level of 106.0 dBA. The turbines' sound power output at various wind speeds are listed below.

Wind Speed (m/s)	3 m/s	3.5 m/s	4 m/s	4.5 m/s	5 m/s	6 m/s	6.5 m/s	7 m/s	7.5 m/s	8 m/s	8.5 m/s	9 m/s	9.5 m/s	10 m/s
G114 2.0 MW	95.8	95.8	96.8	99.85	101.9	104.1	106	106	106	106	106	106	106	106
G114 2.5 MW	95.1	95.1	97.5	100.3	102.8	104.9	106	106	106	106	106	106	106	106

Correspondence from the manufacturer, including confirmation of the maximum sound power output is attached as Appendix B.

Safety Features

The G114 2.5 MW turbine has the same safety features as the G114 2.0 MW turbine, and as generally described in the project's initial application. These features include sensors that capture outside temperatures, wind speed and direction, and turbine operating parameters such as component temperatures, pressure levels, blade vibrations and positioning. The 2.5 MW turbine also will have the same lightening protection system as the 2.0 MW turbine. Correspondence from the manufacturer confirming that the 2.5 MW turbine and the 2.0 MW turbine share the same safety features is attached as Appendix B

As required under the Certificate (condition 4 of the January 21, 2014 Joint Stipulation), the Applicant will submit the safety manual for the turbine selected for the project prior to construction. Representative safety manuals were provided in the project's initial application to the Board, and included a Gamesa safety manual.

Additional questions about the proposed nameplate capacity increase for the G114 turbine model may be directed to the undersigned counsel or to Jason Dagger, Project Manager, Scioto Ridge Wind Farm. Given that this amendment presents no changes to the facility design, other than increasing the megawatt capacity from 2.0 to 2.5 MW for the G114 turbine model, the Applicant requests an expedited ruling on this application with a decision to be issued by April 28, 2016.

Respectfully submitted,

s/ Michael J. Settineri

Michael J. Settineri (0073369)

Stephen M. Howard (0022421)

Scott M. Guttman (0086639)

VORYS, SATER, SEYMOUR AND PEASE LLP

52 East Gay Street

P.O. Box 1008

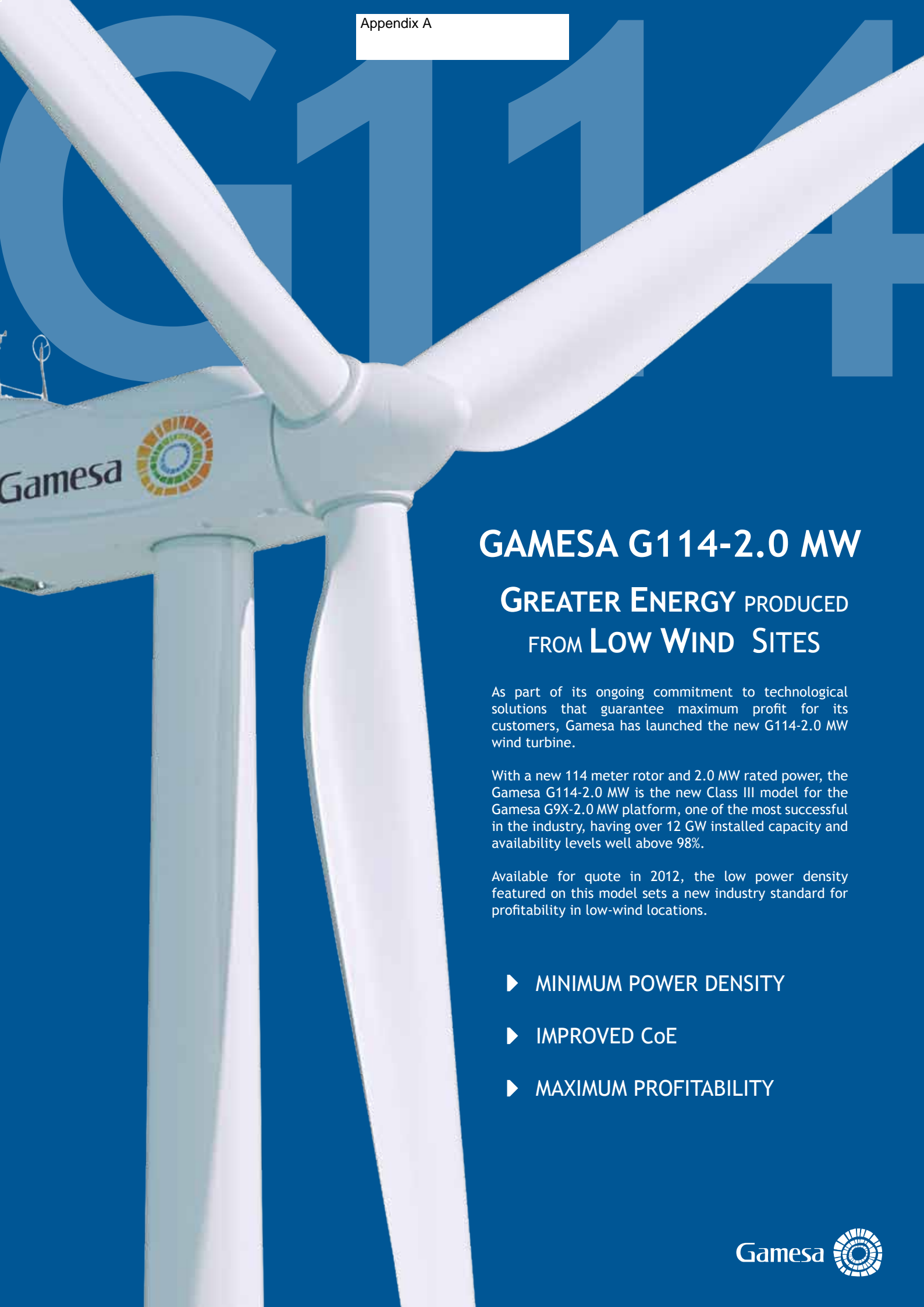
Columbus, Ohio 43216-1008

(614) 464-5462

(614) 719-5146 (fax)

mjsettineri@vorys.com

Attorneys for Hardin Wind LLC



GAMESA G114-2.0 MW

GREATER ENERGY PRODUCED FROM LOW WIND SITES

As part of its ongoing commitment to technological solutions that guarantee maximum profit for its customers, Gamesa has launched the new G114-2.0 MW wind turbine.

With a new 114 meter rotor and 2.0 MW rated power, the Gamesa G114-2.0 MW is the new Class III model for the Gamesa G9X-2.0 MW platform, one of the most successful in the industry, having over 12 GW installed capacity and availability levels well above 98%.

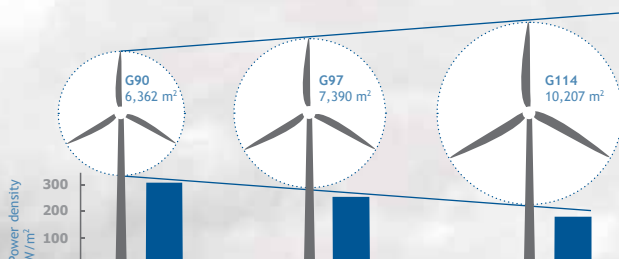
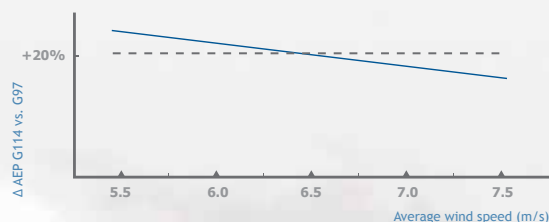
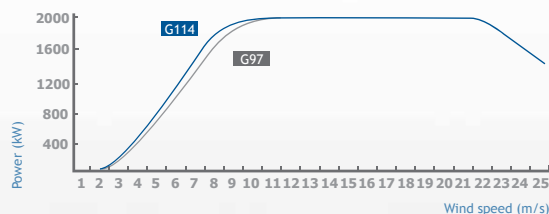
Available for quote in 2012, the low power density featured on this model sets a new industry standard for profitability in low-wind locations.

- ▶ MINIMUM POWER DENSITY
- ▶ IMPROVED CoE
- ▶ MAXIMUM PROFITABILITY

MORE ENERGY PRODUCTION IN LOW-WIND LOCATIONS

The Gamesa G114-2.0 MW wind turbine inherits many of the technologies developed over 10 years with the Gamesa G9X-2.0 MW platform.

Now, with a new 114 m rotor, the Gamesa G114-2.0 MW has a 38% larger swept area than the Gamesa G97-2.0 MW and produces over 20% more energy annually. The new 55.5 m blade with state-of-the-art airfoil design ensures maximum energy production, reduced noise levels and a significantly lower Cost of Energy for Gamesa's Class III products.



SPECIFICATIONS

General Details

Rated power	2.0 MW
Wind class	IIIA
Rotor diameter	114m
Swept area	10,207m ²
Power density	195.94 W/m ²
Control	Independent pitch and variable speed
Gearbox	3 stages
Generator	Doubly fed
Frequency	50 Hz / 60 Hz

Blades

Length	55.5 m
Airfoil	Gamesa

Towers

Height	93, 120, 140 m and site-specific
--------	----------------------------------

In order to minimize the environmental impact, this document has been printed on paper made from 50% pure cellulose fiber (ECF), 40% selected pre-consumer recycled fiber, and 10% post-consumer deinked recycled fiber inks based exclusively on vegetable oils with a minimum volatile organic compound (VOC) content. Varnish based predominantly on natural and renewable raw materials.

The present document, its content, its annexes and/or amendments has been drawn up by Gamesa Corporación Tecnológica, S.A. for information purposes only and could be modified without prior notice. All the content of the Document is protected by intellectual and industrial property rights owned by Gamesa Corporación Tecnológica, S.A. The addressee shall not reproduce any of the information, neither totally nor partially.

Printed date: March 2012.



C/ Ciudad de la Innovación, 9-11
31621 Sarriguren (Spain)
Tel: +34 948 771 000
Fax: +34 948 165 039
info@gamesacorp.com
www.gamesacorp.com

AUSTRALIA

Level 13, 167 Macquarie Street,
Sydney NSW 2000
Tel: +61 (2) 8667 3000

BRAZIL

Rua Hungria 1240, 3ºA
Jd. América, CEP 01455-000
São Paulo (SP)
Tel: +5511 3096 4444

CHINA

23/F, Tower 1,
Beijing Prosper Center No. 5
Guanghua Road, Chaoyang District,
Beijing 100020
Tel: +86 10 5789 0899
Fax: +86 10 5761 1996

EGYPT

3, 218 St. Degla,
Maadi, Cairo
Tel: +20 225 211 048
Fax: +20 225 211 282

FRANCE

Parc Mail, Bâtiment G
6 Allée Irène Joliot-Curie
69791 Saint Priest Cedex
Tel: +33 (0) 4 72 79 49 39

GERMANY

Stadthausbrücke 1-3, 5 Stock
20355 Hamburg
Tel: +49 (0) 403 7644 743

INDIA

The Futura IT Park, Block B, 8th floor
No. 334 Rajiv Gandhi Salai
Sholinganallur, Chennai 600119
Tel: +91 44 3924 2424
sales.india@gamesacorp.com

ITALY

Via Mentore Maggini 48/50
00143 Rome
Tel: +39 0645543650
Fax: +39 0645553974

JAPAN

Daiwa Jisho Building 4F - 411
74-1 Naka-ku, Yamashita-cho
Yokohama-city
231-0023 Kanagawa
Tel: +81 45 680 50 80
Fax: +81 45 680 50 81

MEXICO

Torre Diana, Piso 14
Av. Pº de la Reforma 389
Colonia Cuahtermoc
06500 Mexico DF
Tel: +52 55 50934637

MOROCCO

345, Lot Gzennaya A B.P 397
Tanger (Boukhalef)
Tel: +212 539 393308/09
Fax: +212 539 393312

POLAND

Ul. Galaktyczna 30A
80-299 Gdansk
Tel: +48 58 766 62 62
Fax: +48 58 766 62 99
poland.wind@gamesacorp.com

SINGAPORE

3 Temasek Avenue
Centennial Tower - Level 34
Singapore 039190
Tel: +65 6549 7763
Fax: +65 6549 7011

SOUTH AFRICA

The Colosseum
1st Floor Century Way, Foyer 3
Century City
7441 Cape Town
Tel: +27 0 215260300
Fax: +27 0 215260311

TURKEY

Astoria, Buyukdere Cad. No. 127
Kule A, Kat 10
Esentepe
Istanbul 34394
Tel: +90 212 340 76 00

UNITED KINGDOM

25 Napier Place
Wardpark North
Cumbernauld G68 0LL
Tel: +44 1236724890

UNITED STATES

2050 Cabot Boulevard West
Langhorne, PA 19047
Tel: +1 215 710 3100
Fax: +1 215 741 4048

G114-2.5 MW

Boosting production in medium wind sites

The goal to continually reduce the Cost of Energy in the 2.0-3.0 MW market segment is central to Gamesa's product design philosophy and has led the evolution within the 2.0 MW platform with the introduction of the G114-2.5MW wind turbine.

With the offer of a larger rotor for medium wind sites, new tower options and a power boost to 2.5 MW, the G114-2.5 MW Class II turbine complements the 2.0 MW product series and promises to become a mainstay of Gamesa's growing product portfolio.

- ▶ **PROVEN TECHNOLOGY**
- ▶ **OVER 29% MORE ENERGY PRODUCTION***
- ▶ **10% NOMINAL REDUCTION IN CoE***

* As compared to the G97-2.0 MW.



**GLOBAL TECHNOLOGY
EVERLASTING ENERGY**

Gamesa



NEW G114-2.5 MW

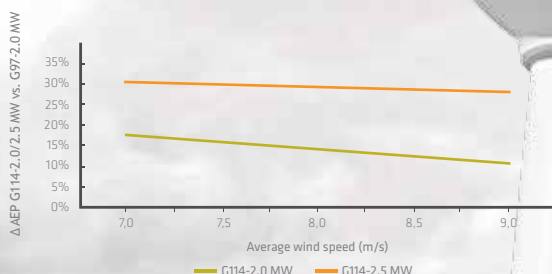
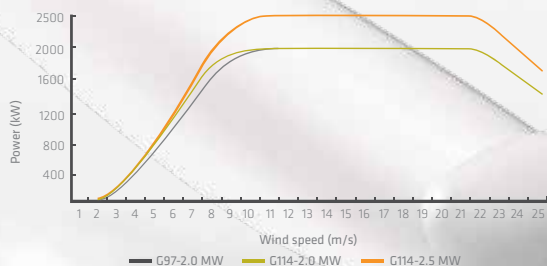
Boosting production in medium wind sites

As part of the evolutionary development process of the Gamesa 2.0-2.5 MW platform, the G114-2.5 MW turbine will inherit the technologies, components, and subsystems previously deployed and proven through the reliable operation of 15,000 MW of Gamesa's high-performing 2.0 MW turbines.

Features of the G114-2.5 MW include:

- ▶ Variable pitch and speed technology for maximum energy capture.
- ▶ Active yaw system for optimum adaptation to complex terrain.
- ▶ Gamesa SMP predictive maintenance system.
- ▶ Gamesa NRS® noise control system to minimize noise emissions.
- ▶ Gamesa Windnet® remote control and monitoring system.

By incorporating technology enhancements, including a new 2.5 MW generator and Gamesa's new 56m reinforced blade, the G114-2.5 MW Class II turbine promises to deliver nearly 30% more energy along with a 10% nominal reduction in Cost of Energy, making it one of the most profitable solutions available in the market today.



SPECIFICATIONS

General Details

Rated power	2.5 MW
Wind class	IIA
Rotor diameter	114 m
Swept area	10,207 m ²
Power density	244.93 W/m ²
Control	Pitch and variable speed
Gearbox	3 stages
Generator	Doubly fed
Frequency	50 Hz / 60 Hz

Blades

Length	56 m
Airfoil	Gamesa

Towers

Height	80, 93, 125 m and site-specific
--------	---------------------------------



C/ Ciudad de la Innovación, 9-11
31621 Sarriena (Spain)
Tel: +34 948 771 000
Fax: +34 948 165 039
info@gamesacorp.com
www.gamesacorp.com

AUSTRALIA

Level 39, 385 Bourke Street,
Melbourne VIC 3000

BRAZIL

Rua Hungria 1240, 3º A
Jd. Europa, CEP 01455-000,
São Paulo (SP)
Tel: +5511 3096 4444

CHINA

23/F, Tower 1, Beijing Prosper Center
No. 5
Guanghua Road,
Chaoyang District,
Beijing 100020
Tel: +86 10 5789 0899
Fax: +86 10 5761 1996

EGYPT

3, 218 St. Degla,
Maadi, Cairo
Tel: +20 225 211 048
Fax: +20 225 211 282

FRANCE

97 Allée Borodine - Cedre 3
69800 Saint Priest
Tel: +33 (0) 4 72 79 49 39

GERMANY

Neuer Wall 10 / Jungfernstieg
20354 Hamburg
Tel: +49 40 822 15 30 - 48

GREECE

9 Adrianou str,
11525 Neo Psychiko, Athens
Tel: +30 21067 48947
Fax: +30 21067 20167

INDIA

The Futura IT Park, B-Block, 8th Floor
334, Rajiv Gandhi Salai
Sholinganallur, Chennai - 600 119
Tel: +91 44 3924 2424
sales.india@gamesacorp.com

ITALY

Via Pio Emanuelli 1
00143 Rome
Tel: +39 0645543650
Fax: +39 0645553974

MEXICO

C/ Hamburgo, n° 213, Planta 18,
Juárez (Reforma Centro)
06600, Mexico DF
Tel: +52 55 5093 4637

POLAND

Ul. Galaktyczna 30A
80-299 Gdansk
Tel: +48 58 766 62 62
Fax: +48 58 766 62 99
poland.wind@gamesacorp.com

ROMANIA

169A Calea Floreasca Street,
Building A, 4th Floor, office no 2069,
Sector 1
014459 Bucharest
Tel: +40 318 21 24
Fax: +40 318 60 21 00

SWEDEN / FINLAND / NORWAY

Solna Strandväg 78
171 54 Solna (Sweden)
Tel: +46 (0) 8 5052 00 00
Fax: +46 (0) 8 5052 10 10

TURKEY

Astoria
Buyukdere Cad. No. 127
Kule A, Kat 10
Esentepe, Istanbul 34394
Tel: +90 212 340 76 00

UNITED KINGDOM

10 Greycoat Place
London SW1P 1SB
Tel: +44 (0) 20 7960 6227

UNITED STATES

1150 Northbrook Drive
Trevose, PA 19053
Tel: +1 215 710 3100
Fax: +1 215 741 4048

Appendix B



April 6, 2016

To whom it may concern,

Gamesa has developed four onshore wind turbine platforms which include 2.0 MW, 2.5 MW, 3.3 MW and 5.0 MW nameplate variants. The 2.0 MW platform and the 2.5 MW platform are the most similar sharing most of the same components, tower heights and rotor diameters as shown in the attached presentation.

The Gamesa wind turbines proposed for the Scioto Ridge project include the G114 2.0 MW and 2.5 MW turbines with the same 93 m hub height and overall tip height. Both turbines have been field tested and Type Certified according to the IEC 61400 standard and therefore share the same safety characteristics.

In addition, both proposed wind turbines have the same maximum noise level of 106 dB(A) subject to ± 2 dB(A) for IEC 61400-14 uncertainties. Both wind turbines can also be operated in noise reduced modes with a lower maximum noise level if that is needed, which is primarily accomplished by reducing the speed of the rotor.

Please see the attached presentation and accompanying specifications. If you have any further questions please do not hesitate to contact the undersigned.

Sincerely,

A handwritten signature in blue ink, appearing to read "G. Onzain", with a long horizontal flourish extending to the left.

Gonzalo Onzain
VP Sales & Marketing
Gamesa Technology Corporation



Gamesa's 2.0 & 2.5 MW Platforms

April 2015

Gamesa 2.0 MW and 2.5 MW Platforms

Portfolio

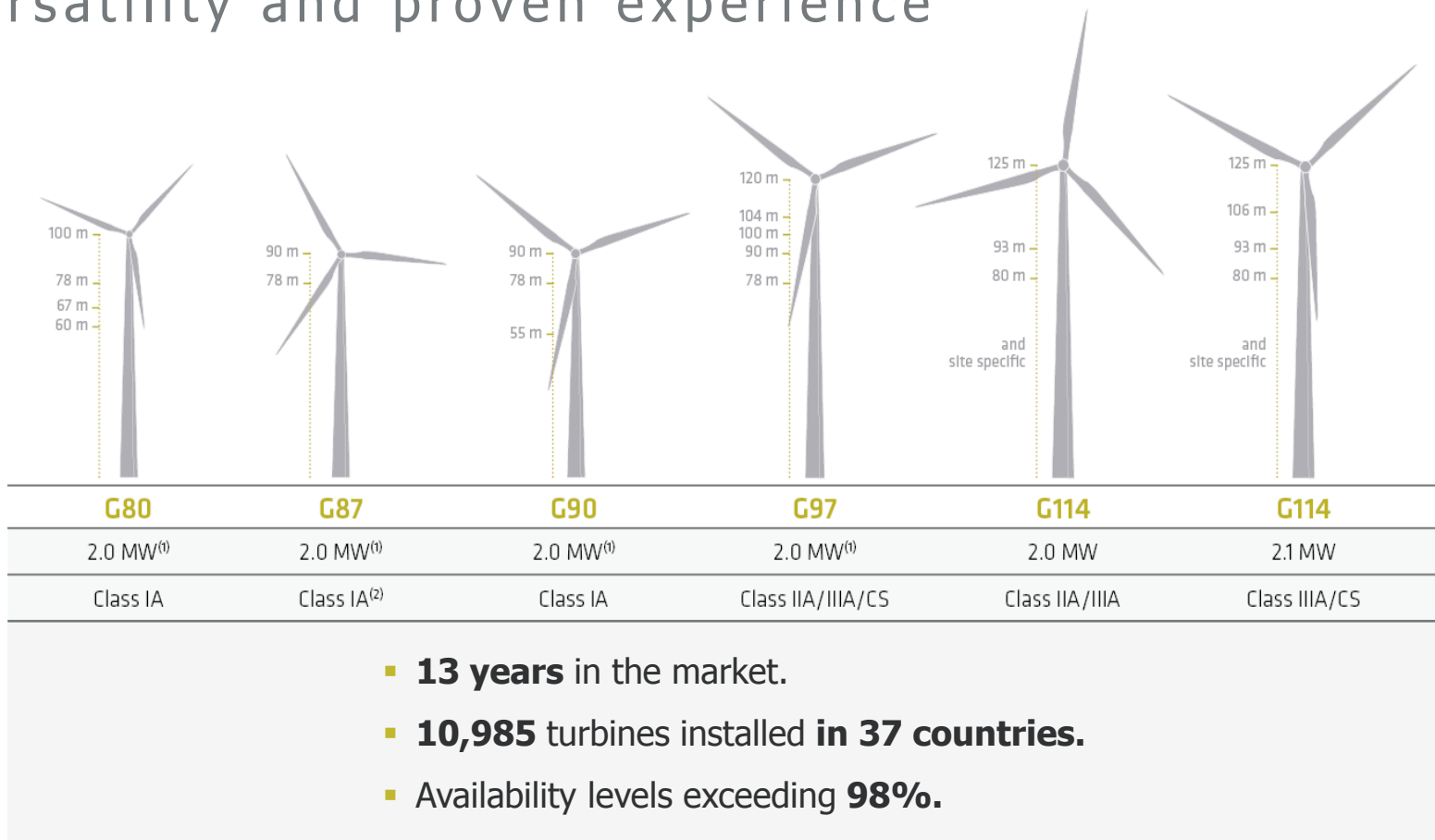
MODEL	ROTOR DIAMETER (m)	IEC CLASS	NOMINAL POWER	TOWER HEIGHT (m)	TYPE CERTIFICATE	50-60Hz
G80	80	IA	2,000 kW	60, 67, 78, 100	✓	✓
G87	87	IA*, IIA	2,000 kW	67, 78, 90, 100	✓	✓
G90	90	IA, IIA, IIIA	2,000 kW	55, 67, 78, 90, 100	✓	✓
G97	97	IIA, IIIA	2,000 kW	78, 90, 100, 104*, 120	✓	✓
G114	114	IIA/IIIA	2,000 kW	80, 93, 106*, 125	✓	✓
G106**	106	IA	2,500 kW	72, 80, 93 + site specific	—	✓
G114**	114	IIA	2,500 kW	80, 93, 125 + site specific	✓	✓
G126**	126	IIIA	2,500 kW	84, 102, 129 + site specific	—	✓

* Certified as Class S

** Under development

Gamesa 2.0 MW

Versatility and proven experience



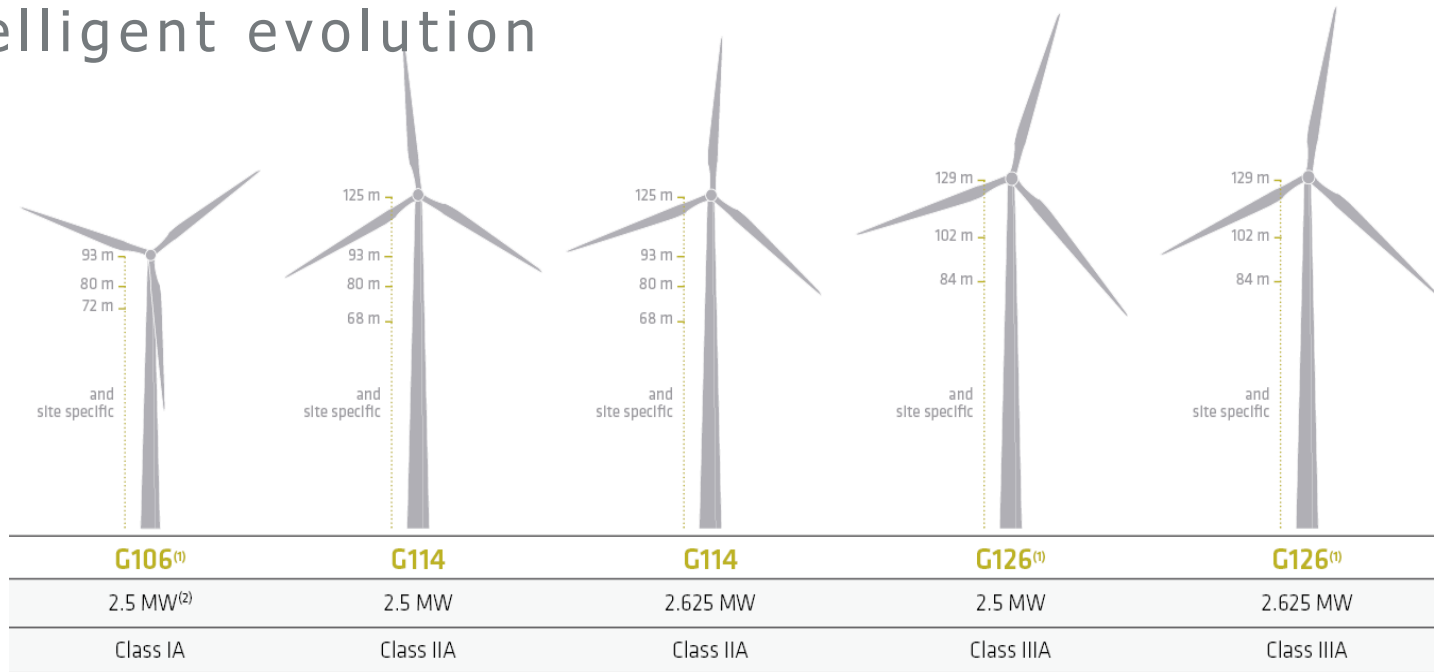
¹ 2.1 MW nominal power upgrade available depending on the site.

² Class S.

One of the most successful platforms in the market

Gamesa 2.5 MW

Intelligent evolution



- Nominal power increase to **2.5 MW**.
- **Guaranteed reliability** backed by the proven experience of the 2.0 MW platform.
- **G114-2.5 MW IIA:** fully validated and certified, in serial production with 280 MW in firm orders @Q4 2015.
- **G126-2.5 MW IIIA:** the latest addition to the 2.5 MW portfolio, optimized for low wind sites.

⁽¹⁾ Under development.

⁽²⁾ 2.625 MW nominal power upgrade available depending on the site.

Complements the 2.0 MW offer in projects requiring higher nominal power

Gamesa G114-2.5 MW Class IIA

vs. G114-2.0 MW IIA

► Blade:

- Same aerodynamic design and external surface (G114-2.0 MW blade design already contemplates upscaling to 2.5 MW)
- Same moulds
- Reduced design risks – most blade validation and testing during the G114-2.0 MW project

► New 2.5 MW electrical system:

- Same concept (DFIM), nacelle topology and control strategy
- New up-scaled converter, generator and transformers

► Mechanical system:

- Reinforcements to blade bearings, torque arms and main frame
- Rest of components are the same

► Power: 25% more power for the 2.5 MW vs 2.0

- Both turbines are offered in max power modes where 2.5 MW operates at 2.625 MW and 2.0 MW operates at 2.1 MW at full rated power

► **Noise Emission:** noise levels of the 2.0 vs. 2.5 and the max power of each turbine are virtually the same as shown below. Both platforms also have noise reduced modes where the maximum noise level can be reduced further, if needed.

G114 2.0	
H = 93m	
WS	SPL
[m/s]	[dB(A)]
3	95.8
3.5	95.8
4	96.8
4.5	99.5
5	101.9
5.5	104.1
6	106
6.5	106
7	106
7.5	106
8	106
8.5	106
9	106
9.5	106
10	106

G114 2.5	
H = 93m	
WS	SPL
[m/s]	[dB(A)]
3	95.1
3.5	95.1
4	97.5
4.5	100.3
5	102.8
5.5	104.9
6	106
6.5	106
7	106
7.5	106
8	106
8.5	106
9	106
9.5	106
10	106

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

4/8/2016 5:13:54 PM

in

Case No(s). 16-0725-EL-BGA

Summary: Application for a Second Amendment to the Certificate previously issued in Case No. 13-1177-EL-BGN electronically filed by Mr. Scott M Guttman on behalf of Hardin Wind LLC