Nxuba Wind Farm

NERSA PUBLIC HEARINGS

10 September 2015
• Nxuba Wind Farm has been appointed as a Preferred Bidder in the Fourth Round of the Department of Energy’s (DoE) Renewable Energy IPP Procurement Programme (REIPPPP)

• Nxuba Wind Farm has a contracted capacity of 138.9MW and is located between the towns of Cookhouse and Bedford in the Eastern Cape province of South Africa

• Nxuba Wind Farm is located immediately adjacent to Eskom’s Poseidon substation, and the Cookhouse Wind Farm (138.6MW) and the Nojoli Wind Farm (86.6MW) which are REIPPPP Round 1 and Round 3 projects respectively

• Nxuba Wind Farm has made application to the National Energy Regulator of South Africa (NERSA) for an Electricity Generation Licence and for a licence for the operation of an Electricity Distribution Connection Facility in terms of the Electricity Regulation Act, 2006 (Act No. 4 of 2006)
• The Nxuba Wind Farm project is incorporated within a ring-fenced special purpose vehicle called **Nxuba Wind Farm (RF) (Pty) Ltd** which is the applicant

• Nxuba Wind Farm (RF) (Pty) Ltd is a private company with registration number 2014/114923/07

• The registered address of the applicant is:
  Fernwood House, 2nd Floor
  The Oval, 1 Oakdale Road
  Newlands, 7700
  Cape Town
  South Africa

• The relevant contact person for the applicant is:
  Matteo Forlani
  Email: matteo.forlani@enel.com
  Fax: +27 10 344 0101
• Nxuba Wind Farm is situated on the properties depicted in the site layout diagram

• The Nxuba Wind Farm site co-ordinates are:
  • 32 deg 44’ 41.27”S
  • 25 deg 56’ 28.98”E

• The Nxuba Wind Farm project will comprise 47 Acciona AW125 3MW wind turbines, and associated wind farm infrastructure, including a 2km overhead line from the wind farm substation to the Poseidon substation, connecting at a voltage level of 132kV

• Nxuba Wind Farm will commence construction in 2016 with operations commencing in late 2017 and the wind farm will be operational for a period of 20 years
**Contracted Capacity:** 138.9MW

**Wind Turbine Generator:** Acciona AW125 3MW

**Hub height:** 100m

**Number of WTGs:** 47

**Voltage Connection Level:** 132kV

**Grid integration:** Connection to Poseidon substation will be within acceptable limits for fault ride through, reactive power generation and operate in compliance with the Grid Connection Code for Renewable Power Plants, Version 2.8

**Scheduled COD:** Q3 2017

**Wind Turbine Supplier:** Acciona Wind Power South Africa (Pty) Ltd

**Civil Balance of Plant Contractor:** Power Construction (Pty) Ltd

**Electrical Balance of Plant Contractor:** Consolidated Power Projects (Pty) Ltd

**O&M Contractor:** Acciona Wind Power South Africa (Pty) Ltd
The Nxuba Wind Farm was appointed as a Preferred Bidder project by the DoE in REIPPPP Round 4.

The Project’s Environmental Impact Assessment (EIA) was originally conducted in two separate processes for the wind projects originally known as the ‘Bedford Wind Farm’ and ‘Great Fish River Wind Farm’ – the Nxuba Wind Farm project involves the combination of these two projects.

The Project’s Environmental Authorisations (EA) were issued by the Department of Environmental Affairs (DEA) as follows:
- EA for Bedford Wind Farm on 02 March 2012
- EA for Great Fish River Wind Farm on 02 February 2012
- Both EAs were transferred to the Nxuba project company in August 2014.

During the EIA public consultation process, all stakeholders and registered Interested and Affected Parties were provided opportunities to partake and comment on the project. No formal objections or appeals against the Project were received.

Rezoning approval was granted by the Blue Crane Route Municipality in March 2012 to rezone the properties from ‘Agricultural Zone 1 to Special Zone permitting a Wind Energy Facility and Agricultural’.

The Project received preliminary approval from the South Africa Civil Aviation Authority (SACAA) in June 2014 and final approval from SACAA will be sought prior to construction.

The Project has conducted an Aquatic Impact Assessment and no Integrated Water Use Licences are required for the activities to be undertaken by the Project in terms of Section 21(c) and (i) of the National Water Act, 26 of 1998.

All other permits required by the Project are being progressed and will be to hand before commencement of construction.
The Project’s partners include:
- African Clean Energy Developments
- Enel Green Power
- Pele Green Energy
- Nxuba Wind Farm Community Trust
- Request Renewables
- Acciona Wind Power South Africa
- Power Construction
- Consolidated Power Projects

ACED is the project developer of the Nxuba Wind Farm

The Sponsors of the Project (including Enel Green Power, Pele Green Energy, Request Renewables and the Community Trust) bring together a strategic partnership with experience in developing, construction and operating renewable energy projects internationally and in the South African REIPPPP

Acciona Wind Power South Africa, Power Construction and Consolidated Power Projects have significant experience and expertise in constructing and operating renewable energy projects internationally and in South Africa
NXUBA WIND FARM
PROJECT STRUCTURE

Shareholders

- Nxuba Wind Farm Community Trust: 10.0%
- Pele Green Energy: 30.0%
- Enel Green Power: 53.0%
- Request Renewables (Pty) Ltd: 7.0%

Contractors

- Acciona Wind Power South Africa (Pty) Ltd
- Consolidated Power Projects (Pty) Ltd
- Power Construction (Pty) Ltd

Agreements

- Turbine Supply & Installation Agreement
- Electrical Balance of Plant EPC Agreement
- Civil Balance of Plant EPC Agreement

Bidder (Project Company)

Nxuba Wind Farm (RF) (Pty) Ltd

Equity Finance 100%
• African Clean Energy Developments (Pty) Limited (ACED) is a South African registered company dedicated to the development of renewable energy projects in Sub-Saharan Africa

• ACED and its shareholders, African Infrastructure Investment Manager (Pty) Ltd (AIIM) and AFPOC Limited (AFPOC), have an established track record in renewable energy projects in South Africa and globally

• In the South African REIPPPP, ACED and its shareholders have been involved in the development, bidding, investment and construction of 720MW of wind projects and 75MW of solar photovoltaic projects

• The ACED business has been in operation for 6 years and is at the forefront of renewable energy development in South Africa
Enel Green Power RSA (Pty) Ltd (Enel or EGP) has ambitions to have a strong presence in South Africa over the long term.

EGP already has more than 70 people employed and working in EGP’s Johannesburg headquarters.

EGP has been awarded in excess of 1,200 MW wind and solar projects in the DoE’s REIPPPP, which accounts for an investment of approximately ZAR 18 billion in South Africa.

EGP is a major global renewable energy investor and operator globally and is committed to bringing its expertise and experience to the South African market.

EGP RSA is a 100% subsidiary of Enel Green Power S.p.A. which in turn is subsidiary of Enel S.p.A.
ENEL GREEN POWER
GLOBAL FOOTPRINT IN RENEWABLE ENERGY

**North America**
- 2.1 GW in operation
- 0.4 GW under construction
- 5.1 GW pipeline

**Latin America**
- 1.7 GW in operation
- 1.0 GW under construction
- 12.4 GW pipeline

**Europe**
- 5.8 GW in operation
- 0.1 GW under construction
- 4.0 GW pipeline

**Africa**
- 10 MW in operation
- 0.5 GW under construction
- 4.5 GW pipeline

Of which:
- 0.7 GW awarded in 2015

Total **capacity** by technology
- 9,626 MW

- Geo: 59%
- Hydro: 27%
- Wind: 9%
- Biomass: 4%
- Solar: 1%

Total **production** by technology
- 31.8 TWh

- Geo: 44%
- Hydro: 36%
- Wind: 19%
- Biomass: <1%
- Solar: 1%

1. As of December 31st, 2014
ENEL'S GLOBAL PRESENCE

1. As of 31st December 2014
2. Among private operators

Global diversified player in more than 30 countries
Pele Energy Group (PEG) has three subsidiaries namely, Pele Natural Energy (PNE), Pele Green Energy (PGE) and Knowledge Pele (KP).

PEG owns and operates 689 MW of renewable and base-load power projects across Southern Africa, with involvement in a further 250 MW through its research and development.

PEG’s beginnings can be traced to 2009 with the establishment of Pele, an organisation focused largely on social development. Although the company has evolved into a sound energy group, the company embraces the social development aspects of the business through KP, a business focused solely on this function.

Pele Green Energy is an IPP which develops, owns and operates power generation plants in the renewable energy space.

PGE was one of the first 28 preferred bidders in the first round of the REIPPPP alongside Soitec on the 36 MW Solar CPV project. In October 2013, PGE together with Enel Green Power were selected as a Preferred Bidder on the 88 MW Nojoli Wind Farm, as well as on the 60 MW Tomburke Solar and 75 MW Paleishuiwel Solar plant as the EPC and O&M contractor alongside its partner Terni Energia. In December 2014 PGE together with ACWA were selected as Preferred Bidder on the 100MW Redstone Solar CSP plant. In April 2015 PGE was selected as Preferred Bidder on the 140MW Karusa Wind Farm, 140MW Soetwater Wind Farm and 140MW Nxuba Wind Farm.

Pele Natural Energy primarily develops, owns and operates base-load plants. PNE owns 20.4% of the Kuvaninga project, a 40.29 MW natural gas fires powered plant in Mozambique.

Knowledge Pele is engaged in research and development. KP has provided services to over 10 renewable energy projects as well as university linked research projects.
The Nxuba Wind Farm project delivers exceptional value for money to the South African government, low cost of electricity to electricity consumers and delivers significant economic development benefits to South Africa and the Local Communities.

In REIPPPP Round 4, the DoE awarded 5 wind farm projects as Preferred Bidders in April 2015, including the Nxuba Wind Farm.

The Preferred Bidder projects were appointed by the DoE on the basis of their relative ranking in terms of Price (70% weighting) and Economic Development (30% weighting).

Nxuba Wind Farm therefore ranks in the top 5 wind projects in the country in terms of delivering value for money to the South African government and citizens.

The Project’s Sponsors have committed to progressive Economic Development targets to ensure meaningful economic development through socio-economic development, enterprise development, preferential procurement, black economic empowerment ownership and job creation in the Local Communities.

As a result of the strong level of competition in REIPPPP Round 4, the DoE made a further allocation and appointed 7 additional wind farm projects. This demonstrates that Nxuba Wind Farm delivers exception value for money as it was one of the highest ranking projects to be awarded Preferred Bidder status by the DoE in REIPPPP Round 4.
In support of the Department of Energy’s objectives to achieve economic development and socio-economic development in South Africa, the Project has made progressive Economic Development commitments across the seven Economic Development Elements including:

1. Job Creation
2. Local Content
3. Ownership
4. Management Control
5. Preferential Procurement
6. Enterprise Development
7. Socio-Economic Development
Job Creation

- During the construction phase, 633 (12-month) jobs will be created for South African Citizens
  - Of which 568 jobs will be created for Black Citizens
  - Of which 321 jobs will be created for Local Citizens providing a boost to the income levels of the members of the Local Communities

- During operations, 101 jobs will be created for South Africa Citizens
  - Of which 51 jobs will be created for Black Citizens
  - Of which 31 jobs will be created for Local Citizens providing sustained employment opportunities for local community members after the completion of construction

Ownership & Local Communities

- 40% of the Equity in the Project will be owned by Black South Africans
- The Local Communities will collectively own 10% of the Nxuba Wind Farm through the Nxuba Wind Farm Community Trust and benefits will flow to the Local Communities in the form of Development Initiatives, programmes and projects
- Project spend areas and initiatives will be determined through ongoing needs analysis, asset mapping research and multi-stakeholder engagement
- Focus will be given to targeting local socio-economic and enterprise development needs that will provide long term sustainable community benefits, helping to reduce poverty and unemployment, improve economic opportunities and social support structures and improving the quality of lives of Local Community members at all levels: individuals, households and small enterprises
THANK YOU