



Advancing Wind Power in Illinois Conference 2010

Marie Streenz

Horizon Wind Energy

How to Get a Job in Wind Energy

Thursday, July 15, 2010, 11:30 AM




How to Get a Job in Wind Energy– IWWG Annual Conference



Marie Streenz
Project Developer
July 15, 2010

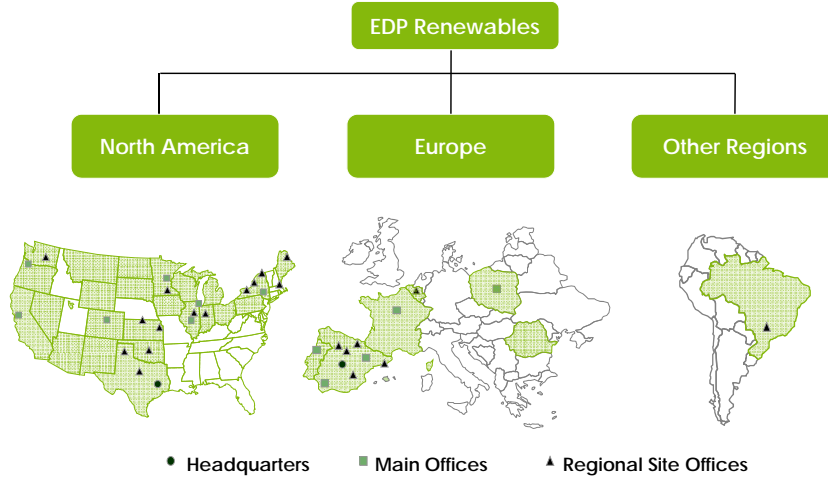
Horizon Wind Energy background

- Horizon Wind Energy LLC is owned by [EDP Renováveis, S.A. \(“EDPR”\)](#), a leading renewable energy company. [EDP—Energias de Portugal, S.A. \(“EDP”\)](#) is the parent company of Horizon.
- Horizon began in 1998 as a “build-transfer” developer, Zilkha Renewable Energy, followed in 2005 by a period of ownership by Goldman Sachs. With its acquisition by EDP in June 2007 the Company is now an integrated renewable energy company, ranked third in the United States in wind energy by net installed capacity.
- Horizon operates 23 wind farms with more than 2700 MW of installed capacity.



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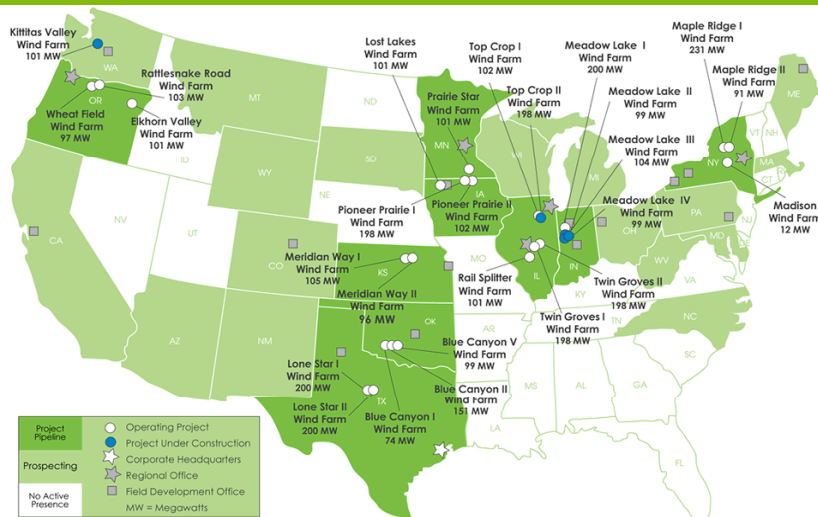
EDPR's Operating Platforms



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Our Wind Farms in the U.S.



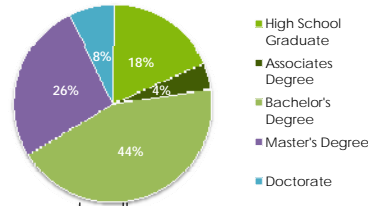
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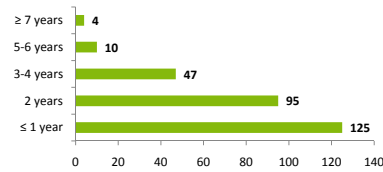
Horizon People - Demographics



- Educational backgrounds:
 - 34% of employees have advanced degrees
 - 14% of employees have a military background



- 75% of employees have less than 2 years of experience with the Company



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Horizon Core Business Functions and Positions

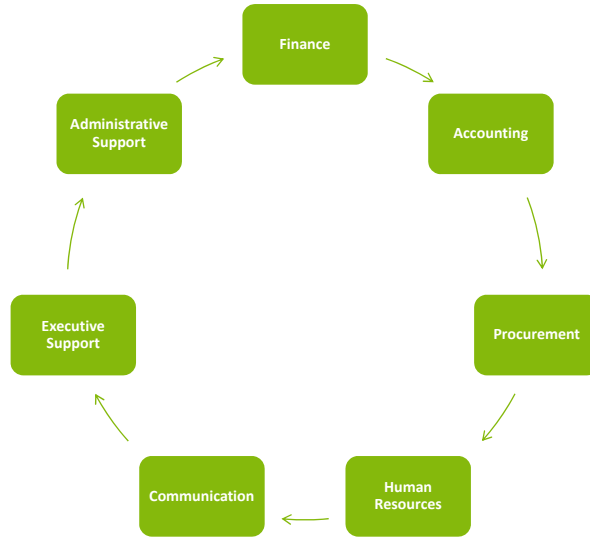


	Professionals	Managers	Directors
Development	<ul style="list-style-type: none"> • Project Developer • Land Specialist • Development Associate • GIS Project Coordinator • Paralegal 	<ul style="list-style-type: none"> • Project Manager • Regional Environmental Manager • Transmission/ Interconnection Manager • Project Counsel • Real Estate Attorney • Document Control Manager 	<ul style="list-style-type: none"> • Regional Directors • Transmission Director • Permitting & Environmental Affairs Director
Engineering and Construction	<ul style="list-style-type: none"> • Energy Assessment Analyst • Met Logistics Analyst/Associate • Inspector • Project Specialist • Civil Engineer • Turbine Procurement Associate 	<ul style="list-style-type: none"> • Project Manager • Project Engineer • Health & Safety Manager • GIS Manager • Energy Assessment Manager • Site Construction Manager • Senior Electrical Engineer 	<ul style="list-style-type: none"> • Project Management Director • Energy Assessment Director • Engineering Director • Turbine Procurement Director
Energy Management Group	<ul style="list-style-type: none"> • Origination Associate • EMG Analyst/Associate • Market Intel Analyst • Sr. Structuring Analyst • Asset Management Associate • Performance Analyst • Settlement Analyst 	<ul style="list-style-type: none"> • Regional Ops Manager • Assistant Ops Manager • Portfolio Manager • Transmission Specialist • Performance Engineer • Market Intel Manager • Reliability Engineer 	<ul style="list-style-type: none"> • Asset Management Director • Operations Director • Market Operations Director • Origination & Power Marketing Director

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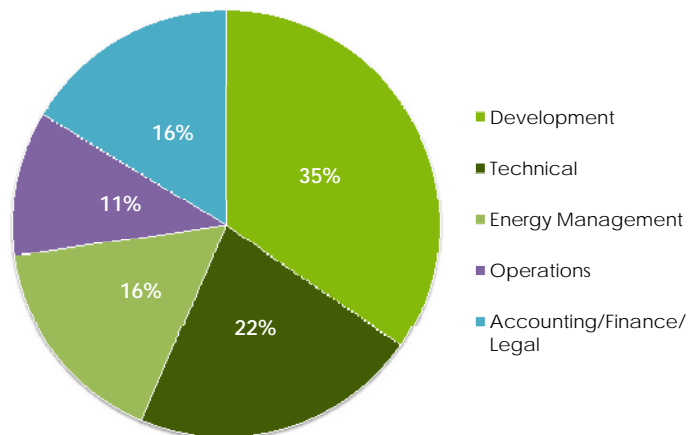
Horizon's Key Supporting Functions



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Where People Work in the Organization



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The Wind Project Life Cycle



Development

Construction

Operations

2-10 years

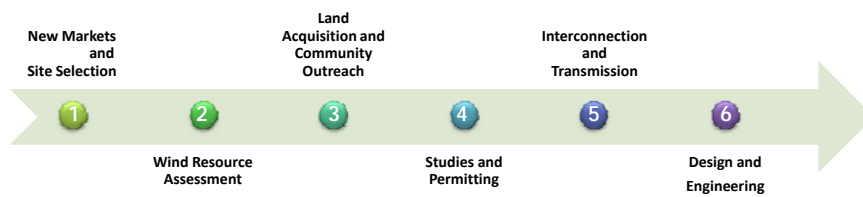
1-2 years

30+ years

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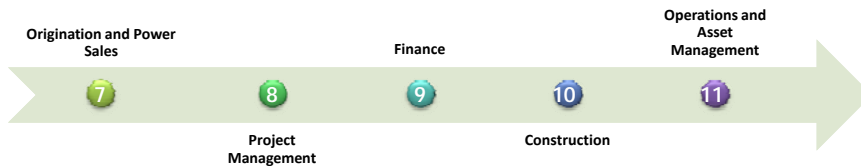
Project Development Tasks



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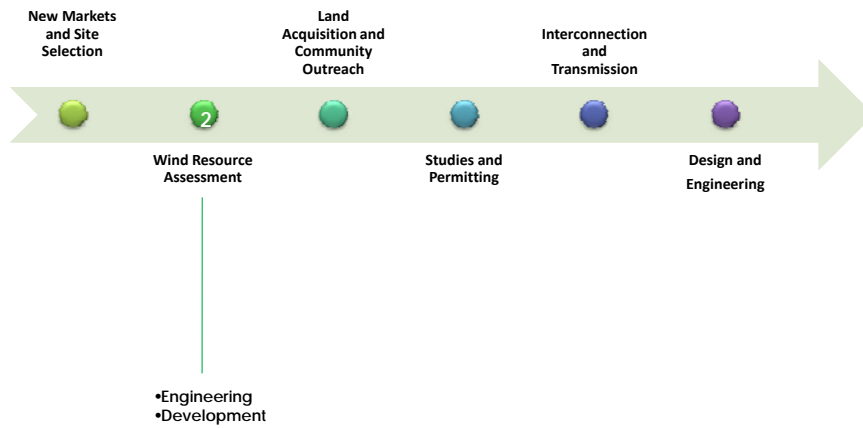
Project Development Tasks



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Wind Resource Assessment



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Wind Resource Assessment



Highlighted position: Energy Assessment Associate

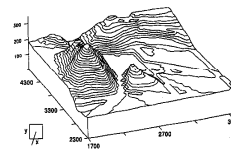
Department: Energy Assessment

Role: Manage wind modeling activities for early stage projects to optimize cost, return and technical feasibility.

Education: Bachelor's degree in Meteorology

Previous Experience: knowledge of forecasted weather paths

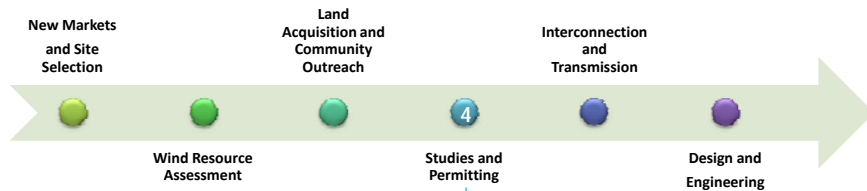
Previous Industry: Travel support; TV station



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Studies and Permitting



- Engineering
- Legal
- Development

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Studies and Permitting



Highlighted position: Project Manager

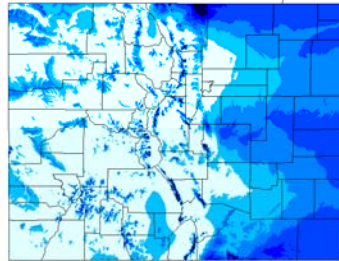
Department: Development

Role: responsible for the development of wind generation projects from the project identification stage through start of construction.

Education: Bachelor's in Chemical Engineering

Previous Experience: consultancy and strategy for future investments; supply operations

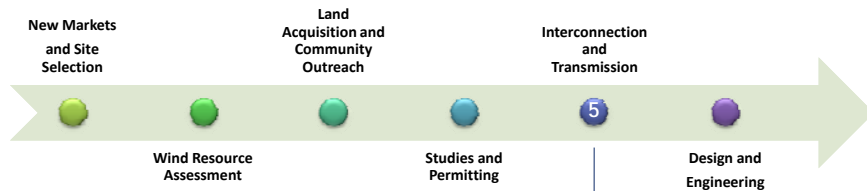
Previous Industry: Oil and Gas



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Interconnection and Transmission



- Engineering
- Legal
- Development
- Energy Management

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Interconnection and Transmission



Highlighted position: Transmission Analyst/Interconnection Queue

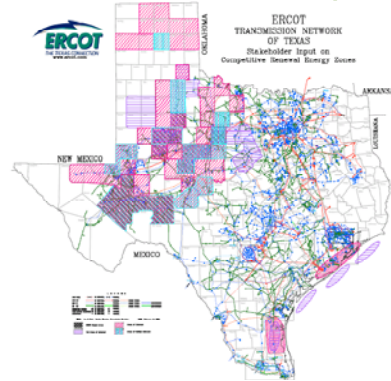
Department: Development

Role: Support the processes and strategies associated with interconnection of Company's renewable energy projects. Monitor RTO grid interconnection processes and Company project portfolio to ensure compliance with rules and deadlines.

Education: Master's in Engineering

Previous Experience: transmission planning, operations and plant engineering

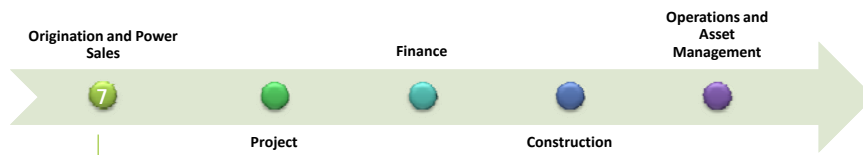
Previous Industry: Utility



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Origination and Power Sales

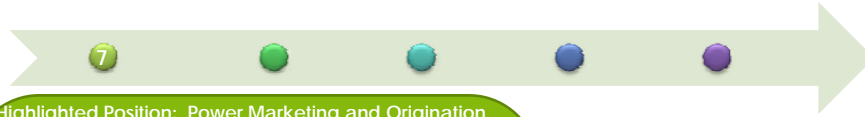


- Energy Management Group
- Development
- Finance
- Engineering

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Origination and Power Sales



Highlighted Position: Power Marketing and Origination Associate

Department: Energy Management

Role: Undertake analysis and present on financial issues, regulatory issues, and all project characteristics to support Horizons' power marketing and origination negotiations. Analyze market and regulatory trends to help identify the greatest value adding revenue strategy for Horizon projects.

Education: MBA, MS in Business Administration

Previous Experience: Creating strategic business plans ; analyze agreement options

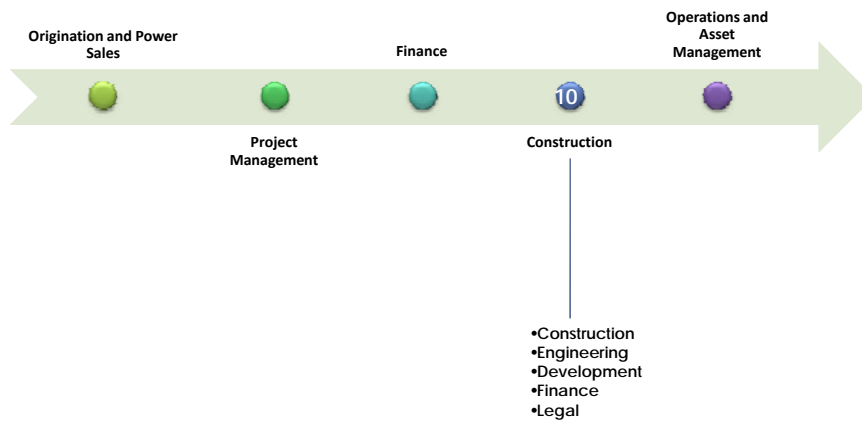
Previous Industry: Entertainment



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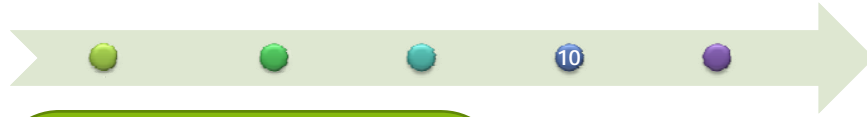
Construction



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Construction



Highlighted Position: Site Construction Manager

Department: Project Management

Role: Provides day to day site supervision of Horizon project personnel monitors the site construction, and activities in order to assure the fulfillment of the project requirements

Education: High School Graduate

Previous Experience: remodeling homes and overseeing the construction and layout of the project

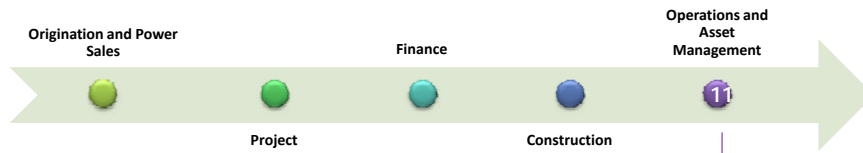
Previous Industry: Self-employed



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Operations and Asset Management

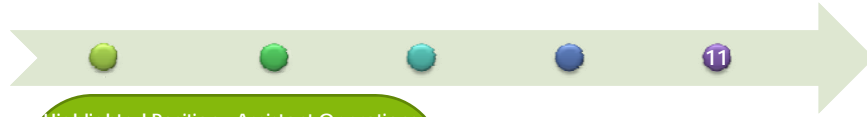


- Energy Management Group
- Finance
- Legal

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Operations and Asset Management



Highlighted Position: Assistant Operations Manager

Department: Operations Services

Role: Assist the Operations Manager in all activities as needed and required which includes all operational duties for the assigned site/park.

Education: Bachelor's degree in Engineering

Previous Experience: led teams to accomplish projects such as risk management programs, flight operations, equipment protection programs



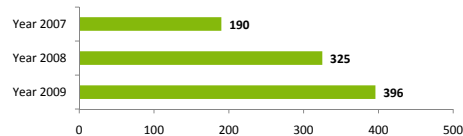
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HR Facts and Figures



- The total amount of applicants that have been tracked from October 2007 to April 2009 = **6100**
 - On an average monthly basis, the amount of applicants has increased from 190 per month in 2007 to ~400 per month in 2009.
 - The average amount of applicants applying per open requisition is ~50



- The average amount of time to fill an open requisition is 1.5 – 2 months. Certain technical positions are harder to fill.

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Recent Challenges



- The Company faced challenges in implementing procedures and policies to build structure around the rapid growth of the organization
- At the end of 2008, Horizon implemented a hiring freeze due to uncertainty associated with the global financial crisis
- In 2009 Horizon continued to expand strategically, hiring for positions that will contribute to core business functions
- In 2010 it is much the same story. Currently Horizon has 34 open positions listed on our website. Please visit www.horizonwind.com and choose Our Company – Jobs to browse open positions

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Successes



- We added 72 new employees to staff in 2009, with a YE head count of 303.
- We welcomed 26 interns last summer with a number returning to Horizon this summer. We have 24 interns this summer at the company.
- We have been successful in integrating Horizon with the EDP Group in a number of areas
 - Performance Management
 - Best practices (procurement, project management)
 - Information technology
 - Cross-cultural opportunities.

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Education Opportunities in IL



- Continuing Education
 - [Illinois State University- Renewable Energy](#)
 - Bachelor's degree
 - Policy or Technical
 - To meet the growing demand for well educated workers, Illinois State University has developed the first interdisciplinary renewable energy major in the nation.
 - Heartland Community College- Renewable Energy & Environmental Controls
 - [Renewable Energy Degree](#) – Associate's degree
 - [Electronic Systems Technology Degree](#)
 - The REEC courses provide students an opportunity to learn technical aspects and skills related to renewable energy including solar and wind generation technologies. REEC courses also include the Green Building Technology course which provides an overview of energy efficiency, construction principles, and the LEED process.

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Education Opportunities in IL



- Certification Courses
 - [Building Operator Certification](#)
 - Heartland Community College- Normal, IL
 - [Wind Turbine Technician](#)
 - Highland Community College - Freeport, IL
 - [Wind Turbine Technician Program](#)
 - Danville Area Community College - Danville, IL
 - Students will complete an industry-derived curriculum as they learn about the electrical power generation industry, safety at the worksite, mechanical devices, hydraulic and electrical systems.
 - Graduates enter workforce with skills necessary to be employed in entry-level technical positions and advance with additional training

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Educational events



- Seminars/Conferences/Newsletters
 - [Energy Conservation Workshops- Heartland CC](#)
 - Basic Photovoltaic
 - Solar Domestic Hot Water Systems
 - Intro to Wind Systems
 - [Sustainability Workshops- Heartland CC](#)
 - HOT Solutions to Climate Change
 - Living Locally, Acting Globally

- www.energycentral.com
- www.renewableenergyworld.com
- www.windustry.org
- www.awea.org
- www.illinoiswind.org

Basic pointers



RESUMES

- Keep it simple and use bullet points; no paragraphs.
- Make sure the entire resume is done in the same format, font and style.
- When using a resume template make sure template defaults are removed.
- Tailor your resume to the job description using key words whenever possible.

Cover Letters

- Check for typos and grammatical errors.
- Make sure the letter speaks to the correct job description, company, and location.
- Again, if using a template, make sure all template defaults have been removed.