



Renewable Energy:

# Our Commitment for the Future

Transportation, off loading to pad,  
complete installation, vacuum  
fill and test, rigging and  
mobilizations.

prolec



# Complete "Turnkey" Solutions

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## Spare Parts

24 / 7 Availability

## Storage Preparation

## Field Services

- Inspections (external & internal) and / or Technical assistance
- Assembly, drying & oil fill
- Electric Tests

## Maintenance

- Service according to Instruction Manual
- Transformer (outside & inside) and / or LTC (external or in-tank type)
- Refurbishment
- Controls Upgrade (Gauges & Indicators, M&D equipment, LTC controls, etc)



## Training

- Personalized transformer seminars at the manufacturing facility
- Can cover all product ranges

## Condition Assessment

- Transformer current conditions, risks, life extension, increase load capacity, operating restrictions



# Experience in the industry

To provide our customers with cost-effective renewable power we need today's most efficient technologies.

As a leader in reliable transformer design and manufacturing, Prolec GE continues to focus on developing the most efficient transformer solutions available to the renewable energy industry including Wind and Solar energy.

With more than 30 years of experience, we have developed a wide range of transformers, delivering an outstanding performance for high efficiency operation under the most demanding conditions. Serving the Wind Industry since 1999, with more than 96 GW installed in North America.

## Transformers for:

- Wind Energy
- Solar Energy

Prolec GE: We provide custom engineered solutions to maintain and enhance performance on environmentally friendly Energy Generating sources.



## Product scope

### Generator Step-Up Transformers

- Ratings up to 7.5 MVA
- High efficiency amorphous core units [optional]
- High voltages up to 200 kV BIL
- Low voltage up to 60 kV
- Delta – Wye connection
- Temperature rise options: 55, 55/65, 65/75, 75 C°
- ANSI and special impedances
- Single or dual secondary windings
- Mineral oil, high flammability insulating fluids or natural esters

## Standards and Certifications



### Step-Up Transformer

- 1000 MVA 3 $\phi$  or 500 MVA 1 $\phi$
- 550 kV (1675 kV BIL) 50 or 60 Hz
- LTC (reactive or resistive) or DETC in HV
- Low noise level NEMA – 25 dBA [optional]
- Extra low gas generation during factory tests [over 75% lower than industry standards].

# Solutions for...

## Energy efficiency

Our highly efficient three phase step-up transformers are ideal for Renewable Energy applications, where energy savings are crucial for the economic success over the lifetime of the project.

Prolec GE's Amorphous Metal units provide the following benefits, amongst others, to your Renewable Energy projects:

- Helps in energy conservation program by reducing harmful emissions of green house gases
- Transformers are even more efficient at low load levels
- Better thermal performance due to operating at lower average temperatures than traditional silicon steel cores

Prolec GE's Amorphous Metal Transformers have received GE's Ecomagination certification. Ecomagination is GE's commitment to address challenges such as:

- More efficient products made with environmentally friendly processes



- Reduced hazardous materials and waste
- Operational safety and training
- Continuous environmental impact improvements

## Seismic conditions

To support renewable energy projects located in seismic regions, Prolec GE offers mechanically reinforced products which are designed and manufactured suitable to operate successfully during an earthquake event with importance factors:

- **Distribution Transformers:** 1 and 1.5 "Seismic Certified Transformers" (IBC)

- **Power Transformers:** UBC seismic zone 4.0 design certification

Our knowledge, experience, and quality solutions make Prolec GE the right team for your renewable energy project with the right design for your needs.

Enjoy a new level of responsiveness and reliability that only Prolec GE can offer.

**Prolec GE: Transforming Together.**

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## Main Office

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## Additional Information

For any additional information  
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