# ESTIMATED ENERGY PRODUCTION

Date Range
2002-11-14 TO 2003-11-14

## SITE 0210

*Site Information*

| | |
|---|---|
| Project: | Idaho State wind |
| Location: | Parkinson, Ririe, ID |
| Site Elevation: | 6000FT |
| Averaging Time: | 10 min |

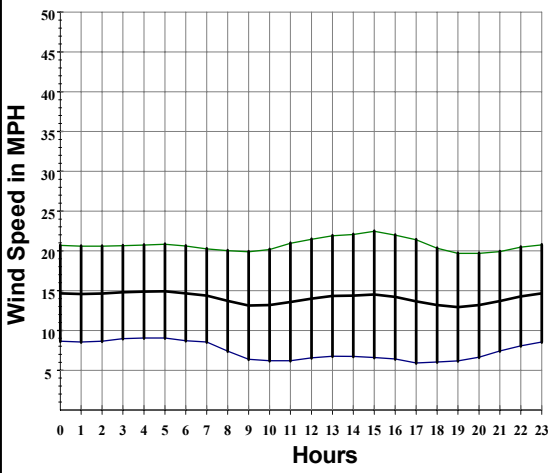
*Sensor 1 Information*

| | |
|---|---|
| Channel: | 1 |
| Type: | Anemometer |
| Scale: | 1.711000000 |
| Offset: | 0.7800 |
| Description: | Anemometer |
| Height: | 66FT |

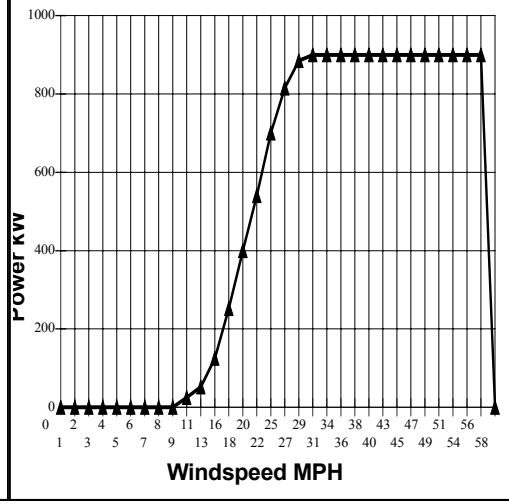
*Sensor 2 Information*

| | |
|---|---|
| Channel: | 2 |
| Type: | Direction Vane |
| Scale: | 1.000000000 |
| Offset: | 0.0000 |
| Description: | Direction Vane |
| Height: | 66FT |

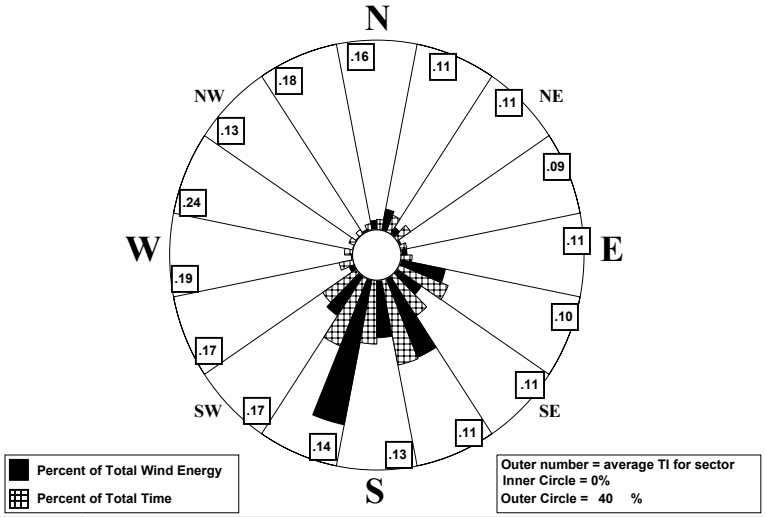
### Diurnal Wind Speed Pattern



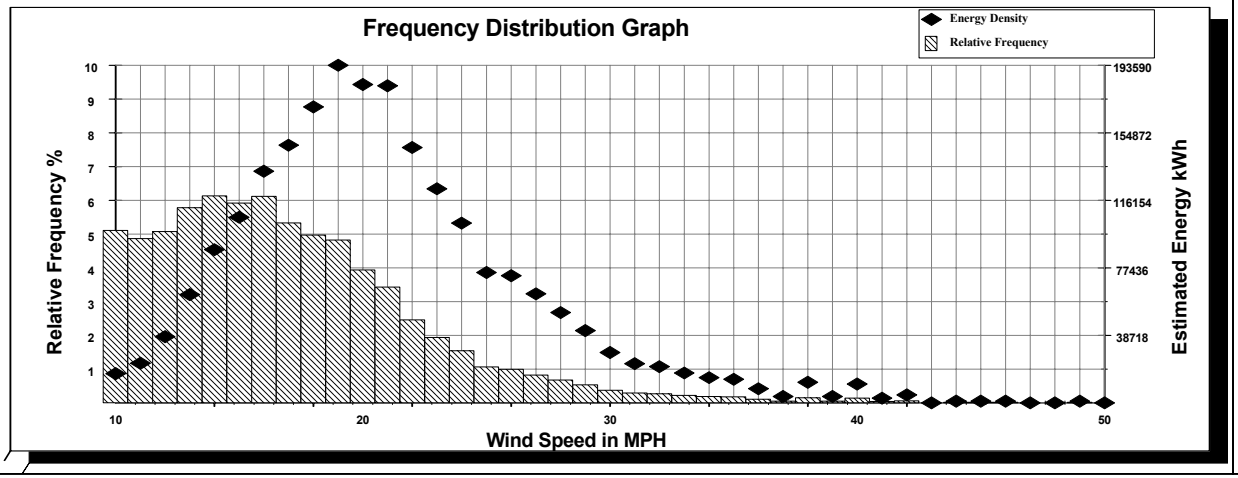

### Power Curve for 900 kW Series




### WIND ROSE GRAPH




### Frequency Distribution Graph




### Statistics

| | |
|---|---|
| **Estimated Energy Output** | **2188724 KWH** |
| **Calculated Air Density** | **1.015 kg/m3** |
| **( temperature data and pressure based on elevation )** | |
| **Average Wind Speed** | **14.1 MPH** |
| **Average Turbulence Intensity** | **0.14** |
| **Mean Energy Wind Direction** | **SSW** |
| **Mean Wind Direction** | **SSE** |
| **Capacity Factor** | **0.28** |
| **Average Temperature** | **0.0 F** |
| **Turbine Manufacturer** | **Enron Wind** |
| **Turbine Model** | **900 kW Series** |
| **Turbine Rating** | **900.0 kW** |
| **Number of Turbines** | **1** |
| **Estimated Annual Production** | **2225046 KWH/Year** |

Total hours = 8784 Total hours used in Calculations = 8617 Percent Data used = 98.1