WIND RESOURCE ASSESSMENT

PRODUCT: Model 276

APPLICATION DETAILS:
The customer specializes in providing site analysis on potential wind farm locations. These assessments allow the end customer to evaluate available wind power, identify project risks, prioritize their investments, and validate the selection using data. After the remote sensing system captures the wind resource assessment data, the end customer can determine if the wind turbine project is worth pursuing.

CUSTOMER PROBLEM:
End customer relies on sensor accuracy/sensitivity for site selection
During the site selection process, wind turbine manufacturers require a substantial amount of accurate test data to guide their assessment. The current sensor's accuracy drifts over time, leading to an inaccurate wind analysis. Since their devices are required to operate unattended while collecting wind data surrounding the height of the turbine, a rugged low power consuming sensor can ensure these high standards are met. Due to the high cost of wind turbines, the initial analysis is crucial to the overall success of a wind farm project.

SETRA STRENGTHS

- ±0.25% FS Accuracy

- Environmentally Rugged

- Excellent Long-Term Stability

- Compact Design

- Low Power Consumption

SETRA SOLUTION:
Setra provided the customer with the Model 276, a barometric pressure transducer that provides high accuracy and stability over a wide compensated temperature range, ideal for this application. The Model 276 consumes very little power, which is why it is ideal for an application which uses solar panels. The customer's wind assessment device utilizes a sodar sensor to gather feedback of the environmental conditions. Understanding the barometric pressure is an important component of the sodar measurement because it enables the device to properly collect accurate wind calculation data.

WHY SETRA WON:
Sensor provided accurate test data in assessment results
Setra was able to provide the customer with the Model 276, reducing the uncertainty of the wind resource assessment and enabling better site selection for the end customer. The customer was able to standardize on the Model 276 by building setup software around the sensor's parameters for faster installation within the device. The overall performance of the Model 276 within the assessment device has helped the customer expand their business and emerge as an industry leader.

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