



In the renewable energy sector, OEMs often restrict the data owners can see and how they interact with the equipment.



The Data Access Challenge

OEM Automation

In the late 1990's and early 2000's, the gas turbine was the fastest growing power generation technology.

Quick ramp rates and lower emissions comprised a strong value proposition for the utility industry. However, original equipment manufacturers (OEMs) generally sold gas turbine assets with long-term service agreements (LTSA's), which prohibited owners from fully realizing the asset value by restricting control functionality and data availability.

These automation systems lack implementation standards and advanced control functionality, and often restrict the data that is visible to owners and how they interact with the equipment.

Thus, the renewable energy industry seems to be reliving the lessons that the utility industry learned in the past. However, the renewable energy industry can also learn from such experience and apply best practices to assets that are now being deployed around the world.

Since key data used to assess and operate these assets comes from the automation technology deployed on those assets, the accessibility to that data and the ability to capture it in its most granular form is critical. In certain situations, the assets may not be equipped with the data acquisition capabilities that are necessary to maximize their value.

The deployment of non-OEM automation hardware and software can address these issues.

This is the option many utilities owners have taken to resolve their data access issues, whether it was a simple overlay capability or a more tangible, standardized hardware replacement.

Many OEM automation systems provide only 10-15 minute average data values or they fail to integrate data points to downstream systems. It is impossible to analyze high frequency variables such as vibration transients or current spikes with average data values.

Many equipment performance issues will be invisible to the owner as the root causes are simply “averaged out.”

While the inability to access high-frequency data is a big enough problem, the fact that many points are not even included in the data feed provided by the OEM could be even worse. The missing data could be exactly what is needed to resolve an equipment performance or reliability issue.

These solutions give the owners complete control over configuration of data acquisition, integration, and access. **This combination of SCADA overlay, control automation (PLCs), low impact data acquisition, and sensor technologies enables integration with enterprise IT and Asset Performance Management (APM) systems.**

These seemingly simple capabilities are valuable because they allow assets to participate in additional market opportunities such as ancillary services. As power purchase agreement (PPA) prices continue to fall, it will be more important than ever for owners to have access to these additional market opportunities—many of which provide better profit margins than just selling kilowatt hours.



Owners benefit from an agnostic technology approach — one which is open and does not lock them into the limited or targeted functionality of an OEM offering.