

YieldCos - moving beyond the IPO

Solutions to get serious about asset management

November 2015



Current landscape

With several initial public offerings (IPOs) and asset acquisitions, YieldCos were the biggest catalyst in the renewable energy market last year. Despite recent volatility in YieldCo stock prices, many industry participants expect the renewable trend to continue, as equipment prices continue to fall and environmental and renewable policies like the Clean Power Plan evolve.

As market conditions change, top YieldCos will excel at finance and asset acquisition as well as at integrating their assets into an efficient portfolio. Getting better at asset management may not only improve plant performance, but may make the company a more attractive suitor in future acquisitions. Moreover, as capital markets volatility manifests and interest rates rise, YieldCos will need to wring additional efficiencies out of their operating portfolios. This means the need to leverage scale in order to reduce operating costs will only grow stronger.

While some YieldCos are affiliated with a major independent power producer (IPP) or hybrid utility (Hybrid) that provides well-developed asset management capabilities, some of the largest YieldCos are not. Many have not developed the global asset management capabilities needed to run a portfolio worth billions of dollars, yet expectations are that businesses of that magnitude operate cost efficiently and with high reliability. Even for those YieldCos that are affiliated with a parent IPP or Hybrid, the parent company's capabilities may not be fully integrated with the YieldCo. Thus, most, if not all YieldCos, will need to quickly invest in building out asset management capabilities.

On the following pages, we outline a structured approach to identify potential asset management problems as well as provide recommendations on how to solve these issues. YieldCos will find it critical to address these issues early on, as they become exacerbated as the business grows. In addition, since some observers are questioning the vitality of the YieldCo model, the market is putting a premium on managing growth and cash flow, furthering the need for efficient asset management controls.

These trends will put a spotlight on asset management and likely reward the YieldCos that move most aggressively to improve their performance in key operational areas to control costs and improve the efficiency of their portfolios. These top performers also could create a cost of capital advantage for themselves as acquirers and integrators of new renewables projects. So, while the YieldCo business model is relatively young, it appears investors expect it to develop mature asset management competencies quickly.

Asset management challenges

Just as new parents benefit from heeding the advice of more experienced friends and family, YieldCo sponsors could greatly benefit by gaining an understanding of the asset management problems that their spin-off will likely face.

At PwC, we see asset management challenges falling into five categories:



Operations and maintenance (O&M)

A “plug” on the income statement, O&M is often outsourced to a provider who is optimizing at the project level, missing the opportunity for portfolio-wide efficiencies



Data and asset monitoring

Projects acquired from multiple sources require costly manual workarounds to coordinate work orders



Settlement and billing

Systems are not integrated across the portfolio, leading to inefficiencies and potential mistakes



Reporting

Closing the books is a painful process, requiring manual integration across dozens of projects, with the potential for mistakes and reputation-hobbling restatements



Cybersecurity

Portfolio growth means that operators need to evolve their IT protection capabilities to effectively ward off data breaches

Solutions for the most common asset management problems

	Problem	Solution	Benefits
Operations and maintenance (O&M)	O&M is strained by growth and the complexity of a more geographically distributed portfolio, with smaller sites and new technologies. As a result, plant production may not be optimized, costs are not controlled across the portfolio, and owners and investors may be at risk.	Invest time to ask key questions about O&M. Are the supply chain network and field service processes/systems in place to support O&M still appropriate given growth, new geographic focus, and evolving technology mix? Are long-held O&M budget assumptions still accurate? Are there opportunities to reduce costs or increase system output?	Improved project returns based on reduced downtime, lower O&M costs, and potentially increased power output.
Data and asset monitoring	Individual projects operate on different computerized maintenance management systems, preventing full portfolio-level visibility and requiring manual workarounds to coordinate work orders. Challenges grow more acute as projects are acquired from multiple sources.	A lightweight Enterprise Asset Management (EAM) implementation can integrate the disparate systems in as little as 6-9 months at a scale appropriate for the YieldCo. Implementation is supported by a one-time initial asset audit to load all required equipment items and maintenance history into the EAM system and integrate the system with that of the sponsor, if needed.	Visibility into business operations as well as material cost analysis across the portfolio enables the YieldCo to track and reduce costs for common work orders and large spend categories.

	Problem	Solution	Benefits
Settlement, billing, and compliance	Settlement, billing, and market events are handled manually and systems support varies by asset type and location. Workarounds create a crunch during reporting season, increasing the likelihood of errors that could cause fees, compliance lapses, and fines.	Modern counterparty settlements and billings systems improve efficiency and accuracy by integrating across the portfolio and automating key tasks.	Better coordination across the portfolio and reduced touch time for key activities reduces duplicative costs, as well as increases speed and productivity.
Reporting	The YieldCo structure increasingly demands tight control of cash flows and implicitly requires cash flow predictability to support disbursements. Public company operations also lead to a lower materiality threshold for reporting than when assets were operated by the parent company. If not managed effectively, this can lead to last minute guidance changes and costly restatements that will quickly erode investor confidence	Leverage a formal business intelligence platform that enables reports and dashboards to drill down to individual assets and can be reconfigured, as needed, to support management decision-making.	Improved cash flow predictability and earnings guidance accuracy, driving shareholder confidence and improving the ability to raise capital. Lower back office overhead is a plus, too.
Cybersecurity	Growth of portfolios means that operators will need to evolve their cybersecurity measures to protect against disruption, data breaches, and potential attacks.	A consolidated asset management system that closes gaps created by workarounds and ad hoc systems.	Reduced threat level and compliance with Federal Energy Regulatory Commission (FERC) requirements, at lower cost than attempting to build security on top of disparate systems.

Ultimately, an asset owner wants an O&M provider who is focused on maximizing the output of the system while maintaining a low overall cost structure. If the YieldCo doesn't have the desire and/or operational capabilities to execute O&M services in-house, it is critical to find an O&M partner that has the core capabilities, experience, and technology to manage a global fleet of assets. Most importantly, the O&M provider needs to have a long-term commitment to O&M as a business; otherwise, the owner will need to seek out a new service provider in the future, which creates further cost and churn.

*Troy Lauterbach
VP of Global Operations and Maintenance, First Solar*

Maintaining financial yields as solar assets age is difficult for many owners and operators of individual systems. Such maintenance becomes increasingly difficult as systems with different components in diverse environments are collected to form portfolios or YieldCos. While small, local O&M providers are often adequate to deal with limited issues on specific projects and components, they will not typically have the resources, knowledge, equipment, spare parts, and infrastructure to support a national collection of assets. Such knowledge is critical, as a 1% loss of system output can drive a 15% loss on economic yield. To achieve efficiencies and provide the highest service levels at the lowest cost, a national approach to asset management is required. Luckily, national providers are emerging, and in some cases, they can provide output guarantees lending certainty to minimum yields.

*Bill Klein
CEO and Founder, Solarrus Corporation*

YieldCos that have a strong formal relationship with a parent company can benefit from the growth, stability, and importantly operational expertise of the parent. For example, working across NRG and NRG Yield allows us to leverage operating costs, infrastructure, and experience across 50,000 MWs of conventional and renewable generation technologies.

*Randall Hickok
Senior Vice President, Asset Management and Engineering, NRG*

As YieldCos grow and add more solution types, their increasing complexity means O&M is very much in focus right now. Fortunately, the O&M ecosystem is maturing to meet this need. We are seeing national O&M providers emerge and some developers are creating competitive differentiation with their O&M capabilities. This could not come at a better time, as project returns are being squeezed and asset managers will be asked to find new ways to improve project output and decrease costs. Sponsors and YieldCo managers will need to think carefully about whether to outsource O&M or provide the service through their sponsor – making investments to improve their capabilities as needed.

*Brian Carey
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Practitioners available to discuss the YieldCo operating model

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