Accounting for power purchase agreements (PPAs)
Agenda

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## Evaluating Accounting Treatment for a PPA

### 3 Main Components

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<td>Is there a variable interest entity under ASC 810-10?</td>
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<td>Is the PPA a lease (or contains one) under ASC 840/842?</td>
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<td>Is the PPA or are any elements a derivative per ASC 815?</td>
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VIE Considerations

Which party should consolidate a renewable facility entity?
VIE Considerations

ASC 810-10

- A Variable Interest Entity (VIE) is an entity in which an investor has a variable interest that is not based on the majority of voting rights.

- Renewable energy facilities are typically owned by a separate legal entity (e.g. an LLC) which is often a VIE.

- ASC 810-10-20 defines variable interests in a VIE as “contractual, ownership, or other pecuniary interests in a VIE that change with changes in the fair value of the VIE’s net assets exclusive of variable interests.”

- The identification of variable interests requires an economic analysis of the rights and obligations of a legal entity’s assets, liabilities, equity, and other contracts.
VIE Considerations
ASC 810-10

• Is the legal entity a VIE?
  - Is there sufficient equity at risk?
  - Do the equity holders lack any one of the three:
    - Power to direct activities of a legal entity
    - Obligation to absorb losses
    - Right to receive residual returns

• Reporting entity is required to determine whether the arrangement is an operating lease that qualifies for the scope exception in ASC 810-10-55-39
VIE Considerations
Renewables

Renewable Energy Credits

− If the PPA is determined to be a lease, determination must be made of whether RECs are an output of the specified asset in the lease

Fixed-Price PPA’s can result in a reporting entity having a variable interest due to:

− Variability related to O&M absorbed by equity & debt investors, or
− Variability related to price changes absorbed by the PPA off-taker or owner operator
− The entity with the power over the most significant activities or controllable risks is the entity that will consolidate the VIE
Leasing Impacts for ASC 842

New Standard and Transition
Leasing Standard Update
ASC 840 vs. 842

Effective Dates:
- Already required for public entities
- Private entities have the option to early adopt, with required adoption effective for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022

ASC 840
It is not uncommon for PPAs to qualify as leases for accounting purposes. The evaluation of whether a contract is (or contains) a lease under ASC 840 focuses on whether:

− (1) specified assets must be provided for the contract to be fulfilled and
− (2) the contract conveys the right to control the use of a specified asset for an agreed period.

ASC 842
Aligns the new control concept with that in the revenue (ASC 606) and consolidation (ASC 810) guidance.

− To control the use of an asset, a customer is required to have not only the right to obtain substantially all of the economic benefits from use of an asset throughout the period of use (a “benefits” element), but also the ability to direct the use of that asset (a “power” element).
Leasing Standard Update
Transition Impacts

Practical Expedients
“Package of 3”

1. Do not reassess any expired or existing contracts for leases
2. Do not reassess lease classification for any expired or existing leases
3. Do not reassess initial direct costs

Impacts on Renewables projects:
Sales-type or direct financing lease with significant variable payments may result in lessor recognizing a loss at commencement
- Net investment in the lease does not include variable lease payments
- If net investment < carrying amount of leased asset, a loss is recognized

A book loss, but not an economic loss
Leasing Standard Update

Control of Physical Access

Under ASC 840-10-15-6(b) (formerly EITF Issue 01-8), an arrangement may qualify as a lease because the customer (1) takes more than a minor amount of the output of the PP&E and (2) controls physical access to the PP&E. That is, under ASC 840, the right to control the use of PP&E may be conveyed through the right to control physical access to the PP&E.

Under ASC 842, control of physical access will not be solely determinative of whether the customer has power over (i.e., whether the customer has the right to direct the use of) the PP&E. The party that controls physical access to the PP&E in an arrangement will generally have at least some (but maybe not all) decision-making rights related to when and how the PP&E is used. Accordingly, while some contracts that are, or contain, leases under ASC 840 on the basis of the control over physical access may still meet the definition of a lease under ASC 842, others may not.
Rooftop Solar

Developer Y executes a 25-year PPA with Resident Z under which Y will install solar panels on the roof of Z’s home. In exchange, Z will purchase 100 percent of the electricity produced by the solar panels at a price that is fixed per unit of electricity. The rooftop solar panels are expected to meet 50 percent of Z’s demand for electricity. Developer Y retains ownership of the solar panels and is responsible for any operation and maintenance that is needed throughout the contract term. However, because the panels are installed on Z’s home, Z controls physical access to them. Under ASC 840, the contract is a lease because Z (1) will take more than a minor amount of the output (i.e., the electricity) produced by the solar panels during the 25-year contract term and (2) controls physical access to the solar panels. However, under ASC 842, the parties will need to assess whether Z has both power and economics (i.e., whether it has the right to control the use of the solar panels). Although Z obtains substantially all of the economic benefits from the use of the solar panels through its purchase of 100 percent of the electricity, Z may not have the right to direct the use of the panels (i.e., it may not have power over the use of the panel).
Leasing Standard Update
Renewables example

Wind Farm

A customer enters into a land easement arrangement with a farmer for the right to construct and maintain 25 wind turbines on the farmer’s 500-acre plot of land. Each wind turbine will be constructed on individual acre plots. At issue is whether the identified asset is the entire 500-acre plot of land or whether there are 25 identified assets, each one acre of land.

As in the previous example, if the identified asset is the entire 500-acre plot of land, the parties are less likely to conclude that the customer has the right to obtain substantially all the economic benefits from use of the land because the farmer retains all of the rights to the economic benefits of the remaining 475 acres. However, if the identified assets are 25 individual acre plots of land, the customer may have the right to obtain substantially all the economic benefits from using each individual acre plot.
Derivative Treatment Under ASC 815
Derivatives Overview

**Derivative Criteria Reminders**

- Financial instrument or other contract having each of the following:
  - One or more underlyings and one or more notional amounts or payment provisions or both.
  - Consider whether the contract contains minimum volumes, whether the contract is a “requirements” contract, or the remedies for non-performance.
  - Are contractual volumes tied to production/output, requirements needs, or consumption requirements?
  - No (or small) investment at inception
  - Requires/permits net settlement or de facto net settlement

**NPNS Considerations**

- ASC 815 offers certain scope exemptions (e.g. Normal Purchase Normal Sale); a robust identification process and strict documentation is required.
- Power purchase or sales agreements –ASC 815-10-15-45 through 51
- Designation is common and often appropriate, but a common pitfall is a lack of thoroughness of evaluation and documentation
Virtual PPA
Virtual or Synthetic PPA’s
Common Considerations

• Example Virtual PPA
  • An owner sells power in the market and a counterparty pays or receives the difference between a set price per MWH and the market price, but does not take delivery of the power which is sold into the market
  • The counterparty also pays a set price for all of the REC’s

• Common considerations include:
  • Whether it is a derivative or not
  • The producer’s evaluation under 606
    - The producer needs to evaluate whether the energy and the RECs are separate performance obligations or there is only one performance obligation.
  • Virtual PPA arrangements still must first be evaluated for leases (as with any other PPA)
    - 842: Generally not a lease as the buyer is not controlling most relevant aspects of the facility
    - 840: Significant judgment required, but can be a lease (Refer to EITF 01-8)
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