Webinar: Tax Equity Structuring
New Trends, Challenges, and Advice

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INDUSTRY TRENDS
Industry Trends

• The Fed is raising interest rates
  – Debt spreads face continued downward pressure due to competition from Asian and European banks
  – Over-supply of bank debt leads to more aggressive financing terms (70+ banks in the market)
  – Sponsors are buying interest rate hedges
  – Lenders require hedging for floating interest rate deals

• Project M&A market is very active—both for development and operating assets
  – Utility scale solar selling @ 6.5 - 7.5%, wind selling @ 8.0 - 9.5% (unlevered after-tax)
  – More buyers are willing to take development and construction risk
  – Asian and European investors want to get a foothold in the US because they believe the risk-adjusted returns are very attractive
    • US offshore wind is an attractive market to European financiers given experience in Europe

• Plans for huge offshore wind projects in MA, NJ, NY, MD, CT & RI
• Revenue models are changing
  – Utility PPAs are becoming rare, corporate PPAs and hedges are more common
  – Significant pressure on PPA rates - will you make money?
  – PPA terms are getting shorter - how comfortable are you with the post-PPA merchant risk?
  – Basis pricing risk (hub vs. node) – do you have sophisticated risk management in-house?
  – Curtailment remains a big issue in certain markets
    • Impact on sponsor returns
    • Tax equity investors may protect themselves via a PAYGO structure or cash sweeps

• Compressed Margins – financiers’ cost of funds increasing while competition for deals lowering their returns

• Hunt for higher returns and lack of utility PPAs are driving market to commercial & industrial (C&I) solar
  – Big developers and investors are moving into C&I solar
Industry Trends, cont.

• Solar developers are planning for “start of construction” by end of 2019 to lock-in 30% ITC prior to the phase down

• Energy storage for solar is a growing trend
  – Despite many benefits, the revenue model is still evolving – how to be compensated for resiliency and frequency regulation?
  – Some renewable power RFPs require storage to be included
    • Xcel RFP median responses

<table>
<thead>
<tr>
<th></th>
<th>No Storage</th>
<th>Co-Located Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind: $18/MW</td>
<td>Wind: $21/MW</td>
<td></td>
</tr>
<tr>
<td>Solar: $29/MW</td>
<td>Solar: $36/MW</td>
<td></td>
</tr>
</tbody>
</table>

– Offshore wind generally being bid with storage to avoid selling at negative prices during high production

• Utilities are rate-basing wind as PTC not subject to normalization and there is even some rate-basing of solar, despite normalization

• New small tax equity syndicators are entering the market to sell to regional banks and corporates
PARTNERSHIP FLIP STRUCTURE OVERVIEW
• Project typically is financed with some combination of sponsor equity and investor equity and, in some cases, debt
  – Investor acquires interest in project company for cash
  – Investor typically makes an up-front investment, although investor in a PTC deal also may make pay-as-you-go payments (i.e., PAYGO)

• Investor initially is allocated as much as 99% of tax items (PTC or ITC and depreciation) and subsequently "flips" down to as little as 5% after achieving a specified after-tax IRR ("flip rate")
### Partnership Flip Structure – Sharing Ratios

<table>
<thead>
<tr>
<th></th>
<th>Pre-Flip Period (1)</th>
<th>Post-Flip Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investor</td>
<td>Sponsor</td>
</tr>
<tr>
<td>Pre-Tax Cash</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>Tax Credits</td>
<td>99%</td>
<td>1%</td>
</tr>
<tr>
<td>Taxable Income/ Loss</td>
<td>99%</td>
<td>1%</td>
</tr>
</tbody>
</table>

(1) Flip typically occurs in Year 10 for wind or Year 6 for solar

- The ultimate objective is to allocate tax benefits to a party that can use them most efficiently
- There are many variations of the basic structure
TAX EQUITY RETURNS
Tax Equity Returns

• Wind & Utility Solar: generally, 6.75% to 8.5% after-tax flip rate
  – Utility-scale solar is no longer at a premium to wind

• C&I Solar: generally, 9.0% to 12.5%+ after-tax flip rate
  – Much of C&I is “time” based flips that are quoted in terms of price per $1 of ITC, not an after-tax flip rate

• Resi Solar: Rates often higher than C&I
Tax Equity Returns are Very Attractive

• The risk-return profile of the tax equity investment is very attractive
  – Tax equity investor returns are primarily driven by tax benefits (PTC or ITC and depreciation), and the ITC and depreciation have very limited exposure to project performance risk
  – In solar projects, for example, over 90% of capital is returned in Years 1-2, almost exclusively from low-risk tax benefits known at deal closing
  – In wind projects, risk associated with production/PTCs can be managed using several approaches (e.g. PAYGO, cash sharing ratios, cash sweeps)

• Investors can continue to demand a premium due to the limited number of them (i.e., public corporations that consistently owe taxes and have capital available to invest outside of their core operations)

• Most sponsors can still secure tax equity for their projects
100% BONUS DEPRECIATION (EXPENSING)
100% Bonus Depreciation Rules

• 100% expensing (i.e., “bonus” depreciation) is available for wind and solar property that is (i) new (but see below), (ii) acquired after September 27, 2017, and (iii) placed in service after September 27, 2017, and before January 1, 2023
  – 20% annual phase down for property placed in service in 2023 or later; full phase out (i.e., no bonus) for property placed in service in 2027 or later
  – For property acquired before September 27, 2017: (i) 50% for property placed in service before January 1, 2018; (ii) 40% for property placed in service in 2018; (iii) 30% for property placed in service in 2019; and (iv) 0% for property placed in service after 2019
    • Property is not treated as acquired after the date on which a “written binding contract” is entered into for such acquisition
  – Special rules apply to used property acquired after September 27, 2017
• Used property that is acquired after September 27, 2017, is eligible for 100% bonus depreciation if the following requirements are met:
  – The property has not been used by the taxpayer (or any member of taxpayer’s consolidated group) at any time prior to such acquisition
  – The taxpayer does not acquire the property from certain related persons
    • A partnership is considered related to a partner that owns more than 50% of the capital interest or profits interest therein
  – The taxpayer does not take a carryover basis in the property (e.g., through a contribution to a partnership)

• The cost of used property does not include the basis of any other property already held by the taxpayer (e.g., exchanged basis)
• Special Partnership Items
  – Section 704(c) remedial allocations are not eligible for bonus depreciation
  – Section 734(b) basis adjustments (i.e., step-ups resulting from distributions in excess of a partner’s outside basis) are not eligible for bonus depreciation
  – Section 743(b) basis adjustments (i.e., step-ups resulting from a transfer of a partnership interest) are generally eligible for bonus depreciation
    • The transferee partner must still satisfy the acquisition requirements with respect to the partnership property to which the adjustment relates (e.g., not impermissibly related to the transferor, no carryover basis, etc.)
    • The transferee partner must not have previously had a “depreciable interest” in the portion of the partnership property deemed acquired
    • Prior use of the partnership property by the partnership is not relevant
Corporate income tax rate decrease from 35% to 21% reduced the amount of tax equity amount in the project capital structure:

- Wind went down from ~60-70% in 2017 to 50-60% in 2018
- Solar went down from ~35-45% in 2017 to 30-40% in 2018
Tax Reform Impact on Tax Equity: Bonus Depreciation

• A small number of projects can be structured with 100% bonus depreciation, even though the benefit is probably marginal.

• Key structuring challenges include:
  • Tax equity investor’s Section 704(b) “capital account” constraints (increasing the amount of “DRO” reduces the amount of loss reallocations).
  • Tax equity investor suspended losses due to insufficient “outside basis” (Section 704(d)).

• Wind projects tend to be better candidates for bonus depreciation due to higher starting outside basis of the tax equity investor.
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Advice to C&I Solar Developers

• Seek to have a master tax equity financing arrangement that projects that meet stipulated requirements can be easily added to

• One project per project company

• In PPAs, include that it is the intent of the parties that the PPA is a “service contract” for purposes of IRC § 7701(e)

• In PPAs, use care with fixed or capped purchase options

• In site leases, avoid rents calculated as profit sharing; revenue (before expenses) sharing is fine (e.g., royalty)

• In site leases, try to provide the project with the right to renew for a period at least as long as the useful life of the project
TAX CREDIT ELIGIBILITY: IRS
START OF CONSTRUCTION
GUIDANCE
Tax Credit Phase Out for Wind Projects

- Wind projects qualify for the § 45 PTC at rate of $0.024/kWh (that will continue to be periodically adjusted by the IRS for inflation); the credit will ramp-down based on when the project starts construction based on the following schedule:

<table>
<thead>
<tr>
<th>Year</th>
<th>Credit Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>100%</td>
</tr>
<tr>
<td>2017</td>
<td>80%</td>
</tr>
<tr>
<td>2018</td>
<td>60%</td>
</tr>
<tr>
<td>2019</td>
<td>40%</td>
</tr>
<tr>
<td>2020</td>
<td>Expires</td>
</tr>
</tbody>
</table>

- Alternatively, wind projects have the option to claim the 30% ITC, across the same timeframe; ITC for a wind project would be subject to the same ramp-down schedule (i.e., a project that started construction in 2019 will qualify for a 12% ITC => 30% * 40%)
• The § 48 ITC for solar ramps down based on the following schedule for the start of construction:

<table>
<thead>
<tr>
<th>Year</th>
<th>ITC</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>30%</td>
</tr>
<tr>
<td>2019</td>
<td>30%</td>
</tr>
<tr>
<td>2020</td>
<td>26%</td>
</tr>
<tr>
<td>2021</td>
<td>22%</td>
</tr>
<tr>
<td>2022</td>
<td>10%</td>
</tr>
</tbody>
</table>

• To qualify for more than a 10% § 48 ITC, a project must be placed in service by the end of 2023, regardless of its start of construction date
  – Wind, unlike solar, does not have a placed in service statutory deadline, but the IRS’s guidance created a “soft” deadline (discussed below)
• Renewable energy tax credits determined by when the project started construction

• IRS issued Notice 2016-31 for Wind and Notice 2018-59 for Solar:
  – Projects have until December 31 of the year that included the fourth anniversary of the start of construction date to be "placed in service" (e.g., if construction started on a wind project in June 1, 2016, then project must be in service by December 31, 2020) to avoid "continuous" work/construction requirement
IRS Start of Construction Guidance

• Two methods to start construction:
  – Commence "physical work of a significant nature" or
  – Incur at least 5% of the cost of the project
    • Must take delivery of equipment purchased with 5% within 3.5 months of payment (e.g., April 15 if pay on December 31)
    • But must take delivery in same year if vendor provides debt financing

• Both methods generally follow the Treasury Cash Grant guidance but with some key differences

• No minimum level of work was required in order to meet the "physical work of a significant nature" requirement
  – Qualifying work – O & M road construction, digging turbine foundations, manufacturing a customized step-up transformer or manufacturing other equipment not held in inventory by the manufacturer
  – Work not done by the project owner directly must be performed pursuant to a “binding written contract,” which has certain highly technical requirements
  – Look-Through Rule – EPC contractor can satisfy 5% safe harbor for project owner if EPC contractor and project owner have a binding written contractor (EPC contractor effectively finances 5% safe harbor for project owner)
Placed in Service

• Property is placed in service during the taxable year that such property is placed in a condition or state of readiness and availability for a “specifically assigned function,” whether in a trade or business or in the production of income.

• The IRS and courts have identified five factors indicating that electrical generation property is placed in service:
  – whether all necessary licenses and permits to operate the facility have been approved;
  – whether the facility has been synchronized;
  – whether all critical testing of the facility has been completed;
  – whether the taxpayer has taken control of the facility from the contractor building the facility; and
  – whether daily operation of the facility has begun.

• But to which property are the factors applied? A block, an array, the entire project? And how is the “specifically assigned function” of property determined?
Placed in Service (cont’d)

## Defining Property

<table>
<thead>
<tr>
<th>Wind</th>
<th>Solar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Code Section 45:</strong> PTC is allowed for electricity production from a “facility”</td>
<td><strong>Code Section 48:</strong> ITC is for “energy property,” which is defined as “equipment which uses solar energy to generate electricity”</td>
</tr>
<tr>
<td><strong>IRS Rev. Rul. 94-31:</strong> Each turbine is a “facility” for purposes of the PTC and 80/20 test</td>
<td><strong>IRS Notice 2018-59:</strong> Energy property comprises all components of property necessary to generate electricity up to and including the inverter (e.g., PV panels, mounting equipment, support structures, power conditioning equipment, inverters)</td>
</tr>
<tr>
<td><strong>IRS Rev. Proc. 2007-65:</strong> Investment requirements must be satisfied by date that the “Wind Farm” is placed in service</td>
<td><strong>IRS Notice 2018-59:</strong> For rooftop projects, solar property that is installed on a single rooftop is considered a single unit of property</td>
</tr>
<tr>
<td><strong>IRS Notice 2013-29:</strong> Multiple turbines that are operated as a single project are treated as a single facility for purposes of determining whether construction has begun</td>
<td><strong>IRS Notice 2018-59:</strong> Multiple energy properties that are operated as a single project are treated as a single energy property for purposes of determining whether construction has begun</td>
</tr>
</tbody>
</table>
“Specifically Assigned Function”

• Courts and IRS have applied a “subjective” test that looks at the specifically assigned function envisioned by the taxpayer and the specific needs of the taxpayer’s business

• Factors to Consider:
  – Does the investment assume all blocks will be placed in service?
  – Does the PPA allow for COD prior to all blocks being placed in service? Are sales of electricity allowed prior to all blocks being placed in service? If so, at a full rate?
  – Does testing and turnover under the EPC occur on a block-by-block basis?
  – Does “substantial completion” under the EPC occur on a block-by-block basis?
  – Does the Interconnection allow for less than all of the blocks to be placed in service?
HYPOTHETICAL LIQUIDATION AT BOOK VALUE (HLBV)
There are 4 methods of accounting for an investment under US GAAP:

<table>
<thead>
<tr>
<th>Method</th>
<th>General Criteria</th>
<th>HLBV Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consolidation</td>
<td>Variable interest model vs voting interest model (ASC 810-10, FIN46R, ARB 51)</td>
<td>Yes</td>
</tr>
<tr>
<td>2. Equity method</td>
<td>&quot;Significant influence&quot; over operating and financial policies (ASC 323-10, ASC 970-323, SOP 78-9). If consolidation is not appropriate, use this method.</td>
<td>Yes</td>
</tr>
<tr>
<td>3. Cost method</td>
<td>Rare in partnership flip structures. Used when the investor's investment amount is minor (&lt; 3-5%)</td>
<td>No</td>
</tr>
<tr>
<td>4. Fair value</td>
<td>Changes in FV flow through earnings.</td>
<td>No</td>
</tr>
</tbody>
</table>

- Consolidation and equity methods are more prevalent in accounting for renewable energy projects.
- Both accounting methods may require an application of HLBV income allocation techniques because the project's capital structure provides different rights and priorities to its owners or ownership percentages are not specified.
- Conventional income allocation approaches (e.g., percentage ownership interest or effective yield) do not reflect tax equity project's economic reality. HLBV overcomes the challenges of these conventional approaches.
HLBV Pre-Tax Earning Profiles – Wind PTC vs Solar ITC
SPEAKER BIOGRAPHIES
David K. Burton is a partner in Mayer Brown’s New York office and a member of the Tax Transactions & Consulting practice. He leads Mayer Brown's Renewable Energy group in New York. He advises clients on a wide range of US tax matters, with a particular emphasis on project finance and energy transactions. In addition, he also advises clients on tax matters regarding the formation and structuring of domestic and offshore investment funds.

David has extensive experience structuring tax-efficient transactions, such as sale-leasebacks, flip partnerships, pass-through leases and other structures, for the acquisition and financing of renewable energy assets.

Earlier in his career, David was the managing director and senior tax counsel at GE Energy Financial Services (GE EFS), one of the world’s leading investors in energy projects. At GE EFS, David oversaw all of the tax aspects for more than $21 billion in global energy projects from structuring transactions to accounting for taxes to formulating tax policy initiatives. During his tenure at GE EFS, the division’s investments in wind, solar, hydro, biomass and geothermal power grew to $6 billion, making GE EFS the largest tax-advantaged energy investor in the United States. Before joining GE EFS, David was a tax lawyer at GE Capital and primarily focused on aircraft and equipment leasing and financing and asset acquisitions.

David has been recognized by Chambers USA 2018 in the area of Projects: Renewables & Alternative Energy. He was named to A Word About Wind’s “Legal Power List 2018 & 2016 and in 2016 received an award from the Burton Foundation for legal writing excellence for his article “How Can a Renewable Energy Plan be Sold for a Capital Gain”.

David received his BA magna cum laude from Ithaca College in 1993 and his JD cum laude from the Georgetown University Law Center in 1996, where he was on the staff of The Tax Lawyer.

He is co-editor of the firm’s blog www.TaxEquityTimes.com.
Vadim Ovchinnikov is a Managing Director at Alfa Energy Advisors. Mr. Ovchinnikov has over fifteen years of professional experience in project finance, capital raise, M&A, project due diligence, and valuation. He has assisted numerous clients in the power sector (solar, wind, gas, geothermal and hydro) and actively works with project developers, investors, and corporate clients in North America, Latin America, Europe and emerging markets.

Prior to Alfa Energy Advisors, Mr. Ovchinnikov was a Managing Director at Chicago Advisory Group for five years providing financial advisory services to clients in the energy and banking sectors. His prior experience includes working for PricewaterhouseCoopers in the Mergers & Acquisitions Group in Europe. Prior to that he was part of PwC's Investment and Capital Markets Group in Chicago focusing on serving clients in the banking industry. Mr. Ovchinnikov started his career at the Financial Accounting Standards Board (FASB) where he was a member of the Derivatives Implementation Team and the Financial Instruments Team.

Mr. Ovchinnikov received a Master's degree (Magna Cum Laude) and a Bachelor of Science degree in International Business and Professional Accounting from Brigham Young University. He is a CFA charterholder, a licensed CPA, and a member of the CFA Institute and the AICPA.
Jeffrey G. Davis is a partner in the Tax Transactions & Consulting group in Mayer Brown’s Washington DC office and is a co-head of the firm’s Renewable Energy group. Jeff represents major corporations, financial institutions and private equity funds on a wide range of US federal income tax matters. His practice focuses on partnership tax, tax credits and other incentives, and project finance and development.

In particular, Jeff advises equity investors, lenders, developers, equipment suppliers and utilities in electric energy projects involving all major renewable resources, including wind, solar, geothermal, hydroelectric, biomass and refined coal. He regularly advises clients on a variety of tax-related issues regarding the development, structuring, financing, and acquisition and/or disposition of renewable energy projects. He has significant experience with the qualification for and monetization of tax credits (including those provided under IRC sections 45 and 48) and other tax benefits associated with renewable energy projects, as well as section 1603 Treasury grants in lieu of tax credits. Jeff has represented investors and sponsors in dozens of “tax equity” financings using the “partnership flip” structure (also known as PAPS), including levered and unlevered transactions, as well as those involving pay-as-you-go (PAYGO) payments and Industrial Revenue Bonds. Jeff also has significant experience with the new markets tax credit (NMTC) under IRC section 45D, the nonconventional source fuel credit under IRC section 45K, the energy efficient appliance credit under IRC section 45M, and the energy efficient commercial building deduction under IRC section 179D.

In addition, Jeff represents clients in matters before the US Department of the Treasury and the Internal Revenue Service, including assisting with applications for private letter rulings, requests for published guidance and applications for Section 1603 Treasury grants in lieu of tax credits. He frequently speaks at conferences on tax credits and other tax incentives and has served as an adjunct professor in the graduate tax program at Georgetown University Law Center.

In December 2017, Washingtonian Magazine named Jeff a 2017 Top Lawyer (Tax). In 2013, LMG Cleantech and Renewable Energy named Jeff one of the CleanTech 100, which “consists of the top 100 clean technology and renewable energy lawyers practicing in the industry today. These practitioners were recommended by their colleagues consistently as reputable and effective attorneys who are constantly involved with the industry.” He is described in The Legal 500 United States (2013) as “knowledgeable” and “always up to date’ with the latest developments.”

Prior to joining Mayer Brown in 2009, Jeff was a partner at a boutique tax and capital markets firm in Washington DC. He is co-editor of the firm’s blog www.TaxEquityTimes.com.
Gintaras Sadauskas is a Managing Director at Alfa Energy Advisors. Mr. Sadauskas focuses on providing financial and commercial advice in relation to the development, financing, purchase and sale of power generation assets (solar, wind, gas, hydro, geothermal and coal). During the past fifteen years, he has been involved in numerous project financings and portfolio transactions in North America, Europe, Asia, Latin America and Africa.

Prior to joining Alfa Energy Advisors, Mr. Sadauskas worked in the project finance and M&A groups at the AES Corporation headquarters. He participated in multiple acquisitions and structured project financings in the US and internationally. Prior to AES, Gintaras worked in the Financial Advisory Services Group at KPMG in Europe.

Mr. Sadauskas received an MBA degree from the Darden School of Business, University of Virginia and M.Sc. in International Management from the University of Lausanne in Switzerland.
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