



Infocast's  
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# ***Wind Power Purchase Agreements: Issues and Strategies***

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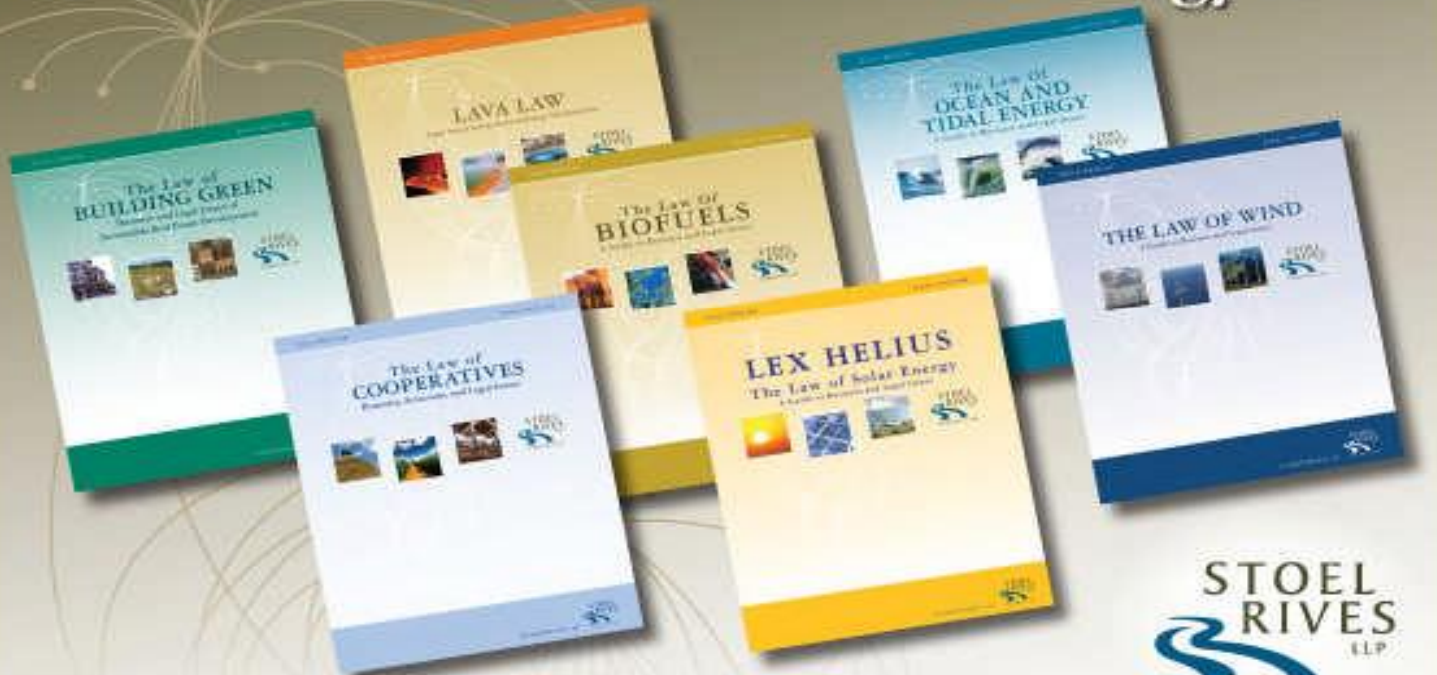




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**We wrote the book on renewable energy law...**



*...in fact, we wrote seven of them.*



# Topic Overview

- Project Construction
- Operation
  - Performance Guarantees
  - Curtailments
  - Maintenance
  - Pricing Issues
- Defaults and Termination
- Renewable Energy Credits (RECs)



# Project Construction

- Tension Between Buyer and Seller: “Must Build” vs. “Put”
- Buyer wants:
  - Development and Construction Milestones
  - A Guaranteed Commercial Operation Date (“COD”)
  - Delay Damages for failure to meet Construction Milestones or Guaranteed COD
  - Liquidated Damages if the Project Achieves its Guaranteed COD With Less Capacity Than Promised



# Project Construction

- Seller wants:
  - Force Majeure outs
  - Off ramps if specified conditions aren't met by a date certain
  - No damages if a milestone is missed but COD is still achieved before the Guaranteed COD
  - Caps on Delay Damages (the lower, the better)
- Buyer may agree to many of Seller's points, but may ask for "right of first refusal" or "right of first offer"



# Conditions Precedent to Seller's Obligations

- Typical Examples
  - Execution of required wind leases and rights of way
  - Execution of an Interconnection Agreement
  - Receipt of Permits (in a non-appealable form)
  - Receipt of Financing (Debt or Tax Equity)
  - Board approval



# Conditions Precedent to Buyer's Obligations

- Typical Examples
  - Public Utility Commission approval of the PPA, enabling Buyer to pass PPA costs through to its ratepayers
  - Board approval
- Public Entities
  - May be subject to contract procurement rules
  - Approval process governed by state law



# Questions to Ask About Any Condition Precedent (CP)

- What is the deadline for satisfying or waiving the CP?
- What happens if the CP isn't satisfied or waived by the deadline?
- Which party has the right to waive the CP?



# Building the Project: Milestones

- Will the PPA set out any Project development milestones?
- What happens if Seller misses a milestone?
  - Default?
  - Additional credit support?
  - Other cure?
- What if Seller misses a milestone but still achieves Guaranteed COD?



# Building the Project: Commercial Operation Date (COD)

- COD often represents the transition between “test energy rate” and “contract rate”
- What is the Project’s expected COD?
- What is required to achieve COD?
  - Buyer prefers subjective standards
  - Seller will press for objective standards and a dispute resolution process
- How “complete” must the Project be to achieve COD?
- Does Seller have a duty to complete the Project if COD is achieved at less than 100%?



# Pricing Issue: Tax Credits

- Expiration Dates for PTCs/ITCs/Cash In Lieu
- What happens if all or part of project isn't "placed in service" by the expiration date or construction does not "start" in 2009 or 2010?
- Options
  - Price adjustment (straight or partial pass through)
  - Developer's right to terminate
  - Developer's right to terminate, subject to offtaker option to buy at adjusted price



# Delivering the Project's Output

- Will the energy be delivered “as available?”
- Will the energy be scheduled? If so, by Buyer or Seller? At whose cost?
- Will the energy be firmed and shaped?
  - Physical firming and shaping
  - Market-based firming and shaping



# Delivering the Project's Output

- What's the "Delivery Point" for the energy?
  - Where title and risk of losses passes from Seller to Buyer
  - Seller usually prefers the point where the project interconnects to the transmission system (a "busbar" sale)
  - Buyer may prefer a point of delivery from which it has transmission



# Curtailments

- Why do curtailments matter?
- If a wind energy project is curtailed because of insufficient transmission, it loses, on each MWh curtailed:
  - The Contract Price for the energy and RECs
  - The PTC (for a high capacity-factor project relying on the PTC)
- Under the AARA, some projects may rely on ITC or government grant, thus changing the curtailment calculus somewhat



# Curtailments (cont.)

- Seller wants to shift curtailment risk to Buyer by
  - Treating curtailed energy as if it were generated
  - Requiring Buyer to pay for the curtailed energy by paying the Contract Price plus the PTC (if applicable) on an after-tax basis
- Allocation of curtailment risk can be a contentious issue – possible compromises
  - Seller absorbs curtailment for an agreed upon number of hours or MWhs, after which Buyer pays as if the energy were actually generated



# Curtailments (cont.)

- The parties share the cost of curtailment
- Buyer doesn't pay for curtailment, but curtailed energy counts toward output guarantees
- Curtailments are treated differently depending on cause of curtailment (system emergency, congestion)
- Curtailments are treated differently depending on quality of transmission (firm, non-firm, conditional firm)



# Curtailments (cont.)

- Regardless of how the risk is shared, the PPA needs to explain how to calculate the amount of energy that would have been generated without the curtailment
- This calculation mechanism will also be needed to explain how much energy would have been generated but for the effect of a Force Majeure event



# Wind Integration Charges

- Wind PPAs Should Address How Price Will be Adjusted For Wind Integration and Other Post-Effect Date Charges
- What is a Wind Integration Rate (WI Rate)?
  - Bonneville Power Administration Rate Case: the WI Rate is what BPA charges for providing reserves to balance wind generation:
    - Regulation Reserves – balance the moment-to-moment differences between generation (wind) and load
    - Following Reserves – balance larger differences between generation and load over longer time periods within an hour
    - Imbalance Reserves – adjust for the differences between a generator's schedule and generation



# Wind Integration Charges (cont.)

- FY 2010-2011 BPA Rate Case set WI Rate at about \$1.29/kW/month ( $\approx$  \$5.70/MWh)
- BPA originally proposed a WI Rate more than double the final amount (\$2.72/kW/month ( $\approx$  \$12/MWh)), but reached an agreement with the wind community on the amount of reserves allocated to wind balancing
- The lower WI Rate is predicated on:
  - Demonstrated and anticipated forecasting/scheduling improvements by wind generators
  - The potential for increased curtailments under Dispatch Standing Order 216 if BPA runs low on reserves
- The final rate represents a cost savings to wind generators of approximately \$122 million over the rate period



# Wind Integration Charges (cont.)

- What We Can Expect from the WI Rate
  - The current WI Rate is in effect for two years – October 1, 2009 to September 30, 2009
    - A number of factors go into evaluating what the WI Rate will look like in the future, including:
      - Installed wind capacity
      - Wind generator scheduling and forecasting improvements
      - BPA operational improvements



# Other Potential Price Adjustments

- Taxes (e.g., sales or excise taxes) imposed after Effective Date
- O&M Costs
- Changes in law that increase operating or compliance costs



# Performance Guarantees

- Seller prefers to deliver an “as available” product with no liquidated damages for shortfalls in performance; Buyer’s often insist on Performance Guarantee
- Mechanical Availability Guarantees
  - Availability is stated as a percentage
  - Seller assumes risk of equipment performance but does not assume wind risk



# Performance Guarantees (cont.)

- Force Majeure periods are usually excluded from the calculation
- If Mechanical Availability falls below the guaranteed percentage, the parties calculate the shortfall in MWh and the Seller pays the Buyer liquidated damages
- This can become a very complex calculation for wind (multiple generators)



# Performance Guarantees (cont.)

- Output Guarantee
  - Seller commits to a minimum “Guaranteed Output”
  - If there is a shortfall in output:
    - Seller liable for Purchaser’s damages (usually replacement damages, but sometimes fixed amount per MWh)
    - Shortfall may even be deemed an Event of Default
- Standard in California utility PPAs
- Increasingly common in other regions



# Performance Guarantees (cont.)

- Features of Output Guarantee
  - The Output Guarantee will usually be stated as a percentage of the Project's Expected Output
  - If the Project is not built to full size, the Project's Expected Output needs to be adjusted downward
  - Contract Price is often lower for Project output above 110% of Expected Output
  - Seller will try to set Output Guarantee at a level it is very confident of achieving.



# Performance Guarantees (cont.)

- Seller prefers to test the guarantee over two or three years
- Seller will want to count the following toward the achievement of an Output Guarantee:
  - Curtailed energy
  - Energy lost through force majeure
  - Energy that Seller can't deliver because of Buyer's breach



# Output Guarantee Issues

- Wind Risk(s)
  - The Seller cannot control the wind
  - Guarantees based on historic calculations of P50 or P95 conditions may be riskier than the Seller's models predict
  - “Global Weirding” might affect wind conditions at site over the life of a long-term PPA
- Mechanical Risk
  - How will wind turbines perform in later years of a long-term PPA?



# Outages

- When does Seller get to schedule outages? Buyer will require a procedure for scheduling outages and will try to prevent scheduled outages from occurring in peak load months.
- What constitutes a scheduled or forced outage at the Project?
  - If outage is defined too low, Seller will constantly be giving Buyer outage notices and may be prevented from performing scheduled maintenance
  - For wind, PPA usually provides that it's not an outage if fewer than  $x$  MW of wind turbines are off line



# Default and Termination

- What are the “Events of Default” for Seller?
  - Bankruptcy
  - Failure to deliver energy/RECs if not timely cured
  - Credit support default, if not timely cured
- What are the “Events of Default” for Buyer?
  - Bankruptcy
  - Failure to take energy/RECs if not timely cured



# Default and Termination (cont.)

- Failure to pay if not timely cured
- PPA will define “cure periods”
  - 10 days for payment defaults
  - 30 days for most other defaults
  - Cure period can be extended if cure can't be completed within initial cure period but the cure is commenced within that period and is thereafter diligently completed (but no more than x days)



# Default and Termination (cont.)

- What happens while the PPA is in default and a cure is pending?
  - Seller usually gets to mitigate its damages by selling to third parties
  - Non-defaulting party may suspend performance
- What happens if a shaping party defaults—is that Buyer’s problem, or Seller’s?



# Defaults—Lenders and Tax Equity

- Lenders and Tax Equity
  - PPA should give Lenders and Tax Equity the right to step in to cure Seller's default
  - Lenders and Tax Equity will need additional time in which to cure a Seller default
  - Default under loan documents cannot be a default under PPA



# Consequences of Event of Default

- Non-defaulting Party can terminate PPA and seek damages for the breach
- Damages are usually direct damages, typically measured by “cover”
- Aggregate damages are sometimes capped, but typically not for “willful” breach
- PPA may contain a detailed formula for calculating damages that a party is entitled to receive upon termination
- Beware the EEI “two-way termination” clause—there are scenarios in which it could cause the non-defaulting party to pay large sums of money to the defaulting party



# Calculation of Damages

- Often based on “Cover” Damages (market vs. contract price)
- Liquidated (fixed) damages. *See TXU v. FPL.*
- Termination Damages



# Limits on Damages

- PPA usually states that neither Party can recover punitive, consequential or incidental damages from the other
- However, the PPA should be clear that lost PTCs are direct damages and thus are not excluded by limit on consequential damages. *Cf. TXU v. FPL*
- The PPA should also be clear that damages that are a part of liquidated damages are also deemed direct damages
- Terminating party must mitigate its damages



# Credit Support

- Seller is almost always required to provide credit support
- PPA almost never requires Buyer to provide, even in the face of a credit downgrade
- SCE is now disclaiming effect of UCC 2-609
- Credit Support
  - Guaranty
  - Letter of Credit
  - Cash
  - Second Lien on Project Assets
- Amount can vary from development to operation phase



# Renewable Energy Credits (RECs)

- Aka “Green Tags,” “Environmental Attributes” or “Tradeable Renewable Certificates” (“TRCs”)
- RECs are often “Bundled” With Energy in PPA
- 1 MWh of energy = 1 MWh of RECs
- RECs can be separated from energy and sold “unbundled,” but unbundled RECs may not produce RPS compliance



# Sale of RECs

- The PPA will define RECs—the definition will be very broad, and the Buyer usually will not let Seller reduce that breadth.
- California’s definition of “Environmental Attributes” is set by the CPUC and can’t be changed.
- Who bears the risk of change of law with respect to RECs (or anything else for that matter)?
  - Seller prefers to take risk of laws in effect or at least known on date of PPA
  - Buyer (especially California utilities) often try to require Seller to comply with law even if it changes—in California, Seller’s are only required to absorb “commercially reasonable” costs



# Restrictions on Assignments

- All PPAs will have both Seller and Purchaser restrictions on assignment without consent, as well as types of assignments that are permitted with consent
- Both Seller and Purchaser need to scour these provisions carefully, as there often will be both obvious and less obvious pitfalls



# Key Negotiating Issues re Restrictions on Assignments

- Collateral assignments to lenders and the ability of lenders to assign must be fully protected
- Clearly state that there is no restriction on upstream assignment of ownership interests
  - Do not assume that a restriction on assignment of assets will not apply to a transfer of ownership interests
- Beware of Purchaser's rights to assign the PPA to an affiliate, especially if Purchaser is thereby released
- When consent is required for an assignment, negotiate
  - “Not unreasonably denied, conditioned or delayed” language
  - Standards for approval



# Minimum Equity Ratio Requirements

- PROVISIONS: Seller must maintain at all times a specified minimum equity ratio
- Currently mostly show up in proposed contracts for nonrenewable resources, but some utilities are starting to raise issue in renewable contract negotiations
- Provisions as proposed would create unnecessarily high equity ratio requirements, increase Seller's cost of capital, and create long-term default risks



# Reasons Given for Minimum Equity Ratio Requirements

- Fin 46 and debt equivalence issues
- Utilities are mistaken when they propose minimum Seller equity ratios to address such issues
  - Seller needs to understand and be able to educate the Purchaser on these issues
- Minimum equity ratios are more justifiable when the Purchaser is granted a subordinate lien as security
  - This is one of multiple reasons for Sellers to resist demands for such liens





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