Power Purchase Agreement

Request for Information Response Summary

This document reflects summarized information obtained by the U. S. Department of Energy in response to a Request for Information (RFI) published March 2, 2011 entitled "Federal Government Power Purchase Agreements (PPA) Issues." Note that this is only a summary - it does not include comments based on response analysis and does not represent the opinion of the U.S. Department of Energy.

Contract Term Limitations

- Power Purchase Agreement (PPA) contract terms of 20-30 years are best (with a term less than 75% to 80% of system economic life due to Generally Accepted Accounting Principles (GAAP) and Internal Revenue Service (IRS) rules). Most respondents included a cost increase estimate for a 10 year versus 20 year contract. These estimates ranged from 25-65%. Cost increase estimates for a 20 versus 30 year contract: 15-20%.

- None of the proposed options were compelling as financiers would consider them to be high risk
  - **10 year contract with long-term Land Use Agreement (LUA):** It may be difficult to sell power into the market on a pure economic basis - the buyer must be willing to pay more than the market price due to a renewable portfolio standard (RPS) or other policy.
  - **10 year contract with 10 year option:** All of the respondents stated that there would be little or no benefit.
  - **Indefinite term with one year termination:** The majority of the respondents said this option is too risky, although several noted that inclusion of an appropriate Termination Value Schedule (TVS) helps. The "indefinite" term is limited by tax regulations.

- **Could long-term PPA be financed through loan with shorter term?** It was noted in the responses that in some circumstances, it may be beneficial to obtain a loan that is shorter than the PPA term**.**

- **Other potential contract length solution:**
  - Contractor has put option with strike price = Net Present Value (NPV) of expected revenues.
  - Long-term prepaid PPA (Federal agency pays for renewable power in advance).
  - 20 year PPA with host termination right in year 10, triggering the TVS.
  - 10 year contract structured with option to extend contract in years 5 & 11
    - Low PPA rates for first 5 years
    - Significant PPA rate increase in year 6 unless option is exercised
    - Similar option in year 11

End of Contract Terms

- **Typical end of contract options:**
  Most of the respondents noted the following PPA end of contract options as acceptable under IRS regulations for investment tax credit and other federal tax benefit eligibility:
  - Extension of PPA
  - Fair Market Value (FMV) asset purchase, with value determined by independent 3rd party at time of purchase.
  - Project removal (usually at contractor's expense)

  Other PPA end of contract options:

- Financier, at its option, either removes System or abandons at no cost.
- Financier continues to operate and sell output

- **Typical renewable system removal and restoration language:** There was a variety of responses including: restore site to original condition with reasonable wear and tear, spell out restoration requirements for surface and below-ground items. Some respondents included typical language examples.

- **Average removal cost:** Removal costs vary depending on system type, location, and contract length. Several noted that equipment salvage value should cover cost of removal. Those respondents that provided cost estimates indicated a range between 5-10% of total cost for a 15 year term ($.2/W or $0.005/kWh). A reserve fund could be established from project cash flows. Several respondents noted that removal results in needless loss of project benefits - 40% system output loss for removal after 20 years and 70% loss if removal at 10 years.

- **Infrastructure compensation requirements:** Answers were split on whether this would be required. Some respondents stated that compensation would not be required – the PPA payments over the contract term would be sufficient, while others said that compensation would be required. Respondent comments regarding need for compensation:
  - Compensation would be required. The PPA must specify appraisal approach for infrastructure compensation (usually FMV).
  - Compensation usually not required for electrical duct banks and piping, only for assets such as a water or natural gas system.
  - The contractor will assess FMV versus cost of removal, then may abandon in place.

Termination for Convenience (T4C)

- The majority of the respondents expressed concern regarding the government's unilateral right to terminate because it increases project costs and reduces project viability from the investor standpoint. A TVS reduces/eliminates this risk. The TVS must be detailed and specific, include all costs (including tax penalties for termination in first 5 or so years) necessary to make investor whole and be completed in a reasonable timeframe. The TVS could consider the contractor's ability to mitigate losses.

- There is also concern that cost recovery is limited to a certain percentage of contract price under FAR 52.212-4(l). FAR 52.241-10 is preferable since it should allow for a pre-negotiated schedule with higher costs.

- Many respondents stated that the following termination provisions should be used:
  - For T4C prior to Commercial Operation Date (COD): use more simplified process based on acceptance of cost presentation, per FAR 52.249-2 or FAR 52-241-10
  - After COD: TVS will provide termination cost, which includes recapturing any necessary taxes, and will otherwise make the investor whole.
  - Consensus that partial termination would fall under changes clause, FAR 52.243

- Many respondents stated that a termination ceiling does not provide sufficient assurances that investors will be made whole – that a TVS or termination floor is preferable. One respondent noted that a termination ceiling is better than no termination provision at all.

Site Access/Land Use Agreement (LUA) Options

- **Site access language in the PPA rather than LUA:** Mixed response. Several respondents felt that this would work, but most prefer a separate LUA. Inclusion of site access provisions in the PPA is problematic because of financier requirements and loss of access rights if PPA is terminated. A separate LUA allows for a separate landowner and power purchaser, prevents LUA language from being dispersed throughout the PPA and prevents any accidental deletions. The LUA term should exceed PPA term by at least 20% to encompass entire contract scope, including removal.

- **Key site access terms and conditions :** Free and unlimited access (vehicular and pedestrian access for O&M, transmission line and cable access, etc) with no restrictions and with consideration if site access prevents important deadlines from being met, "quiet use and enjoyment" of the site, no right of property owner to interfere and indemnification for pre-existing environmental conditions.

- **Preferred LUA type:** Most respondents prefer a lease.
    - A minority of respondents stated that an easement is preferable
    - Some respondents preferred a license because it provides the contractor with the most unlimited access without requiring payments
    - Other respondents indicated that project characteristics drive the appropriate LUA, bearing in mind that taxes or other financial liabilities may be triggered by certain LUAs, that it is important to ensure rights are protected (no encumbrance of asset) and that the LUA should run concurrent with the PPA, with a termination link.

- **FAR Part 41.501(c)(4) (52.241-5 Contractor's Facilities):** Some respondents stated this is not acceptable, others stated it is acceptable, and some did not answer the question. Those stating that it is acceptable indicated that it has been tested and may be acceptable to investors, but is not as straight forward as a lease; it provides the bare minimum for financing; the access rights limitations could create issues.

- **Impacts of not attaching LUA to the PPA:** Fifty-percent (50%) of respondents indicated that it would be fatal to the deal, as site control is essential for developers and lenders. A minority of respondents noted that this would not be fatal if the PPA provides strong enough access rights and provides remedies for denied access.

Special Purpose Entities (SPE)

- **Option 1: SPE is created, submits the PPA proposal, and is awarded the contract if selected.**
    - Differing opinions. A**cceptable Method According to Respondents:** A minority of respondents stated that administrative cost is minimal. Several stated that this option is workable but increases cost. Several others noted that it is important to allow any experience and other qualification requirements to be met by SPE

affiliates (i.e., the parent company) - is this allowable? SPE should have a reasonable period after award to comply with insurance and other requirements.

- **Unacceptable Method According to Respondents:** Several respondents noted that investors usually will not make firm commitments without a contract in hand because of high cost of due diligence, etc. A minority of respondents noted that forming a SPE will not negate potential novation requirement. Several respondents said that this is too administratively burdensome (CCR and ORCA registration requirements, etc). A minority of respondents also noted that this option leaves the contractor with an SPE with costs, but no assets if bidding is unsuccessful.

- **Option 2: Contract novation after contract award. Note that there is no novation guarantee and the novation process can take some time.** Several respondents noted that Contract novation is the only viable option and they need assurances that it will actually occur. It should become standard part of PPA process.

- **Option 3: The offeror subcontracts to the SPE. The original offeror is ultimately responsible for renewable project performance and fulfilling all contractual requirements.**
  - Differing opinions. A**cceptable Method According to Respondents:** The offeror can subcontract to SPE - there are several contract clauses to ensure offeror maintains responsibility for the project. It is possible to maintain performance obligation without degrading tax benefits. This is a workable option unless contractor wishes to structure SPE as bankruptcy-remote entity.
  - **Unacceptable Method According to Respondents:** Having the offeror subcontract to SPE may not allow SPE the proper tax status needed for PPA under IRS rules. This defeats one of the primary purposes of creating the SPE - to limit the liability of the provider and its lenders to the assets of the SPE and its insurance policies. This would essentially create a parent company guarantee and would not be tenable.

- **Option 4: If financiers have issues with payment under any resultant contract, an Assignment of Claims can be initiated in accordance with FAR 32.802.**
  - Differing opinions. **Acceptable Method According to Respondents:** This option can be used in conjunction with other options to provide financiers additional comfort. Any PPA must be assignable as collateral to the lenders in order to secure financing.
  - **Unacceptable Method According to Respondents:** Assignment of cash flows is not an acceptable way to secure solar project financing. This may not allow SPE the proper tax status needed for PPA under IRS rules.

- **Typical PPA ownership structures/financing approaches:** SPEs are required for all third-party financing – including structures such as sale leaseback, partnership-flip, and inverted lease. Tax-exempt use property issue is an important consideration.

- **Other SPE Comments:** SPE is a necessity for non-recourse financing. The most practical solution would be to allow for award to SPE. SPE would be sold to tax owner, so assignment and novation should be an expected step in the PPA process. There are ways to make the government a party to operations and maintenance (O&M) and performance guarantee agreements or make agreements available for pre-approval.