

MEETING BETWEEN REPRESENTATIVES OF MINISTRY OF INDUSTRY & TRADE AND VBF POWER & ENERGY WG

Time and Date: 14:00, Thursday, 15 November 2018

Venue: MPI's premises, 6B Hoang Dieu, Hanoi

SUMMARY

*Prepared by
VBF Power & Energy WG*

I. PARTICIPANTS

Government representatives:

- Mr. Nguyen Noi, Deputy Director of Foreign Investment Agency, Ministry of Planning and Investment
- Mr. Le Anh Duc, Director of Electricity Market Development and Human Resource Training Center, Electricity Regulatory Authority of Vietnam ("ERAV"), Ministry of Industry and Trade (MOIT)
- Mr. Le Dong Hai, Electricity Regulatory Authority of Vietnam (ERAV), MOIT

And representatives from relevant Depts.

VBF representatives:

- Mr. John Rockhold, Head of VBF Power and Energy WG
- Mr. Tomaso Andreatta, VBF Co-chair
- Mr. Gavin Smith, Clean Development Director, Dragon Capital
- Mr. Nguyen Thanh Hai, Associate, Baker & McKenzie Vietnam

And more than 15 representatives from businesses.

II. MAIN DISCUSSION CONTENTS

Introduction and brief on meeting agenda

- Mr. Nguyen Noi introduced attendees from government authorities;
- Mr. John Rockhold introduced VBF and its attending members.

Summary of DPPA issues

Mr. Gavin Smith, Green Development Director, Dragon Capital

Mr. Nguyen Thanh Hai, Associate, Baker & McKenzie Vietnam

- VBF welcomes the beginnings of an outline design for the DPPA concept to deliver into practical reality. VBF members have been in consultation with VLEEP and Deloitte and provided feedbacks from the market users to help the DPPA development process.
- In the future, it needs to have a public consultation process, e.g: workshops in Hanoi and HCMC, to show the market users that this is a serious and immediate prospect.
- VBF has chance to see the concept presentation from VLEEP that proposes 2 models to ERAV: Sleeved DPPA and Synthetic DPPA. From practical viewpoints, sleeved DPPA mechanism is feasible for DPPA.
- Sleeved DPPA: A cleared framework needed
 - ✓ What is the term of DPPA that ERAV and its consultant propose?
 - ✓ Construction risk should be taken into account, especially allocation of risks and cost between stakeholders / involved parties.
- Renewable energy credit: Carbon credit and renewable energy certificate, which is under authority of MONRE; there is not really available a market for renewable energy certificates

yet. Please kindly update the current status of coordination of the MOIT and the Ministry of Natural Resources and Environment (MONRE) in this respect.

- Transition to the competitive wholesale power market: Potential impacts on DPPA mechanism.
 - ✓ According to the recent Circular No. 36/2018/TT-BCT dated 16 October 2018 (with effective date from 6 December 2018) on power operation licenses, the model forms of power generation licenses have included a requirement that power generators are obligated to participate in the competitive power markets in accordance with the regulations on operation of the competitive power markets.
 - ✓ Please clarify whether it is **OPTIONAL** or **COMPULSORY** for power generators to participate in the wholesale power market given that under the current EVN PPA model for renewables, it is still optional for them to participate (power generators / sellers have the right to elect to participate in the competitive power markets).
- The capacity threshold for exemption from power generation license requirement for solar rooftop projects: Under the Circular 36/2018/TT-BCT, the capacity threshold of 1MW remains unchanged. As recommended, for rooftop solar, it should be increased to 3MW in order to attract more private investors' participation in the solar rooftop space.

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

- Two DPPA models proposed by the ERAV's consultant include: Sleeved DPPA and Synthetic DPPA with their own pros and cons. The comparison and evaluation of the pros and cons of each model will be based on the following 4 sets of criteria:
 - ✓ **Consistency with and relevance to the context, structure, orientations and roadmap for development of Vietnam's electricity market;** ensuring compatibility with international experiences in applying DPPA mechanism.
 - ✓ **Economic impacts:** The proposed model should harmonize the economic interests of stakeholders / parties involved in the DPPA mechanism. First, it is important to ensure that the incentives / benefits of renewable energy generating companies are at least comparable to those currently applied, such as FiT. In addition, relevant service providers must also be able to fully recover the costs incurred in DPPA transactions.
 - ✓ **Operations:** The proposed model should be simple and feasible in the context of Vietnam's power sector without generating a large amount of work, which may affect the operations of power sector's participants when implementing this mechanism.
 - ✓ **Legal aspects:** The proposed mechanism should be legally appropriate. In cases where changes to relevant legal regulations and provisions are required, the ERAV's consultant shall have to propose a phased roadmap rather than amending all regulations at once / immediately.
- Whichever model that meets the above criteria at a higher level will be selected. ERAV will consider VBF's proposal to select the Sleeved DPPA model in the process of working with ERAV's consultants.

Pilot scheme

Mr. Gavin Smith, Green Development Director, Dragon Capital

- More details are needed about the pilot scheme:
 - ✓ Which part of the consumers (e.g.: commercial, industrial, ...) may join the DPPA process.
 - ✓ Risks; scale; and set of criteria (in both competence and financial capacity) to select power generators for the pilot scheme.

- ✓ Authorities in charge of determining contents of the pilot scheme.
- ✓ DPPA participants are happy to carry the costs of power distribution and transmission from producers to end-users, but not willing to compensate EVN for loss profit. In general principle, it is not a role of both part-producers and end-users to compensate EVN for lost profit.
- VBF would like to highlight positive impacts of DPPA mechanism: to cover part of power generation capital cost, allow the entry of new investment/ finance into the marketplace, create more power generation,...that bring huge beneficial effects on the whole economics.
- Some issues to raise at the public consultation:
 - ✓ Sleeved DPPA: needs more details to better understand cost breakdowns and some terminologies.
 - ✓ The wheeling fee at VND305 is high. End-users expect to pay for green power the same as/ or less than the current price.
 - ✓ How long is the wheeling fee fixed for? How often could it be changed? The proposal that end-users to commit long-term contract (10 – 15 years) to buy power would be tricky as end-users do not know how the cost is going to change over such long period.
 - ✓ Regarding investment decision, will end-users buy power under the DPPA contract or continue with current EVN power supply contract? What would be the cost of EVN supply electricity for the next 10 years?
 - ✓ VBF understands that the Prime Minister issued the pricing framework for retail power prices in 2017. However, the part of consumers do not have any information about future development of retail tariffs. We need some transparency about how retail prices might develop over 5 – 10 years.

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

Regarding customers participating in DPPA program:

- The long-term goal is to design a DPPA model which ensure both manufacturing customers (including goods producers and service providers) can choose to use clean energy. According to the Government's policy, by 2021-2022, large power consumers, including industrial and commercial ones, will be able to transact directly with power suppliers on the electricity market. By this time, customers will also have many options to purchase electricity, either directly from power producers or from retail power companies.
- The objective of the pilot phase is to see whether the proposed model is feasible, effective, and how it influences and impacts on the structure of the electricity sector in Vietnam as well as related power companies and entities. Currently, the consultant of ERAV recommends limiting the customer groups in the pilot phase. Once the most feasible model is assessed as replicable, ERAV will expand groups of customers for engaging in this DPPA mechanism. According to the current analysis, the consultant of ERAV is focusing on the target group of industrial customers.

Regarding the coverage of the pilot phase:

- At present, ERAV is more focusing on selection of DPPA model before exploring the pilot program in depth.
- Regarding the proposed coverage of target capacity of about 300MW as stated in the VBF document, ERAV has not yet arrived at final decision as it should be based on the consultant's market survey results.
- VBF's proposal and willingness to participate in the market survey will be discussed with the consultant of ERAV and VLEEP will work directly with VBF on expanding the survey participants.

Regarding the selection of the agency to be the decision maker and the criteria for selection of renewable energy plants participating in DPPA:

- The consultant of ERAV is conducting research and has not finalized specific criteria yet. ERAV is consulting with the consultant on the possibility of selecting plants with a capacity of 30 MW or more.
- New mechanisms such as the DPPA require the permission of the competent authority to proceed. Based on the report of the consultant, ERAV will report to the Ministry of Industry and Trade for consideration. If such approval authority goes beyond MOIT's jurisdiction, it must be submitted to the Prime Minister.

Issues related to bidding of renewable energy resources, this falls under the mandate and function of MOIT's Electricity and Renewable Energy Authority.

Regarding public consultation with stakeholders: ERAV is working with the consultant to finalize the reports in November or December 2018. Depending on the quality of the report, ERAV will report to the MOIT leaders on organizing broad public consultation.

Regarding wheeling fees:

The total wheeling fees calculated in the model calculation are VND 305 - this is only an assumption. ERAV is requesting the consultant to prepare clear and transparent rules and method of calculation of such DPPA charges.

DPPA charge:

- Includes a variety of wheeling fees and charges: transmission and distribution costs (network cost), fees for electrical system's auxiliary services, load dispatch/electricity market operation costs, other management costs, etc.
- Except for distribution charge for which there is still no legal basis to regulate / specify separately, other types of charges already have legal basis. However, in practice, only the legal framework on electricity transmission charge are promulgated which are on an annual basis.

Regarding VBF's proposal to fix the term of wheeling fees for 5 years: Wheeling fees and charges are now determined and published annually. The determination of those DPPA charges for a fixed term of 5 years should be thoroughly studied as this is not consistent with the current regulations.

Regarding electricity transmission charge/cost: Currently, a uniform pricing framework is applied nationwide across the country, and there are not yet separate transmission charge for each region of Vietnam, and this is to ensure non-discrimination for all power sources connected to the power system at any location within the territory of Vietnam.

Cost and Losses

1.

Mr. Gavin Smith, Green Development Director, Dragon Capital

Whether national transmission cost is relevant to a power transmission that takes place mainly within the Southern power companies regional only. It does not seem fair to charge for inter-regional transmission the full cost of the national transmission.

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

- ERAV basically agrees that it is theoretically necessary to calculate the exact costs incurred for each transaction on the transmission line, similar to the method of calculating the transmission charge by node / region or length of involved transmission lines.
- Currently, a uniform charge/price is applied nationwide across the country. In the long run, ERAV will consider whether to change this mechanism. For the stable operation of transmission and distribution grids, it is currently not clear whether connection of renewable energy sources will do good or bad. Renewable energy sources are unstable / intermittent sources. Therefore, to ensure a stable grid operation, it requires a strong distribution network and ancillary services for effective backup. EVN is studying the impacts of connection of renewable energy sources to the grid.

2.

Mr. Gavin Smith, Green Development Director, Dragon Capital

About the approval process for DPPA participants, we would suggest that MOIT will be authorized body. Pilot scheme should set a target of 300 MW, which is less than half of the total installed capacity in the country.

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

- 300 MW is just the size of the pilot scheme, not the goal of the pilot.
- Regarding VBF's observation that the wheeling fee of VND 305/kWh or 1.7 cents is quite high, as mentioned, the fee must be sufficient to cover the costs incurred. For example:
 - Singapore: The retail tariff is about 19 cents, of which the total cost of transmission and distribution represents 23.5%.
 - Australia: The retail tariff is 23 cents, of which the total cost of transmission and distribution represents 40%.
- ➔ Currently there are not enough bases to affirm whether the 1.7 cent charge is high, but it is important to accurately reflect the cost incurred in the system.

3.

Mr. Gavin Smith, Green Development Director, Dragon Capital

- Regarding the retail power tariff roadmap, there are some incongruities inside the tariff structure. The distribution of the average increases between different groups of customers (residential, commercial, and industrial) seems very odd.
- Normal peak tariff contribution during one single day also seem to be incongruous. Peak demand is before and after the lunchtime. But in the afternoon, there is no peak tariff for retail packagers. The architecture within daily cycle of normal peak tariff seems to be incongruous against the current economic market conditions.

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

- ERAV will take into account VBF's comments on the tariff structure in our researching and modifying the structure of electricity retail tariffs among groups of customers.

Tax treatment

Mr. Nguyen Thanh Hai, Associate, Baker & McKenzie Vietnam

When considering to apply the DPPA mechanism, tax issue should also be considered, including on DPPA transactions, tariff structure and charges? ERAV may consult with MOF right from this study process of DPPA models to avoid any issues or obstacles as a result of tax considerations and issues when this DPPA mechanism comes into implementation. Net-metering scheme for rooftop solar energy was approved last year (under Decision 11 of the Prime Minister), but then it faced tax issues delaying implementation and now payments to generators under net-metering scheme has still not yet been settled.

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

- MOIT's Electricity and Renewable Energy Authority is taking the lead and coordinating with ERAV to study the net-metering scheme. VBF can communicate directly with the Renewable Energy Department of Electricity and Renewable Energy Authority for further details.
- The Electricity and Renewable Energy Authority is also studying the Green/Renewable Energy Certificates.
- Regarding the duration of the DPPA contract, the consultant is collecting a number of samples of power purchase agreements from other countries to study and provide a framework for DPPA in Vietnam. If VBF has any other relevant experience and DPPA samples, please provide us for reference.
- Circular 36/2018/TT-BCT still retains the capacity threshold of 1 MW for exemption of electricity operation license requirement: Prior to 2017, the exemption of electricity operation license would only apply to projects with a capacity of less than 50 kW. However, due to practical requirements and lessons from neighboring countries, ERAV has raised the exemption level to 1 MW under Circular 12.

Open discussion

1.

Mr. Gavin Smith, Green Development Director, Dragon Capital

- Considering the existing framework on rooftop solar, in order to install rooftop solar system that has two-way meter, there must be safety checked by EVN before the installation of the meter completed. So EVN has a safety control point over the installation of the solar rooftop system that touch the power transmission grid.
- In the last VBF Forum, VBF suggested a further control mechanism could be put in place to reassure EVN and local groups not to be negatively impacted by 3MW solar exemption, such as: notifying EVN on the scale of installation system, current consumption patron, or net exporting patron,...- which helps EVN confident with the idea of installing larger rooftop power system without power operation license in the area of power generation.
- Which is authority in charge of considering the exemption limit?

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

- Circular No. 36 is prepared by ERAV in coordination with entities such as EVN and other relevant entities to study and submit to the Ministry's leadership for consideration and

promulgation. As discussed, in the process of amending Circular 12 to issue Circular 36, ERAV held several meetings with EVN/related entities to review all conditions for licensing activities and thresholds.

- Tax treatment and issues related to net-metering scheme falls under the competence and functions of the Ministry of Finance.
- The adjustment of average electricity retail tariff is done according to the pricing framework for retail power tariff mechanism - according to Decision No. 24/2017/QĐ-TTg. The review and assessment of costs is carried out annually, ensuring the retail power tariff reflect the market costs.

2.

Virginia Foote, President, Bay Global Strategies

Whether ERAV has a timeframe and roadmap to get the next DPPA design to allow for public consultation?

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

- It is expected that by the end of 2018, the DPPA model will be completed for Vietnam. At this point, the consultant will have to finalize the draft DPPA pilot scheme; preparations for the pilot and milestones.
- Based on the advice of the consultant, ERAV will undertake preparatory work (e.g.: Determine the relevant regulations that need to be amended or supplemented, etc.), and report to the ministry leaders and, if necessary, to the Prime Minister.

3.

Mr. Vu Toan Thang, Business Development Director, AES

- How does the power purchase agreement between the buyer and seller in the wholesale electricity market differ from DPPA contract?
- The existing Law on Electricity does not mention distribution charge. So, in order to implement DPPA, is there any need to amend the Law on Electricity as a prerequisite? Or, in the absence of amendment to the Law on Electricity, can some interim form be introduced so that it is possible to implement DPPA scheme without distribution charge?

Feedback from Mr. Le Anh Duc - Director of Electricity Market Development and Human Resource Training Center, ERAV

- Both Sleeved DPPA and Synthetic DPPA models are related to the spot electricity market, but with different degrees of relevance.
- Firstly, under the Sleeved DPPA scheme, the excess part of the renewable energy generating companies will be sold through the spot electricity market at the market price. This, in ERAV's opinion, is not in line with Vietnam's current electricity market design.
- Under the Synthetic DPPA model, 100% of the output of the renewable energy generating companies will be sold through the market. Transaction agreement between the customers and the renewable energy generating companies (DPPA contract) will be settled through a financial contract (contract for difference - CfD). CfDs will set a fixed price for a certain period and the amount of sale between the customers and the RE generating companies.

These two parameters are agreed by both parties, but the payment for the CfD is the difference between the price in the contract and the spot price.

- Accordingly, Synthetic DPPA model is appropriate and completely similar to the current design of Vietnam wholesale electricity market. Adopting this mechanism will help to reduce the work to be done and the issues to be addressed.

Response by Mr. Le Dong Hai, ERAV representative

- The financial efficiency of renewable energy generating companies in the two mechanisms is similar. When implementing the mathematical formula, it shows the financial recovery for the power generation company as well as the electricity cost of the buyers.
- As mentioned, the application of the Synthetic DPPA model is in line with the current model of Vietnam. Basically, ERAV is supporting the Synthetic DPPA mechanism.
- Regarding the development of the electricity market, MOIT has finalized a draft circular regulating the operation of the competitive wholesale electricity market, which gives renewable energy sources an option to participate in the electricity market. The Circular is expected to take effect as of 01 January 2019.

Mr. Nguyen Noi and Mr. John Rockhold delivered closing remarks for the meeting.