BEFORE THE HARYANA ELECTRICITY REGULATORY COMMISSION BAYS No. 33-36, SECTOR-4, PANCHKULA- 134112, HARYANA

Case No. HERC/PRO - 52 of 2020

DATE OF HEARING : 03.11.2020 DATE OF ORDER : 03.11.2020

IN THE MATTER OF:

PETITION FILED UNDER SECTION 86(1) (B) OF THE ELECTRICITY ACT, 2003 FOR APPROVAL OF SOURCE AND DRAFT POWER PURCHASE AGREEMENT (PPA) TO BE EXECUTED WITH M/S AVAADA GREEN HNPROJECT PRIVATE LIMITED FOR PURCHASE OF SOLAR POWER ON LONG TERMS BASIS FOR USEFUL LIFE OF THE PROJECT i.e. 25 YEARS FROM 50 MW GRID INTERACTIVE SOLAR PV BASED POWER PROJECT LOCATED AT VILLAGE, MITHI SURERA, DISTRICT SIRSA AT A TARIFF DETERMINED BY THE COMMISSION UNDER SECTION 62 OF THE ELECTRICITY ACT, 2003, IN TERMS OF HERC REGULATIONS IN VOGUE.

Petitioner

Haryana Power Purchase Centre, Panchkula (HPPC)

Respondent

M/s Avaada Green HNProject Pvt. Ltd

Present On behalf of the Petitioner, through Video Conferencing

Smt. Sonia Madan, Advocate

Present On behalf of the Respondent, through Video Conferencing

Shri Deepak Khurana, Advocate

Quorum

Shri Pravindra Singh Chauhan, Member (In Chair) Shri Naresh Sardana, Member

ORDER

Brief Background of the case

1. HPPC has filed the present petition seeking approval of source & draft PPA to be executed with M/S Avaada Green HNProject Private Limited for purchase of 50 MW solar power for 25 years, from grid interactive solar PV based power project located at Village, Mithi Surera,

Distt. Sirsa, Haryana at a tariff to be determined by the Commission under Section 62 of The Electricity Act, 2003, in terms of HERC Regulations in vogue.

2. HPPC has submitted as under: -

- a) That, the Petitioner, Haryana Power Purchase Centre (hereinafter referred to as 'HPPC') is a joint forum created and owned by the State Distribution Licensees, namely, Uttar Haryana Bijli Vitran Nigam Limited and Dakshin Haryana Bijli Vitran Nigam Limited (hereinafter collectively referred to as 'Haryana Distribution Utilities' or 'Discoms'), with a mandate to arrange/procure economical, reliable and cost effective power including renewable and non-conventional sources for the Haryana Distribution Utilities in order to meet the universal service obligations of providing electricity to their consumers.
- b) That, the Respondent envisaged to set up a 50 MW grid interacted solar power project at Village, Mithi Surera, Distt. Sirsa, Haryana (herein after also refer to as "Project"). This Project has been envisaged as an Open Access/Captive Power Project under the Haryana State Solar Policy, 2016 for sale of power to industrial and commercial consumers in the State of Haryana as amended from time to time. The Project was registered with Haryana Renewable Energy Development Agency (hereinafter also referred to as "HAREDA") vide letter dated 15.07.2019 under Haryana State Solar Policy, 2016 (herein after may also be referred to as "Solar Policy") for Captive Consumption. The Project was granted final connectivity for sale of power under Open Access on 18.10.2019. The Respondent, on the basis of final connectivity approval, started construction of the Project. The construction of Project is in advance stage and Project is near completion.
- c) That in the meantime, a dispute arose between the Project Developer i.e., M/s Avaada Green HNProject Private Limited and HVPNL, Discoms, HPPC (collectively hereafter may also be referred to as "Haryana Power Utilities"). Considering that the Project is in advance stage of Completion and is located within Haryana, the parties involved in the matter were exploring ways to resolve the dispute such that the Project is not stranded and invaluable renewable energy is not lost. The Hon'ble Commission in its order dated 24th August 2020 in PROs bearing no. 23, 25 and 26 of 2020, in similar matter has remarked as under: -

"Commission feels that it would be a positive development if this long pending issue could be resolved amicably through mutual consultations because the ultimate aim of all stakeholders is to achieve the national target of 100 GW Solar Power by 2022."

- d) That, in the meanwhile, the Respondent has offered 50 MW solar power to HPPC/Haryana Discoms, for 25 year, from 50 MW grid interactive solar power project being set up at Village, Mithi Surera, Distt. Sirsa, Haryana (herein after also refer to as "Project") at a tariff to be determined by the Commission under Section 62 of The Electricity Act, 2003 (hereinafter may also be referred to as 'Act'), in terms of HERC Regulations in vogue. That the Respondent is, however, not under litigation regarding connectivity for captive usage of power generated from the Project.
- e) That, the Haryana Electricity Regulatory Commission (Terms and Conditions for determination of tariff for Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations has set the solar and non-solar RPO targets as under: -

FY	RPO (%) as per HERC RE Regulations, 2017		
ГІ	Non Solar	Solar	
2020-21	3.00	7.00	
2021-22	3.00	8.00	

- f) That, the Commission in its ARR order dated 01.06.2020 has considered the Submissions of DISCOMs and inter alia decided to waive off the current backlog of RPOs as a onetime measure. The Commission, however, directed the Discoms to make every possible endeavour to meet the RPO targets as given to them by the Commission in timely manner in true letter and spirit. The Commission has also directed Discoms to perform cost benefit analysis including trade-off between purchase of REC and RE power before rushing with proposal to procure RE power.
- g) That Government of India has set a target of installing 175 GW of renewable energy capacity by the year 2022, which includes 100 GW from solar, 60 GW from wind, 10 GW from biopower and 5 GW from small hydro-power. From a pure macro-economic perspective, reaching 175 GW RE by 2022 could dramatically reduce the coal import bill in 2022. Then there are environmental benefits (less pollution), social benefits (local employment opportunities) and investment inflows, which may need to be monetized to assess the complete range of benefits. Further, Ministry of Power (MoP), vide notification dated 14.06.2018, has pegged the RPO targets for both solar and non-solar RE power at 10.50% each by FY 2021-22.
- h) That addressing a joint sitting of both Houses of Parliament during January, 2020, Hon'ble President of India had announced as under:

"Keeping environment conservation in mind, my Government has enhanced the target for producing renewable energy to 450 gigawatts (GW). Under the Pradhan Mantri-KUSUM Yojana, it has been targeted to provide more than 17 lakh solar pumps to farmers across the country."

Earlier, in September, 2019 at the United Nations Climate Action Summit, Hon'ble Prime Minister of India had announced increasing the renewable energy target to 450 GW by 2030 from 175 GW by 2022.

From the perusal of above, it is apparent that the Government vision is to achieve 450 GW of renewable portfolio by 2030.

- i) That, considering the above, the Renewable Purchase Obligations are expected to increase in order to enable achievement of above goal by 2030.
- j) That MoP in its Order dated 17.4.2020 has proposed amendment to Electricity Act, 2003, wherein heavy penalties have been imposed as brought out here under:-
 - "(2) Notwithstanding anything contained in sub-section (1), in case any complaint is filed before the Appropriate Commission by any person or if that Commission is satisfied that any person, with effect from such date as may be notified by the Central Government, has not purchased power from renewable or hydro sources of energy as specified by it using its powers under the Act, the Appropriate Commission shall after giving such person an opportunity of being heard in the matter, by order in writing, direct that, without prejudice to any other penalty to which he may be liable under this Act, such person shall pay, by way of penalty, a sum calculated at the rate of fifty paise per kilowatt-hour for the shortfall in purchase in the first year of default, one rupees per kilowatt-hour for the shortfall in purchase in the second successive year of default and at the rate of two rupees per unit for the shortfall in purchase continuing after the second year."

Requirement of solar power for fulfilment of RPOs

k) That the existing solar power capacity available with Haryana DISCOMs through long term agreements is 125.8 MW and 238 MW through solar rooftop. Whereas, 267.8 MW is currently available from non-solar RE sources. Besides this, HPPC has made the following tie-ups for procurement of RE Power in order to fulfil the mandated RPOs:-

NON-SOLAR

Sr. No.	Name of the firm and/or Scheme	Contracted Capacity (MW)	Date of Signing of PPA	Expected Commissioning of Project			
Wind	Wind Power Projects						
1.	SECI, ISTS Wind T-II 1000 MW Scheme	150	13.12.2017	28.06.2021			
2.	SECI, ISTS Wind T-III 2000 MW Scheme	350	17.05.2018	150 MW in Sept, 2020 50 MW in Oct, 2020 50 MW in Nov. 2020 50 Mw in 31.08.2021			
3.	SECI, ISTS Wind T-III 2000 MW Scheme	590	21.01.2019	115 MW in April 2021 175 MW in 31.05.2021 300 MW on 28.07.2021			
4.	SECI, ISTS Hybrid (Wind+Solar) T-I 1200 MW Scheme	110	11.07.2019	13.08.2021			
Was	Waste to energy Projects						
4	JBM Environment Management Pvt. Ltd	6.77	21.09.2018	January, 2021			
5	Ecogreen Energy Gurgaon Faridabad Pvt. Ltd	25	Yet to be signed	2021-22			
Bion	Biomass Based Projects						
6.	Small Biomass projects (10 Nos)	65	2018 & 2019	2020-21 & 2021-22			
	TOTAL	1296.77					

SOLAR

Sr. No.	Name of the firm	Contracted Capacity (MW)	Date of Signing of PPA	Expected Commissioning of Project
1.	SECI, ISTS Solar T-I 2000 MW Scheme	100	27.11.2018	31.01.2021
2.	SECI, ISTS Solar T-II 3000 MW Scheme	400	28.05.2019	03.03.2022
3.	SECI (ISTS Hybrid (Wind+Solar) T-I 1200 MW Scheme)	330	11.07.2019	13.08.2021
4.	SECI (ISTS Solar T-IV 1200 MW Scheme)	250	19.03.2020	25.02.2022
5.	NIT-77 (241 MW on long term basis)	241	06.07.2020 (240 MW) 19.06.2020 (1 MW)	2021-22
6.	HPGCL (Solar)	93	Under process	2021-22
7.	PM KUSUM	14.57	01.07.2020 (2 MW)	2020-21
	Total	1428.57		

In addition to above, 100 MW per year is expected to be added every year through solar rooftop. Further, besides above procurement of another 50 MW solar power from M/s Amplus Sun Solutions Pvt. Ltd. stands approved by the Commission and proposal for another and 20 MW from M/s L R Energy Pvt. Ltd. is under process.

- I) That with the above arrangements/tie-ups, the total installed capacity to the tune of 2063 MW and 1565 MW of solar and non-solar RE power is expected to be available by the end FY 2021-22 to meet RPO targets besides energy requirement. Solar and non-solar RPOs to the level of 10.00% and 12.6% respectively are expected to be achieved through current sources during the FY 2022-23. Considering the anticipating upward revision of solar RPO targets beyond 10.5%, additional solar power shall be required for fulfilment of anticipated solar RPOs of Discoms for FY 2022-23 and thereafter.
- m) That, the extant Project, is already constructed and is expected to be commissioned by March, 2021 and therefore, can immediately supply power which will count towards meeting RPO for FY 2021-22 onwards.

Power to determine Project Specific Tariff Under Section 62 of The Electricity Act, 2003.

- That the Commission under Regulation 6 (1) (h) of the HERC (Terms and Conditions for determination of Tariff from Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2017 (hereinafter also referred to as "RE Regulations, 2017") is empowered to determine the project specific tariff from the Solar Power Project if the developers opt for the project specific tariff.
- o) That, the Chapter-8 RE Regulations, 2017 i.e. "Technology specific parameters for Solar PV Power Project" inter alia provides that the Commission shall not determine generic tariff under these Regulations and only project specific tariff, if required, shall be determined.
- p) The Commission in the past has exercised powers under the Section 62 of the Electricity Act, 2003 to approve the tariff as per Section 62 read with Section 86 (1) (b) of the Electricity Act, 2003, reliance in this regard is placed on Order dated 10.04.2018 passed in Case No. HERC/PRO-15 of 2016, wherein this Commission held that:-
 - "d) The petitioner has submitted that the Tariff Policy cannot override the provisions of the Electricity Act, 2003. It has been submitted that the Appellate Tribunal for Electricity in Appeal Nos. 106 and 107 of 2009- BSES Rajdhani Power Ltd. Vs. DERC & others, vide judgement dated 31.03.2010, has considered the matter and has held that notwithstanding the National Tariff Policy requiring procurement of electricity only through Competitive Bidding Process, the State Commission will have the jurisdiction under Section 62 of the Electricity Act, 2003. The relevant extracts from the decision of the Hon'ble Appellate Tribunal are as under:-

...

In view of the above, the Commission is fully empowered and authorized to entertain the petition for approval of the PPA including the price as per Section 62 read with Section 86 (1) (b) of the Electricity Act, 2003."

q) That, this Commission in its order dated 19.09.2016 passed in Case No. HERC/PRO-9 of 2016 has categorically observed that:

"6. Before parting with the ibid Order, the Commission observes that the Hon'ble APTEL in the matter of Appeal Nos 106 and 107 of 2009, has held that the State Commissions have discretionary power either to choose Section 62(1) to approve the PPA or to direct the Discoms to resort to competitive bidding in accordance with the National Tariff Policy read with Section 63 of the Electricity Act, 2003. It has been further held that it is purely a decision of the State Commission to decide whether to approve a negotiated tariff under Section 62 of the Act or to direct the Discoms to adopt competitive tariff discovery through competitive bidding."

That, scheme of The Electricity Act, 2003 inter alia provides for project specific tariff determination under Section 61 and 62 of the Act or adoption of tariff discovered through competitive bidding under Section 63 of the Act. Section 61 & 62 of the Act provide for tariff Regulation and determination of tariff of generation, transmission, wheeling and retail sale of electricity by the Appropriate Commission. Section 63 of the Act states that "Notwithstanding anything contained in Section 62, the Appropriate Commission shall adopt the tariff if such tariff has been determined through transparent process of bidding in accordance with the guidelines issued by the Central Government."

As such, it is open to the Commission to determine project specific tariff under Section 62 read with Section 61 & subject to prudent checks.

Mandate under the National Tariff Policy

r) That, the Government of India had notified new National Tariff Policy on 20 January, 2016 ("hereinafter also referred to as NTP, 2016"). The National Tariff Policy has been formulated and notified in continuation of the National Electricity Policy (NEP) which in turn is notified under Section 3 of the Electricity Act, 2003. NTP, 2016 has primarily focused on renewable energy, energy security and ensuring affordable tariffs. NTP, 2016, vouch for power procurement by Discoms through competitive bidding. However, the NTP, 2016 also

provides that the CERC and SERC shall be guided by the tariff policy in discharging their functions including framing the regulations. As such, NTP, 2016 is a guiding Policy for Regulators for discharging of various functions, however, has no binding mandate under the Act. Relevant portion of 'Legal Position' of NPT, 2016 is reproduced as under:-

"2.0 LEGAL POSITION

- 2.2 Central Electricity Regulatory Commission (CERC) and State Electricity Regulatory Commissions (SERCs) shall be guided by the tariff policy in discharging their functions including framing the regulations.
- 2.4"
- s) Notwithstanding to above, the clause 5.2 of the NTP, 2016 inter alia provides for tariff determination under Section 62 of the Act in respect of the Projects set up/envisaged under the Policy notified by the State to encourage investment in the State by allowing setting up of renewable generating plants. Relevant provision is reproduced as under:-
 - 5.2 All future requirement of power should continue to be procured competitively by distribution licensees except in cases of expansion of existing projects or where there is a company owned or controlled by the State Government as an identified developer and where regulators will need to resort to tariff determination based on norms provided that expansion of generating capacity by private developers for this purpose would be restricted to one time addition of not more than 100% of the existing capacity.

Provided further that the Appropriate Commission, as defined in the Electricity Act, 2003, shall ensure that in case of expansion of such projects, the benefit of sharing of infrastructure of existing project and efficiency of new technology is passed on to consumers through tariff.

Provided also that the State Government can notify a policy to encourage investment in the State by allowing setting up of generating plants, including from renewable energy sources out of which a maximum of 35% of the installed capacity can be procured by the Distribution Licensees of that State for which the tariff may be determined under Section 62 of the Electricity Act, 2003.

Provided that notwithstanding the provision contained in para 5.11(j) of the policy, the tariff for such 35% of the installed capacity shall be determined by SERC.

However, the 15% of power outside long term PPAs allowed under para 5.7.1 of National Electricity Policy shall not be included in 35% allowed to be procured by Distribution Licensees of the State.

(emphasis supplied)

Haryana Solar Power Policy, 2016

- t) The Government of Haryana had formulated Haryana Solar Power Policy 2016 (herein after may also be referred to as "Solar Policy") to promote the generation of power from solar energy. The Solar Policy was notified by the Haryana Government Renewable Energy Department on 14.03.2016. Solar Policy as per its Vision statement aims as under:
 - a. Promote generation of green and clean power;
 - b. Create conditions that would be conducive to the participation of the private as well as public sector in the setting up of solar energy projects in the country;
 - c. To encourage and promote a feasible Investment environment for the same;
 - d. Spread environmental consciousness among all citizens of the state
 - e. Aim for a decentralized and diversified management of the energy sector;
 - f. To work consistently towards an increase of the share of the renewable solar power;
 - g. To attain its target of Soar Renewable Purchase Obligation (Solar RPO) which is just 0.25% at present and would be scaled up to at least 8% by 2021-22;
 - h. To ultimately create a technology driven state with the right 'energy mix".
- u) That the Solar Policy, in lieu of National solar targets of 100 GW, aims to achieve total solar capacity of 3200 MW by the year 2021-22 which include 1600 MW through rooftop solar project under net metering.

Benefit to Haryana Discoms, consumers at large and State economy

- v) That this Project was conceptualized as an Open Access/ Captive Power Project. In case this Project starts selling power under the captive route, this will lead to loss of Cross Subsidy Surcharge and Additional Surcharge from the industrial consumers who will be the captive users of this Project. At this stage, these charges amount to Rs.1.77 / kWh (CSS of Rs. 0.62/and AS of Rs. 1.15/-) and that will be a direct loss to the Discoms which is ultimately be borne by the end consumers by the way of distribution and retail supply tariff. In the overall interest of the consumers of the state, it may be preferred that these projects sell power to the Discoms rather than selling to consumers under captive route.
- w) That the Project has been set up in Bhiwani (correction: Sirsa), near the load centre, therefore, there shall be a reduction of power distribution losses. Additionally, the State shall also be eligible to the State's 50% share of Goods and Supply Tax of the total Project cost.

- x) That, the Project is for a duration of 25 (twenty-five) years and shall contribute significantly in the generation of employment for local population as well as shall also provide lease rentals to the farmers for approximately next 25 (twenty-five) years in the State of Haryana.
- y) That for the reasons mentioned in the subsequent paragraphs, HPPC considers that the sourcing of solar power from this Project by the Discoms will be in the overall interest of all concerned including consumer of Discoms.
- z) Following prayers have been made:
 - a. To approve source and draft PPA to be executed with M/s Avaada Green HNProject Private Limited for purchase of Solar Power on long terms basis for useful life of the project i.e. 25 years from 50 MW grid interactive solar PV based power project located at Village Mithi Surera, District Sirsa at a Tariff determined by the Commission under Section 62 of The Electricity Act, 2003, in terms of HERC Regulations in vogue.
 - b. Pass such further order(s) or direction(s) as may be deemed necessary and fit in the circumstances of the case.

Proceedings in the Case

- 3. The matter was heard on 16th October, 2020, through virtual court (Video Conferencing). Sh. Deepak Khurana, Ld. Advocate for the Respondent submitted that, due to solar module degradation, the variation in CUF considered in States like Rajasthan, Gujarat, Maharashtra etc. as well as SECI ranges from 10 to 15% depending on Direct Normal Irradiation (DNI). The Ld. Counsel also prayed that the commission may consider extending the time period for implementing the project from six to nine month as nature of the project has undergone a change i.e. from captive to sale of power to the Haryana Discoms, requiring re-appraisal by the lending agencies. The Commission directed the Respondent to make written submissions with copy to the Petitioner.
- 4. In compliance of the directions of the Commission in Order dated 16.10.2020, the Respondent filed its written statement dated 23.10.2020, requesting for three modifications in the PPA w.r.t. the variation of declared CUF, timeline for achieving CoD and Performance Bank Guarantee. The Respondent has submitted as under:-

Variation of Declared CUF

- a) The draft PPA contains the following relating to variation of declared CUF of the Project: "4.6. Solar Power Developer shall maintain generation so as to achieve minus five percent (-5%) variation of the Declared CUF. The Solar Power Developer will be liable to pay to HPPC, penalty for the shortfall in CUF any Contract Year below 95% of the Contracted Energy. The amount of such penalty will be in accordance with the terms of this Agreement, which shall ensure that HPPC is offset for all potential costs associated with low generation and supply of power under the Agreement, subject to a maximum of 25% (twenty-five per cent) of the cost of this shortfall in energy terms, calculated at the Tariff. However, this compensation shall not be applicable in events of Force Majeure Event identified under the Agreement affecting supply of Solar Power by Solar Power Developer."
- b) That the variation of -5% on the declared CUF as allowed in the aforesaid provision of the PPA is very less. It is pertinent to mention that there are various issues pertaining to generation from renewable sources, such as weather, degradation of Solar Panels etc. Therefore, it is imperative that adequate percentage of variation in CUF, in order to avoid imposition of penalty, is permitted. The permissible variation in CUF (beyond which there shall be penalty under the PPA) is significant from the perspective of viability of the Project. In this regard, It would be relevant to refer to the following PPA/RFP/RFS (relevant clause reproduced) for Solar PV Projects being undertaken in various parts of the country by various agencies:
 - i) Request for Selection (RfS) Document for Selection of Solar Power Developers for Setting up of 1070 MW Grid-Connected Solar PV Power Projects in RAJASTHAN (Tranche-III) under Tariff-based Competitive bidding dated 16.07.2020 by SECI "Clause 8.1. SPD shall maintain generation so as to achieve annual CUF within + 10% and -15% of the declared value till the end of 10 years from COD, subject to the annual CUF remaining minimum of 15%, and within +10% and -20% of the declared value of the annual CUF thereafter till the end of the PPA duration of 25 years."
 - [Followed By Reverse E-Auction] from 100 MW Grid Connected Solar Photovoltaic Power Project to be developed in 700 MW Raghanesda Solar Park (Phase X), Gujarat dated 15.07.2020 by GUVNL- "Clause 3.9.3- Successful Bidder shall maintain generation so as to achieve annual CUF within + 10% and -15% of the declared value till the end of 10

years from COD, subject to the annual CUF remaining minimum of 15%, and within +10% and - 20% of the declared value of the annual CUF thereafter till the end of the PPA duration of 25 years."

- iii) Request for Proposal (RFP) For Procurement of 250 MW Power from Grid Connect Solar PV Power Projects Through Tariff Based Competitive Bidding Process by BREDA "Clause 4.6.1 SPP shall maintain generation so as to achieve annual CUF within +10% and -15% of the declared value till the end of 10 years from COD and within +10% and -20% of the declared value of the annual CUF thereafter till the end of the PPA duration of 25 years."
- iv) Request for Selection (RfS) for procurement of power on long term basis through competitive bidding process (followed by reverse e-auction) from 500 MW intra state grid connected Solar Photovoltaic Power Projects dated 27.12.2019 by MSEDCL—"Clause 3.12.1 They shall maintain generation so as to achieve CUF in the range of $\pm 10~\%$ of their declared value during PPA duration. The lower limit will, however, be relaxable by MSEDCL to the extent of grid non-availability for evacuation which is beyond the control of the developer."
- c) That in various States across the country, CUF variation of -15% (and at the least -10%) is being allowed. The aforesaid data is spread across four major states namely Rajasthan, Gujarat, Maharashtra & Bihar having considerable renewable energy source presence (the first three states) & therefore the said data is directly relevant. It is also of relevance to note that CUF variation of -15% (at the least -10%) is allowed even in those States (as above) where conditions such as DNI etc. are favourable for Solar PV Projects than in Haryana. This provides a reasonable, just & fair basis of provisioning for at least -10% CUF instead of -5% as currently proposed. Also, there does not appear to be any reasonable basis or rationale to have a departure from the said -15% CUF variation (or at the least -10%). It is further submitted that in terms of the objective & provisions of the Electricity Act, 2003, the Hon'ble Commission safeguards the interest of the consumers as well that of generators. In view of the above, it is submitted that CUF variation upto -15% (or at the least) 10% instead of (-) 5%, may be permitted, which is being followed by various procurers.
- d) In furtherance of the above, it is pertinent to mention that solar modules installed at the Project are prone to natural degradation, which leads to reduction in the CUF. As per International Electrotechnical Commission (IEC) Standards the average module degradation

is 0.7% per annum is the average module degradation, which is considerably high. In the above context, it is submitted that the major activities such as land acquisition, land development, detailed engineering, Topo Survey, Geo-tech investigation, civil foundation works and internal roads (substantially complete) for the Project of the Respondent stand already completed and equipments for the Project have been substantially procured. Owing to the aforesaid, there is almost no possibility for installation of additional modules to restrict CUF variation to -5%. In view of the aforementioned position as well, CUF variation upto (-) 10% instead of (-) 5% is critical for the Project and may kindly be considered & permitted by the Commission.

- e) It is further submitted that on account of degradation of solar modules, additional modules are required to be installed after few years so as to meet CUF criteria, if variation of -5% as proposed in the draft PPA is to be adhered to. Since tariff is to be determined by the Commission on cost plus basis, for additional cost to be incurred on additional modules, the parties will have to approach the Commission again for determination of capacity charges on account of additional cost incurred, which can be avoided by making the CUF variation -10%.
 - Satisfaction of conditions subsequent by the Solar Power Developer/COD
- f) The provision pertaining to satisfaction of condition by the Solar Power Developer in the draft PPA:
 - "3.1. The Solar Power Developer agrees and undertakes to duly perform and complete all of the following activities at the Solar Power Developer's own cost and risk within six (6 months) from the Effective Date, unless such completion is affected by any Force Majeure Event, or if any of the activities is specifically waived off in writing by HPPC.

"

g) The provision relating to COD of the Project in the draft PPA is as under:-

"WHEREAS the Solar Power Developer shall achieve Commercial Operation Date (as defined below) within six (6) months from the date of signing of this Agreement."

.....

- 7.1 Solar Power Developer's Obligations
- 7.1.1 The Solar Power Developer undertakes to be responsible, at Solar Power Developer's own cost and risk, for:

.....

- c. achieving Commercial Operation Date within 6 months from the Effective Date;
- 11.1 Commissioning / Schedule Delivery Date

The Commercial Operation Date of Solar Power Project shall be within 6months from the date of signing of Agreement subject to Force Majeure and/or due to delay in grant of Consents, Clearances and Permits by any Governmental Instrumentality & the commissioning procedure is mentioned in Article-19."

- h) That the Project was conceptualised as an Open Access/ Captive Power Project. Thereafter, in the overall interest of the consumers, it was agreed that the Projects shall sell power to the Discoms rather than selling to consumers under captive route. The credit appraisal of the loan proposed to be taken by the Respondent for the Project was done on the aforementioned premise i.e. Open Access/Captive. Inasmuch as now there is a change in the said premise, the Respondent is required to get a fresh credit appraisal for the Project. The said process of approval and thereafter the disbursement of funds shall take around 4-6 months. In view of the above, the Respondent prays that the period of six months for satisfaction of conditions subsequent and achieving the COD would not be adequate & may kindly be increased to nine months. The Respondent submits that it shall make best efforts to complete the Project and achieve COD within the period of six months, however, considering the afore-mentioned factors, which are not wholly in control of the Respondent, the Respondent is seeking an additional period of 3 months.
- i) Even otherwise, because of the global pandemic (COVID-19) there are various disruptions in the entire systems including banking and thus, the process takes more time than usual. In view of the above unprecedented situation as well, it is submitted that the time period of 9 months be considered for satisfaction of conditions subsequent and achieving the COD.
- j) It is further pertinent to mention that comparatively the time period of six months for satisfaction of conditions subsequent and achieving COD is lesser than the time period permitted for the same, under PPA/RFP/RFS for Solar PV Projects being undertaken in various parts of the country by various agencies. This provides a reasonable basis for allowing sufficient time period to achieve the COD, which the Respondent is requesting to be increased by only 3 months (from 6 months to 9 months). The details are as follows:
 - i) In SECI RfS (*supra*), the time period provided for Project to be commissioned is 18 months from the date of signing of PPA and time period for achieving Financial closure is 12 months from the date of PPA;
 - ii) In GUVNL RfS (*supra*) the time period provided for Project to be commissioned is 15 months from the date of signing of PPA and time period for achieving Financial closure is 9 months;
 - iii)In MSEDCL RfS (*supra*) the time period provided for Project to be commissioned is 18 months from the date of signing of PPA and time period for achieving Financial closure is 12 months from the date of PPA;

iv)In BREDA RFP (*supra*), the time period provided for Project to be commissioned is 18 months from the date of signing of PPA and time period for achieving Financial closure is 12 months from the date of PPA.

In view of the above, therefore, it is prayed that time period of 9 months instead of 6 months be permitted to achieve the conditions subsequent and for achieving the COD.

Performance Bank Guarantee

- k) The provision pertaining to Performance Bank Guarantee in the draft PPA are as follows:"3.3.1. The performance bank guarantee ("Performance Bank Guarantee") having validity of
 twelve (12) months from the date of signing this Agreement and of Rs. 20 Lakh/MW to be
 furnished under this Agreement shall be for guaranteeing the commencement of the supply of
 power up to the Contracted Capacity within the time specified in this Agreement as per format
 prescribed by HPPC."
- 1) That the value of Performance Bank Guarantee (PBG) for an amount of Rs. 20 Lakh/ MW is on the higher side. In this regard, it is submitted that the value of PBG under the PPA/RFP/RFS (relevant clause reproduced) for Solar PV Projects being undertaken in various parts of the country by various agencies is comparatively lesser. This provides a reasonable, just & fair basis of having PBG of Rs 8,00,000/MW. The details are as follows:
 - i) In SECI RfS (*supra*)- Clause 11.1 provides for Performance Bank Guarantee of Rs. 8,00,000/MW;
 - ii) In GUVNL RfS (supra) Clause 3.7 provides for Performance Bank Guarantee of Rs. 9,44,000/MW;
 - iii)In BREDA RFP(supra)- Clause 2.19 provides for Performance Bank Guarantee of Rs. 10,00,000/MW.
 - iv) In MSEDCL RfS (supra)- Performance Bank Guarantee is Rs 14,00,000/MW.
- 5. The case was finally heard on 03.11.2020, through video conferencing, wherein the Respondent reiterated the contents of its above reply, which for the sake of brevity has not been reproduced herein. Per-contra, HPPC argued that petition for source approval was filed with the Commission, consequent to the consensus between the parties on the Terms & Conditions contained in the draft PPA and it is now not open to the Respondent to back track and seek changed in the draft PPA.

Commission's Analysis and Order

- 6. The Commission heard the arguments of the parties at length as well as perused the written submissions placed on record by the parties. The Commission observes that HPPC has to meet the Solar RPO targets fixed by the Commission, under Haryana Electricity Regulatory Commission (Terms and Conditions for determination of Tariff from Renewable Energy Sources, Renewable Purchase Obligation and Renewable Energy Certificate) Regulations, 2017 (HERC RE Regulations, 2017). The Commission, in its ARR Order dated 01.06.2020, has already observed that DISCOMs have defaulted in meeting the Solar RPO obligations. The shortfall in meeting Solar RPO upto FY 2018-19 was 1850 MUs. Further, during FY 2019-20 (till Dec., 2019), shortfall in meeting Solar RPO was 1532 MUs. Although, the Commission, as a onetime measure in view of the Covid- 19 Pandemic, decided to waive off the current backlog of RPO, but, directed Discoms to make every possible endeavor to meet the RPO targets as has been given to them by the Commission in timely manner in true letter and spirit. Undoubtedly, such like projects in the kitty of DISCOMs shall enable them to achieve their RPO targets, which is expected to increase substantially in the coming years.
- 7. The Commission has perused the provisions of National Tariff Policy, 2016, Haryana Solar Policy, 2016 as well as Regulation 6 (1) (h)/47 of HERC RE Regulations, 2017. The said statutes empower the Commission to determine project specific tariff from the Solar Power Projects. In a similar matter, the Commission, vide its Orders dated 14.09.2020 (HERC/PRO-45 of 2020), and 14.10.2020 (HERC/PRO-49 of 2020) has granted approval for procurement of 50 MW Solar Power from M/s. Amplus Sun Solutions Pvt. Ltd., & M/s LR Energy Private Limited for 25 years, at tariff to be determined by the Commission under section 62 of the Electricity Act, 2003.
- 8. The Commission has considered submissions / arguments and the documents placed on record by the parties in the present matter. The Commission has considered the prayers of the Petitioner i.e. approval of source and the PPA as well as the relief sought by the Respondent herein viz. variation in the declared CUF and Performance Bank Guarantee (BG) as well as extending the time period for commissioning the project.
- 9. At the outset, it is observed that as per standard practice no party ought to be considered as deemed drafter of the PPA agreed upon. As a corollary the draft PPA is the result of consensus between the contracting parties. Having reached a consensus on all the terms and conditions of the draft PPA, the Generator / Respondent herein has sought some relaxation /

deviations to the same. The Commission has dealt with the submissions of the Respondent on merit as under:

- (i) Variation in Declared Cumulative Utilization Factor (CUF): it has been argued by the Ld. Counsel, appearing for the Respondent, that due to degradation in the Solar Module overtime by about 0.7% per annum on an average basis as per the International Electrotechnical Commission (IEC), further, the variation in CUF could be anywhere between 10% to 15% as allowed by a few other States in India. Additionally, it has been submitted that the actual variation can only be ascertained after CoD. While the Ld. Counsel, appearing for the Petitioner i.e. HPPC/DISCOMs, would argue that similar terms have earlier been incorporated and agreed to by the a few other solar developers including the project selected through competitive bidding route. Hence, there ought not to be any discrimination as such and no such issue was ever raised by the Generator. After careful perusal of the rival contentions, the Commission is of the considered view the all such solar power projects are set up or to be set-up in Haryana. Hence, the CUF is reckoned with after taking in to account the situation obtaining in Haryana. Further, the ground realities including solar irradiation level may also vary from one State to another. The CUF variation permitted in some other State / SECI ought not to be generalized as such. Resultantly, in order to maintain a level playing field for all the solar power developers in Haryana, the Commission is not inclined to allow the relief sought on this issue. Accordingly, the same is rejected as devoid of merit.
- (ii) BG (Performance Bank Guarantee):- The Generator / Respondent has submitted that the BG/MW in onerous and may be reduced in line with SECI/few other States. Counsel for the Respondent, Ms. Sonia Madan, argued that the a few other solar developers have already submitted the BG as per the PPA i.e. Rs 20 lakh/MW. The Commission observes that BG is essential to ensure that the developer, on declaring CoD, achieve the performance level as envisaged and agreed upon by the parties. The validity of the same, in the present case, is only for 12 months. The nominal amount that a Bank may charge for the BG for 12 months ought not to be considered as onerous.

Having observed as above, the Commission has taken note of the fact that the petitioner, in the hearing held on 03.11.2020, did not press for this relief as such. Hence, the Commission is not giving any Order on the same.

(iii) SCOD: The relief sought for extending the time period for commissioning the project has been

considered. It has been submitted by the Generator / Respondent that project of such nature

has a gestation lag ranging from 18 to 20 months. Further, SECI and a few other States have

allowed 18 months for achieving CoD. The Commission observe that the Respondent must

have done due diligence before agreeing to 6 months' time period for commissioning the

project, any delay in the same, would certainly cause some hardship to the Petitioner i.e.

HPPC/DISCOMs for meeting their planned RPO targets. Nonetheless, the fact cannot be

ignored that the unprecedented worldwide pandemic brought all activities to a standstill for

quite some time slowing down all economic activities. Hence, the Commission considering

the impact of COVID-19, which is beyond reasonable control of the Generator /

Respondent, allows 9 months (6+3) instead of 6 months for commissioning the instant

project. No further extension beyond the said period, for declaring CoD, shall be considered

by the Commission.

10. In view of the above findings / discussions, the Commission approves / Orders as under:

i) Approves the present source of procurement of Solar Power under section 86(1)(b)

of the Electricity Act, 2003.

ii) Approves the draft PPA to be executed with M/s Avaada Green HN Project Private

Limited for purchase of solar power for 25 years from the 50 MWp grid interactive

Solar Pv power project located at Village Mithi Surera, Dt. Sirsa, Haryana.

iii) Scheduled date of commissioning the project shall be nine months (6+3) from the

effective date instead of six months.

iv) Tariff shall be determined by the Commission under Section 62 of The Electricity

Act, 2003, on a separate petition to be filed by the Generator.

11. The Petition is disposed of accordingly.

This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on

03.11.2020.

Date: 03.11.2020

Place: Panchkula

(Naresh Sardana) Member

(Pravindra Singh Chauhan)

Member

18