
**COMMENTS/SUGGESTIONS/OBSERVATIONS
BY SOLAR ENERGY CORPORATION OF INDIA
LIMITED**

ON

**CERC “Draft (Procedures, Terms &
Conditions for granting of Trading
Licence & other matters) Regulation,
2019”, ECO-14/06/2019-CERC dated
July 24, 2019**

September 2019

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1 Key challenges and risks to power traders

Before venturing into an analysis of specifics regarding the aforesaid draft regulations and its impact of incumbent trading licensees, it is important to elucidate some key facets of power trading that have been drawn from global experiences and assessment of Indian power sector. Further certain critical issues that loom large for the power sector need to be discussed so that corrective courses of action can be envisaged.

Electricity markets are time sensitive and are impacted by geographical and seasonal variations. Electricity traders enable generators/utilities to hedge part of their risks to the counter-party thereby reducing their financial exposure. The foremost value addition a trader brings to the table is 'access to market'. By virtue of their expertise and nature of business, the trader can offer access to a larger pool of market participants to generators or utilities whose core business is not to maintain national presence in power markets. Effective electricity trading enhances the ability of generators to operate plants at peak performance and encourages ongoing improvements. These improvements in plant efficiencies boost productivity and lower operating expenses. Based on the accurate price signals driven by trading, utilities can balance consumer demand for power to absorb price shocks or uncertainties in the market, without which consumers could be burdened with exorbitant electricity prices as well as failures in quality supply.

The Trader is essentially a market facilitator and not a market maker. As conceived in the Indian context, the power trader cannot be a market maker providing comprehensive risk-management solutions, but only be a manager of the inherent risks of the buyer/seller being serviced. It is difficult or rather impractical for a power trader to be both. As a facilitator in an asset-backed business, power trading acts as the interface between the market and the organisation's asset base. It may also act on its own, speculating on price signals, either trading around the organisation's own assets or in isolation with no physical asset backing. The financial incentives available to the power trader in India does not allow for absorbing the entire financial risk that traders are exposed to and leads to erosion of their net worth. To ensure that trading activities reflect the strategic objectives of the market participants, it is critical that the function of trading is integrated as an interface in the overall scheme of power markets.

Being responsible for upholding an established code of conduct and governed by legislation, policy and regulation, the power trader is a harbinger of market surveillance and oversight. Thus, power traders can promote the creation and development of transparent electricity markets, minimising risk to power generators, utilities and consumers.

However, power traders face their own share of risks, the key risks are – regulatory/policy, financial risks and performance risks.

2 SECI's perspective

SECI is a Government of India Undertaking and has been established for promotion of Non-conventional Energy in India primarily the solar power and wind power. The key objectives of SECI are:

- To plan and execute an integrated programme on development and implementation of renewable energy projects
- To Own, manage, investigate, plan, promote, develop, design, construction, operation, maintenance, renovation, modernization of power projects in solar, on-shore/off-shore wind, geo-thermal, tidal, bio-gas, bio-mass, small hydro and other renewable energy sources in India and abroad
- Carry on business' of generation, forecasting, purchasing, producing, manufacturing, importing, exporting, exchanging, selling and trading in power products and services in India and abroad
- Plan, develop, maintain, lease, hire, manage solar parks, infrastructure facilities, and all related ancillary facilities & services in India and abroad
- Carry on the business of planning, investigation, survey, research, design and preparation of preliminary feasibility and detailed project reports, related to Power Projects in India and abroad
- Co-ordinate the activities of its subsidiaries and Joint Venture Companies, to determine their economic and financial objectives / targets and to review, control, guide and direct their performance with a view to secure an optimum utilization of all resources placed at their disposal
- Assist, carry out such directions as may be issued by the Administrative Ministry from time to time in executing, evolving, managing, overseeing and coordinating programmes and projects under Jawaharlal Nehru National Solar Mission and all such other Programmes or Missions as may from time to time to be implemented
- Establish, provide, maintain, conduct, scientific and technical research, experiments, pilot projects and tests of all kinds and to process, improve, innovate and invent new products, technologies, directly or in collaboration with other agencies in India & abroad to achieve commercialization
- Engage in the business of performance monitoring, data analysis, resource assessment, cost engineering, technology forecasting, training & capacity building, skill development, promotion & awareness campaigns etc. in India and abroad
- Promote, organize, conduct and render consultancy services in the related activities of the Company in India and abroad

SECI has been functioning as an Implementing Agency and facilitating for the Jawaharlal Nehru National Solar Mission (hereinafter referred to as 'JNNSM') for development, promotion and commercialization of the solar energy technology in India. SECI has been designated as a Nodal Agency for implementation, inter alia, the scheme for developing the grid connected solar power capacity and wind power capacity through different avenues and means in India.

SECI is acting essentially as an intermediary at the instance of the Government of India to facilitate the establishment of solar power projects and wind power projects, to purchase and resale of electricity from such projects to the benefit of the distribution licensees in various States. For the above purpose SECI requires Trading Licence under the provisions of the Electricity Act, 2003.

SECI is not acting in a role of a Margin trader or otherwise independently purchasing electricity from the Power Developers for commercial purposes to gain through trading retaining option to sell electricity to any person at such time and on such terms and conditions including the price as SECI may decide from time to time. SECI is also not retaining the contracts entered into with the Solar Power Developers (SPDs) and Wind Power Developers (WPDs) without entering into a back to back contract for resale of the power purchases immediately or to trade such quantum of power in the open market or through the platform of Power Exchange or otherwise to earn any profit. SECI has been functioning on a fixed Trading Margin of 7 Paise/kWh.

The obligation of SECI as an intermediary to facilitate purchase of solar power and resale of the same has been on a back to back basis to the obligation to be performed and liabilities to be discharged by the distribution companies. By its very nature, considering the role of SECI as an intermediary agency, the financial exposure of SECI cannot be unlimited.

In the context of the above, SECI has a role to facilitate the purchase of non-conventional power from the project developers and resale of the same to the distribution licensees. SECI is, however, evolving and administering the scheme for payment security mechanism to the Solar Power Developers such as out of funds created by the Government of India and also through enforcement of the recovery from the distribution licensees through Tripartite Agreement entered into between the Government of India, the State Governments and the Reserve Bank of India. SECI has also to coordinate the purchase of power from the SPDs and sell power to the distribution licensees.

In addition to the above, SECI has to evolve in an aggressive manner the development of the solar and wind power projects in India to facilitate the implementation of the ambitious programme of the Government of India to reach a higher quantum of green power to be consumed in India and progressively the reduction of the consumption of power generated by use of fossil fuel. SECI has to constantly invest in resources for initiation of the programme for the development of solar-park, wind-park, identification of the areas of development, identification of the resource potential available at various places for setting up of the non-conventional projects. Unlike other Trading Licensees, SECI has not been established to undertake the trading with the existing generator and existing distribution licensees. SECI, on the other hand, actively promotes further development of solar and wind power projects.

There have also been instances where SECI has to invest in the project itself to undertake generation particularly to evolve mechanism for development of solar project in green field areas and green field projects including in remote areas like Lakshadweep, Andaman and Nicobar and new non-conventional energy sources. For the above purposes, SECI requires some revenue for meeting financial requirements of its involvement.

In the context of the above, SECI ought not to be considered as a Trading Licensee established only for the purpose of earning Trading Margin but from the point of view of a vehicle established for promotion of establishment of solar, wind and other non-conventional projects in large scale.

As per the policy of the Central Government, SECI will be involved in facilitating the establishment of the capacity of 100 GW in solar projects, 60 GW in wind projects as per the Government of India's directions.

In addition to the above, SECI has also been administering Viability Fund Scheme (VGF) as well as other similar schemes that Government of India evolves from time to time to promote non-conventional energy projects.

2.1 Comparison of Proposed Draft Regulations with existing Regulation

The proposed Draft Regulation has merged the two existing regulations i.e Terms and Conditions for grant of trading licence and other related matters Regulations, 2009 and Central Electricity Regulatory Commission (Fixation of Trading Margin) Regulations, 2010.

The Draft Regulations have been framed with the objective to specify the terms and conditions for grant of trading licence and other related matters including but not limited to capital adequacy and liquidity requirements for the applicants and existing trading licensee, obligations of the trading licensees, requirements for submission of information, penalties for contravention and non-compliance by the trading licensees and specifying the trading margin that shall be charged by the trading licensees for different types of contracts.

The section captures the changes proposed under Draft Regulation as well as new provisions, if any, as presented in *Exhibit 1*

Exhibit 1: Comparison of proposed and existing regulations

| Existing Regulation | | | Proposed Regulation | | | Observations/Comments/Suggestions |
|--|---------------------------|-----------------------------|--|---------------------------|------------------------------|---|
| Technical Qualification | | | | | | |
| <p>The Applicant shall have at least one full-time professional having qualifications and experience in each of the following disciplines:</p> <p>a. Power System Operations and commercial aspects of power transfer with degree in engineering having 10 years' experience in the field.</p> <p>b. Finance, commerce and accounts having CA/ICWA/MBA (Finance with at least 5 years of experience in the field</p> | | | <p>The Applicant shall have at least one full-time professional having qualifications and experience in each of the following disciplines:</p> <p>a. Power Trading, Energy Risk Management or System Operation with qualification degree in Engineering/Management with at least 5 years of experience in the field</p> <p>b. Finance, commerce and accounts having CA/ICWA/MBA (Finance)/Degree with majors in Finance/Accounts with at least 5 years of experience in the field</p> | | | <p>The proposed draft has widened the field for sourcing manpower.</p> <p>With requirement of experience reduced by 5 years, it may be cheaper to engage an expert.</p> |
| Financial Qualification | | | | | | |
| Category | Min Net Worth (Rs. Crore) | Volume of Electricity in FY | Category | Min Net Worth (Rs. Crore) | Volume of Electricity in FY | <p>The proposed draft has increased the number of categories and has increased the minimum Net worth requirement with new slab depending on volume of trade to be transacted</p> <p>The lowest category (by volume) wise Net worth requirement is proposed to be increased by Rs.1 Crore thus increasing the entry barrier. However, Upper cap of the volume in the lowest Category has also been increased thus limiting the cost on</p> |
| Cat I | 50.00 | No Limit | Cat I | 75.00 | Above 5000 MUs to 10,000 MUs | |
| Cat II | 15.00 | Less than Equal to 1500 MUs | Cat II | 35.00 | Less than Equal to 5000 MUs | |
| Cat III | 5.00 | Less than Equal to 500 MUs | | | | |

| Existing Regulation | | | Proposed Regulation | | | Observations/Comments/Suggestions |
|--|------|----------------------------|--|-------------|-----------------------------------|---|
| Cat IV | 1.00 | Less than Equal to 100 MUs | Cat III | 20.00 | Less than Equal to 3000 MUs | on account of maintaining the Net Worth on the new entrant for trading volume up to 500 MUs. In either case, in order to maintain proposed Net Worth, traders will have to incur more cost. Further, SECI will have to keep on increasing the Net Worth, in the years to come as it enters into more of such contracts with seller and buyers. |
| | | | Cat IV | 10.00 | Less than Equal to 1500 MUs | |
| | | | Cat V | 2.00 | Less than Equal to 500 MUs | |
| | | | <p>Provided that for Category I Trading Licensee, an additional net worth of Rs.20 Crore would be required for every 3000 MUs of electricity traded over and above 10,000 MUs during a Year</p> | | | |
| Applicability of Trading Margin | | | | | | |
| No provision in Regulation 2009. | | | <p>Trading margin shall be applicable to the following types of contracts undertaken by the Trading Licensee:</p> <p>(a) Short term contracts (where period of the contract of the Trading Licensee with either or both the seller and the buyer is up to one year including transactions undertaken through power exchanges);</p> | | | Earlier trading margin was limited to only short term contracts. Now it is being extended for Short Term, Medium Term and Long Term. This is going to adversely affect SECI as it enters only into Long Term (LT) contracts. In LT contracts, a Trader is exposed to longer period of time on account of risk of payment default or risk of dishonouring the contract by the buyer. This aspect of Traders risk has not been thought of |

| Existing Regulation | Proposed Regulation | Observations/Comments/Suggestions |
|---------------------|---|--|
| | <p>(b) Long term contracts and medium term contracts (where period of the contract of the Trading Licensee with both the seller and the buyer is more than one year);</p> <p>(c) Back to Back deals;</p> <p>(d) Cross Border Trade of Electricity.</p> | <p>while extending the applicability of Trading margin to Traders.</p> <p>The term `Back-to-Back deal' is defined in the proposed Section 2 (1) (d) to have the same meaning as is assigned under the Power Market Regulations, 2010. The Power Market Regulations deals with the back to back deal under Regulation 4 (i) (b) as the Inter State transaction in which an Electricity Trader buys a specific quantity of power for a particular duration from one party and substantially sells it to another party on the same terms and conditions where such transaction does not expose the Trader to any price risk, it may expose the Trader to credit risk and operational risk. However, as per the Explanatory memorandum issued by CERC for the proposed regulations, the back to back deal has been explained as “back to back signing of PPA and PSA with no ownership on trader and there is no default risk on trader. The payments under such cases shall be made to developers on realization of payment from buying entities (discoms)”. CERC may amend the definition of back to back deals in the proposed regulations accordingly.</p> |

| Existing Regulation | Proposed Regulation | Observations/Comments/Suggestions | | | | | | |
|-----------------------------------|--|-----------------------------------|----------------|----------------------|--|-----------------------------------|---|---|
| | | | | | | | | |
| Trading Margin | | | | | | | | |
| | <table border="1"> <thead> <tr> <th data-bbox="857 539 1055 619">Contract Type</th> <th data-bbox="1055 539 1482 619">Trading Margin</th> </tr> </thead> <tbody> <tr> <td data-bbox="857 619 1055 1129">Short term contracts</td> <td data-bbox="1055 619 1482 1129"> Between 0 Paise/Unit to 7 Paise/Unit Where payment is not done through Escrow Arrangement or Letter of Credit is not provided with amount equivalent to one point zero five (1.05) times of contract value in favour of seller, Trading Margin would be limited to 1 paise/Unit </td> </tr> <tr> <td data-bbox="857 1129 1055 1374">Contracts through Power Exchanges</td> <td data-bbox="1055 1129 1482 1374"> Between 0 Paise/Unit to 7 Paise/Unit Where payment is not done through Escrow Arrangement or Letter of Credit is not </td> </tr> </tbody> </table> | Contract Type | Trading Margin | Short term contracts | Between 0 Paise/Unit to 7 Paise/Unit Where payment is not done through Escrow Arrangement or Letter of Credit is not provided with amount equivalent to one point zero five (1.05) times of contract value in favour of seller, Trading Margin would be limited to 1 paise/Unit | Contracts through Power Exchanges | Between 0 Paise/Unit to 7 Paise/Unit Where payment is not done through Escrow Arrangement or Letter of Credit is not | <p>Previously Trading Margin for long term and medium term contract was not prescribed. The Commission was of the opinion that the trading licensees would be required to be compensated for default risk, late payment risk, contract dishonour risk, O&M expenses and return on net worth. Since at that time the long term contracts by independent power producers were in nascent stages, enough data was not available to quantify the risks and hence the trading margin was left to be determined to the market forces.</p> <p>SECI has been charging Trading Margin as per the Government of India guidelines. Though, the margin being charged by SECI is not sufficient to cover the expenses as presented in the subsequent sections, SECI has been bearing the expenses to achieve the government's renewable energy objectives. Further it is submitted that the current cost as explained in</p> |
| Contract Type | Trading Margin | | | | | | | |
| Short term contracts | Between 0 Paise/Unit to 7 Paise/Unit Where payment is not done through Escrow Arrangement or Letter of Credit is not provided with amount equivalent to one point zero five (1.05) times of contract value in favour of seller, Trading Margin would be limited to 1 paise/Unit | | | | | | | |
| Contracts through Power Exchanges | Between 0 Paise/Unit to 7 Paise/Unit Where payment is not done through Escrow Arrangement or Letter of Credit is not | | | | | | | |

| Existing Regulation | Proposed Regulation | | Observations/Comments/Suggestions |
|--|---|---|--|
| | | provided in favour of seller, Trading Margin would be limited to 1 paise/Unit | <p>section 4 is under current premise of back to back provisions under PPA and PSA.</p> <p>As explained in the section 3, the cost due to delay in release of payment by the buying entity will require substantially higher trading margin which in turn will adversely impact the cost to be borne by end consumers.</p> <p>As such trading margin of 7 paise/unit may be retained furtherance of GOI initiative of green energy in back to back contracts being entered into by SECI/similarly placed agencies.</p> |
| Long term contracts and medium term contracts | Trading Margin to be decided mutually b/w the Trading Licensee and the Seller. Where payment is not done through Escrow Arrangement or Letter of Credit is not provided in favour of seller, Trading Margin would be limited to 1 paise/Unit | | |
| Back to Back Deals | Between 0 Paise/Unit to 1 Paise/Unit | | |
| Cross Border Trade | Margin to be decided mutually b/w Trading Licensee and Seller | | |
| Obligations of Trading Licensee | | | |
| Under Exceptional cases Licensee not to exceed 120 percent of volume of trade authorised under that category | The Trading Licensee not to exceed at any point of time 110 percent of the volume of trading authorized during a Year under the licence granted to him | | <p>The norms for maintaining allowed volume under a specific category has been tightened.</p> <p>The provision mandates that the payment has to be done through Escrow/LC. It is submitted that such arrangement will lead to additional cost on</p> |

| Existing Regulation | Proposed Regulation | Observations/Comments/Suggestions |
|------------------------------------|--|--|
| | <p>Provision for revocation of License in case of violation of trading margin on more than three times.</p> <p>The Trading Licensee shall make payment of dues upon the agreed due date to the seller for purchase of the agreed quantum of electricity through an escrow arrangement or irrevocable, unconditional and revolving letter of credit in favour of seller. Such escrow arrangement or irrevocable, unconditional and revolving letter of credit in favour of seller shall be equivalent to:</p> <p>(a) two point one (2.1) times the average monthly bill amount (estimated average of monthly billing amounts for three months or actual monthly billing amount for preceding three months as the case may be) with a validity of one year for long term contracts;</p> <p>(b) one point zero five (1.05) times of contract value for short term contracts</p> | <p>account of discounting of LC for making any payment due to the seller. Under the present regime, these are being considered as Payment Security Mechanism and not as a regular method of making payment. Therefore, the proposed regulation will have adverse impact on the cost being borne by end consumers.</p> <p>Also, no standard Escrow Agreement is provided.</p> <p>It is suggested that value of LC may be kept as 1.05 times the average monthly bill amount for long term contract also in line with the TPA.</p> |
| Bar on carrying out Banking | | |

| Existing Regulation | Proposed Regulation | Observations/Comments/Suggestions |
|---|---|--|
| <p>Though Banking was treated as non-trading activity, there was No bar on facilitating Banking between entities by Trading Licensee.</p> | <p>Trading Licensee shall not engage in Banking of electricity</p> | <p>The Draft Regulation proposes to disallow trading licensees to engage in Banking of Electricity.</p> <p>It is to be noted that with Cash strap DISCOMs, meeting load through banking arrangement is a norm in the industry, as they only have to shell out minimum cash payment (for OA charges and trader's margin) for availing electricity. The volume of transaction done under banking between DISCOMs have been increasing. Traders, being the market player, is the only agent who is aware of the monthly surplus or deficit of a utility. Trader is the only entity who have the capability, know-how and information to facilitate a banking transaction between two utilities. The proposed provision, is adverse to the holistic development of power market as well as promotion of other services including ancillary services.</p> |

Exhibit 2: Other Observations

| Clause No. | Observation |
|--|--|
| <p>Regulations 7 and 8 – Applicability of Trading Margin and extent of Trading Margin:</p> | <p>i. Regulations 7 and 8 in Chapter IV of the proposed Trading Regulations deals with the Trading Margin. The Trading Margin in the case of back to back dealing has been restricted to a maximum of 1 Paise/kWh in terms of the proposed Regulation 8 (1) (e). The restriction of the Trading Margin to 1 Paise/kWh will not be a proper consideration for the activities undertaken by SECI and similarly placed Nodal Agencies/Trading Licensees which are acting to facilitate development of non-conventional energy sources as an Implementing Agency of the Central Government. The term</p> |

'Back-to-Back deal' is defined in the proposed Section 2 (1) (d) to have the same meaning as is assigned under the Power Market Regulations, 2010. The Power Market Regulations deals with the back to back deal under Regulation 4 (i) (b) as the Inter State transaction in which an Electricity Trader buys a specific quantity of power for a particular duration from one party and substantially sells it to another party on the same terms and conditions where such transaction does not expose the Trader to any price risk, it may expose the Trader to credit risk and operational risk. However, as per the Explanatory memorandum issued by CERC for the proposed regulations, the back to back deal has been explained as "back to back signing of PPA and PSA with no ownership on trader and there is no default risk on trader. The payments under such cases shall be made to developers on realization of payment from buying entities (discoms)". CERC may amend the definition of back to back deals in the proposed regulations accordingly.

ii. The above back to back deal is in the context of a Power Exchange and over the counter contracts through the Electricity Traders;

iii. The said definition and extent of dealing with back to back deal cannot per-se be applied to a Trading Margin Regulation to be decided by the Hon'ble Commission on the aspect of margin/compensation which should be available to the Electricity Trader for the performance of its services;

iv. It is submitted that activities undertaken by SECI as an Electricity Trader is not akin to back to back over the counter deal in a Power Exchange governed by the Power Market Regulations, 2010. There are substantial preliminary activities to be undertaken by SECI in developing the market in order to bring about a transaction of the PPA with the Power Developers and the back to back arrangement with the Buying Utilities/distribution licensees. It is also not a case of SECI not being financially having no responsibility whatsoever and the status of SECI is not that of a Broker who bring about a transaction without any financial exposure and gains out of the transaction only on the basis that the transaction matures into a contract between the Project Developers and the Buying Utilities. SECI is not in a position to proceed on the basis that the Project Developers and the Buying Utilities having been identified, SECI has no role thereafter but only to receive an overriding margin for each units sold and purchased between the Project Developers and the distribution licensees;

v. In addition to the above, there are payment security mechanisms to be administered by SECI based on the funding to be arranged by the Government of India. There are issues of Viability Gap Fund to be administered based on the scheme evolved by the Government of India. SECI has to continue to coordinate between the SPDs and the Buying Utilities on a constant basis. The Project Developers demand money from SECI. SECI has to constantly take steps to recover the money from the Buying Utilities. SECI has to enforce the payment security mechanism provided in the PSA such as the Tripartite Agreement. SECI has to explore the possibility of selling power to third party in case of default on the part of the Buying Utility. SECI is constantly involved in the litigation on the one side by the Project Developers and on the other side by the Buying Utilities. Above all, SECI has to constantly evolve new schemes for further development of the non-conventional energy in large scale.

vi. In the context of the above, the basis of back to back deal dealt in the Power Market Regulations [Regulation 4 (i)(b) (I)] of the transaction not exposing the Trader to any price risk but exposing the Trader to credit risk or operational risk in the context of the OPC Contract through Electricity Trader cannot per-se be applied to the Trading Margin limitation of 1 Paise/kWh provided in the Trading Margin Regulations.

vii. It is submitted that the Trading Margin is to be considered in the context of the functions to be discharged by the Electricity Trader. It cannot be only on the basis of the fact that SECI will be paying to the Project Developers the amount as per the availability of the funds with SECI out of the payment security funds provided by the Government of India or based on the recovery of the amount from the Buying Utilities through enforcement of the payment security mechanism such as through the Tripartite Agreement entered into between the Central Government, the State Governments and the Reserve Bank of India or through means such as possibility of sale of power to third party on the failure of the Buying Utilities to pay in time. SECI continues to be involved in the recovery of the amount. SECI has to undertake substantial activities for enforcement of the recovery.

viii. In the context of the above, it is submitted that the classification made in Regulation 7 (c) of the proposed Regulations and the restriction placed on the Trading Margin to 1 Paise/kWh in Regulation 8 (1) (e) is not in consonance with the activities to be undertaken by SECI and other similarly placed Nodal Agencies/Electricity Traders designated by the Government of India to facilitate the development of the solar power projects, wind power projects and other non-

conventional energy sources for enabling the distribution licensees to purchase the same. The impact of the credit worthiness of SECI is an important aspect to be considered for the Trading Margin to be allowed to SECI.

ix. It is, therefore, submitted that the Hon'ble Commission may be pleased to amend the provisions of Regulations 7 and 8 of the proposed Trading Regulations to delete the classification of back to back deal and apply the provisions of Regulation 7 (b) read with Regulation 8 (1) (c) to the transaction entered into by SECI and other similarly placed Electricity Traders specifically designated by the Government of India as a Nodal Agency for promotion of the non-conventional energy sources to achieve the goal set up in the policies of the Government of India.

x. It is submitted that the restricted Trading Margin at 1 Paise/kWh will not be conducive for the functioning of SECI and other similarly placed Electricity Traders.

xi. Without prejudice to the above, it is submitted that there can be a restriction on the Trading Margin for back to back deal at the rate of Rs. 1 Paise/Unit only if in a short term purchase the Electricity Trader brings out the contract between the Seller and the Purchaser more akin to the commission agent, without any financial investment, without any manpower employment and consideration is only for arranging the contract between the Project Developers and the Buying Utilities. It cannot apply to cases where the intermediary agency like SECI, NTPC etc. are required to undertake significant activities.

xii. It is also relevant to place on record that the issue of Trading Margin should generally be left to the contractual decision of the Project Developers and the Buying Utilities. The Hon'ble Commission should fix the Trading Margin only where there is a necessity, namely, where the circumstances exists of exploitation by the Electricity Trader of a prevailing situation in the market. For example, if the Electricity Trader has cornered huge quantum of power purchased from various generating sources, has created a scarcity in the market by not releasing the power except to those who will pay substantially high Trading Margin, the Hon'ble Commission should step in and fix the Trading Margin. The object cannot be to fix the Trading Margin at a marginal or significantly non-existing level of 0 Paise to 1 Paise/kWh to an Electricity Trader such as SECI, NTPC etc. who are undertaking activities of implementing the Government of India's Policies for promotion of non-conventional energy.

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| | <p>xiii. It is in the context of the above, SECI submits that the activities of SECI should not be considered only in the context of the day-to-day transactions occurring in the purchase and resale of electricity but in the context of various promotional activities to be undertaken to facilitate the development of the non-conventional energy by bringing out the power projects to enable the Buying Utilities/distribution licensees to source non-conventional energy at a price. In this regard because of the involvement of SECI over the last few years, the price of solar power, wind power etc. has substantially fallen.</p> |
| <p>Regulation 9, Clause 10 – Obligations of Trading Licensee,</p> | <p>Traders have been required to establish either Escrow Arrangement or Letter of Credit as payment security mechanism for all transactions to be able to charge the trading margin exceeding one paisa. Limiting PSM to these two options is highly restrictive and negatively impacting the financial viability of trading transactions. Allowing the trader to offer any suitable payment security mechanism as per commercial standards would afford flexibility and cost benefit, while ensuring fiscal surety for the power supplier. For e.g., TPAs, Corporate fund corpuses for covering buyer defaults could be allowed so that the cost of opening LCs in each contract can be avoided. Incidentally, there are various practical difficulties as well with regard to opening Letters of Credit, since banks are averse to issuing standby LCs for transactions which pertains to buyers who are chronic defaulting utilities with poor credit rating. The fact that the overarching issue of Discom defaults remain largely unaddressed by the concerned authorities while the trading licensees and suppliers are burdened with financial risks only make things worse. Unless there are watertight directives which cannot be circumvented with regard to furnishing of adequate PSM by Discoms, balancing of financial risk in power markets cannot be a reality.</p> |
| <p>Regulation 9, Clause 13 – Obligations of Trading Licensee -</p> | <p>The proposed regulation requires a clarification regarding the trader's role in deviation settlement accounting by the appropriate authority with respect to the buyer and seller. The process of deviation settlement is exclusively between the grid connected buyers/sellers and the appropriate authority wherein the trader has no role at all. All that the trader can verify is whether the requisite protocols are in place for grid connection and deviation settlement in case of private generators or industrial/commercial consumers. There is obviously no need for this verification if the counterparty is a utility.</p> |
| <p>Chapter 5, Sec.9 – Obligations of Trading Licensee - Regulation 17</p> | <p>This deals with safeguards against abuse of dominant position by traders as well as activities which cause conflict of interest and adverse impact on competition in the sector. With specific reference to SECI's activities, it is important to understand the unique role fulfilled by SECI in furthering Govt of India's ambitious solar energy capacity addition</p> |

| | |
|--|---|
| | <p>programme. The power trading operations of SECI is to enable effective utilisation of the power generated by the solar capacity facilitated by SECI and is supplementary to its larger objective. In such a situation, SECI may have market dominance while considering solar power, which should not be construed as abuse of dominant position, affecting the terms of its licence. Similarly, the primary activity of SECI being the nodal agency for development of the solar energy capacity is not to be considered as a conflict of interest with its power trading operations and averse to competition in the sector.</p> |
|--|---|

3 Risk associated with Discoms

Notwithstanding the multitude of reforms in the Electricity sector since the enactment of the Electricity Act 2003, achieving financial and operational sustainability of many of the Electricity Distribution Companies (Discoms) has remained a challenge. Many of the Discoms are financially strained in view of the gap between the cost of supply of power and the average tariff, along with technical & commercial inefficiencies and subsidies which further aggravate the challenges faced by the Discoms. While the financial issues and challenges faced by Discoms tend to appear similar, the underlying causes and remedial measures needed to address these tend to differ substantially across the regions in the country.

While the Electricity Act 2003 laid out the vision for a deregulated power sector, the responsibility of implementing the restructuring process were vested with the states. The long dominant state-owned utilities which functioned as vertically integrated monopolies have more or less unbundled into multiple entities engaged in generation, transmission and distribution of power. However, majority of distribution companies are still under state control, either directly through the SEBI or their unbundled successors, and are financially distressed. Most private distribution companies are also in the same boat, plagued by financial crises.

Much of the losses of distribution companies result from the inherent tariff structure and low revenue collection rates. The tariff structure is defined by class of consumer and a cross subsidy surcharge is used to subsidise domestic and agricultural users. The higher rates paid by industrial and commercial consumers are insufficient to cover the subsidies provided and further compounded by revenue arrears, or collection inefficiencies. Simple unbundling followed by privatisation or corporatisation has proven to be insufficient. The restructuring process must determine who absorbs the existing liabilities and re-establish the financial credibility of electricity utilities. Lack of timely tariff revisions and realistic rationalisation of power prices drive the distribution companies into perpetual woes.

Distribution companies which have been burdened by legacy issues and increased cost of supply without commensurate tariff rationalisation resulting in severe cash flow issues have been forced to default on generator payments. Private power generators have borne the brunt of these defaults due to the lack of adequate payment security for their supplies. In this scenario, which has already severely affected thermal IPPs across the country, a new threat looms on the horizon for the renewable energy sector.

Government of India's renewable energy vision has ushered in a series of renewable energy bids and has gained the interest of investors and developers alike. India's energy demand has historically been catered through fossil fuel based generation; however significant impetus has been given to renewable policy initiatives in the recent past. Despite the traction being witnessed in the renewable energy sector, sale of power from renewable sources such as wind and solar face challenges, primarily due to the financial position of electricity distribution utilities. Most of such utilities continue to be financially strained on account of a number of reasons, primary one being the gap between the cost of supply of power and the average

tariff. Technical and commercial inefficiencies aggravate the financial position of the Discoms further. These issues expose traders such as SECI to the credit risk of discoms.

The most significant risk the SECI is exposed to is the risk of delayed payment or defaults. In either situation, SECI would have to bear the burden of the cost of financing the gap in amount billed to and received from discoms. Most discoms in India have historically had long payment cycles and have registered consistent losses. The financial restructuring of discoms was initiated by the Government of India in the early 2010s in which several states participated. While the Financial Restructuring Plan (FRP) helped discoms balance sheets look neater, the operational challenges of the discoms continued to burden them financially. In an attempt to bring relief to the debt-ridden utilities, and improve their overall performance the Government of India initiated the Ujwal Discom Assurance Yojana (UDAY). Under the scheme 75% of the debt of the utilities has been taken over by the State government which have participated in the scheme. The State government would also take over a percentage of the losses of the Discoms in the subsequent years.

Like FRP, UDAY has been able to bring intermittent relief to most discoms. Notwithstanding the improvements in the operational performance of discoms, most of the discoms still continue to register losses and prolonged payment cycles. While the issue is heightened in the state discoms, similar challenges are also being faced by private discoms.

Exhibit 3-1: Performance of discoms- payable days and cost coverage

| S. No | Discom | Payable days ¹ | | Cost coverage ² | |
|-------|---|---------------------------|------|----------------------------|------|
| | | FY18 | FY17 | FY18 | FY17 |
| 1 | BSES Rajdhani Power Ltd. | 443 | 397 | 1.00 | 0.99 |
| 2 | Tata Power Delhi Distribution Ltd. | 85 | 73 | 1.09 | 1.07 |
| 3 | Punjab State Power Corporation Ltd. (PSPCL) | 47 | 47 | 0.97 | 0.90 |
| 4 | North Bihar Power Distribution Company Limited (NBPDC) | 40 | 59 | 0.87 | 0.94 |
| 5 | South Bihar Power Distribution Company Limited (SBPDCL) | | 110 | | 0.88 |
| 6 | Jharkhand Bijli Vitran Nigam Ltd. | 363 | 337 | 0.98 | 0.72 |
| 7 | Dakshin Gujarat Vij Company (DGVCL) | 0 | 0 | 1.01 | 1.01 |
| 8 | Madhya Gujarat Vij Company (MGVCL) | 0 | 0 | 1.02 | 1.02 |
| 9 | Paschim Gujarat Vij Company (PGVCL) | 0 | 0 | 1.01 | 1.01 |
| 10 | Uttar Gujarat Vij Company (UGVCL) | 0 | 0 | 1.01 | 1.01 |
| 11 | Bangalore Electricity Supply Company (BESCOM) | 81 | 96 | 1.04 | 0.99 |
| 12 | Hubli Electricity Supply Company (HESCOM) | 359 | 319 | 0.88 | 0.87 |

¹ Payable days= Average trade payables for sale of power/ Cost of power purchase

² Cost Coverage= Total Revenue/ Total Expenditure

| S. No | Discom | Payable days ¹ | | Cost coverage ² | |
|-------|--|---------------------------|------|----------------------------|------|
| | | FY18 | FY17 | FY18 | FY17 |
| 13 | Mangalore Electricity Supply Company (MESCOM) | 45 | 41 | 1.02 | 0.92 |
| 14 | Chamundeshwari Electricity Supply Corporation (CESC) | 325 | 290 | 0.94 | 0.89 |
| 15 | Gulbarga Electricity Supply Company (GESCOM) | 351 | 347 | 0.93 | 0.86 |
| 16 | Uttar Haryana Bijli Vitran Nigam Limited (UHBVNL) | 62 | - | 1.02 | 0.98 |
| 17 | Ajmer Vidyut Vitran Nigam Limited (AVVNL) | 26 | 48 | 0.82 | 0.90 |
| 18 | Jodhpur Vidyut Vitran Nigam Limited (JDVVNL) | 38 | 52 | 0.77 | 0.87 |
| 19 | Jaipur Vidyut Vitran Nigam Limited (JVVNL) | 25 | 57 | 0.84 | 0.89 |
| 20 | Madhyanchal Vidyut Vitran Nigam Ltd (MVVNL) | 427 | 236 | 0.98 | 0.93 |
| 21 | Purvanchal Vidyut Vitran Nigam Ltd (PoVVNL) | 401 | 358 | 0.87 | 1.00 |
| 22 | Paschimanchal Vidyut Vitran Nigam Ltd (PaVVNL) | 66 | 70 | 0.95 | 0.97 |
| 23 | Dakshinanchal Vidyut Vitran Nigam Ltd (DVVNL) | 120 | 114 | 0.83 | 0.87 |
| 24 | Kanpur Electricity Supply Company (KESCO) | 67 | 66 | 1.01 | 1.16 |
| 25 | Madhya Pradesh Poorv Kshetra Vidyut Vitran Company Limited (MPPuKVCL) | 119 | 119 | 0.79 | 0.92 |
| 26 | Madhya Pradesh Paschim Kshetra Vidyut Vitran Company Limited (MPPKVCL) | 43 | 44 | 0.97 | 1.05 |
| 27 | Madhya Pradesh Madhya Kshetra Vidyut Vitran Company Limited (MPMKVCL) | 232 | 231 | 0.76 | 0.86 |
| 28 | Southern Power Distribution Company of AP Limited (APSPDCL) | 205 | 153 | 1.00 | 0.90 |
| 29 | Eastern Power Distribution Company of AP Limited (APEPDCL) | 95 | 118 | 1.00 | 0.96 |
| 30 | Southern Power Distribution Company of Telangana Limited (TSSPDCL) | 215 | 200 | 0.82 | 0.78 |
| 31 | Northern Power Distribution Company of Telangana Limited (TSNPCL) | 181 | 185 | 0.85 | 0.84 |

Source: Audited Annual Accounts, Provisional Annual Accounts, ARR/True-up-petitions

Refer *Exhibit 3-1* for the performance assessment of discoms in context of the payment cycles and the cost coverage. The list includes discoms which form approximately 85% of the total power transacted by SECI.

With the exception of Gujarat and Rajasthan, very few states have been able to register short payable days consistently. Some of the discoms have registered payable cycles of longer than one year. This is reflective of the creditworthiness of discoms. Further, only a limited number of discom have been registering profits. The cost coverage of most discoms remains below 1 which further reflects in the payable days.

SECI has billed an amount of Rs 4113.54 crore in FY 19 and up to June FY 20 against which Rs 2858.04 has been received by the end of June FY 20. This reflects a receivable cycle of 112 days against a due date of 60 days for most PSAs signed by SECI with discoms. *Exhibit 3-2* presents the receivable days for SECI against invoices raised to discoms.

Exhibit 3-2: Receivable days of SECI for payment receipts from discoms

| Particular | Amount raised(Cr) FY 18-19 | Amount raised(Cr) FY 19-20 | Amount received(Cr) FY 18-19 | Amount received(Cr) FY 19-20 | Difference(Cr) FY 18-19 | Difference(Cr) FY 19-20 |
|------------------------|----------------------------|----------------------------|------------------------------|------------------------------|-------------------------|-------------------------|
| 750MW | 667.87 | 183.05 | 652.54 | 69.86 | 15.33 | 113.18 |
| 2000MW | 1626.53 | 538.01 | 1226.19 | 126.81 | 400.33 | 411.20 |
| 5000MW | 767.88 | 350.20 | 688.60 | 94.03 | 79.28 | 256.17 |
| Total | 3062.28 | 1071.26 | 2567.34 | 290.70 | 494.94 | 780.56 |
| Outstanding | | 1275.50 | | | | |
| Receivable Days | | 112 days | | | | |

Source: SECI

However, considering the revenue and receipts from the period from July, FY 19 to June FY 20 the receivable days stand at 132 days.

| S.No | Particular | Value |
|----------|--|-----------------|
| 1 | Amount raised FY 19 and Q1 FY 20 | 4134 |
| 2 | Amount raised Q1 FY 19, 750 MW | 181 |
| 3 | Amount raised Q1 FY 19, 2000 & 5000 MW | 429 |
| 4 | Total | 610 |
| 5 | Adjusted revenue | 3524 |
| 6 | Receivables | 1275 |
| 7 | Receivable days | 132 days |

Source: SECI

The impact of long receivable days has been computed under both the conditions, i.e. with receivables of 112 days and 132 days.

3.1 Impact on trading margin due to Discom payable cycle

It has been learnt that SECI pays to the Solar Power Developer (SPDs) in line with the terms and conditions of the PPAs. In most PPAs the payment due date from the buyers is 60 days from raising the invoice. In FY 19, SECI transacted 1214 MU under the 750 MW scheme while and 5617 MU under the 2000 & 5000 MW schemes. SECI has been charging a trading margin

on its transactions at the rates as notified by the CERC. SECI earned a margin of approximately Rs 37 crore in FY 19 on the total 6832 MU transacted, which reflects a margin of approximately 5.4 paise/kWh. An assessment of the carrying cost of the payables would reflect significantly low margins.

The cost of financing delayed payments from discom is computed using receivables of 112 days (case 1) and 132 days (case 2), which reflect is 52 days and 72 days over the due date respectively.

Assuming an interest rate of 10% for financing the payments, the financial cost stands at Rs 59.60 crore and Rs 69.63 crore for case 1 and case 2 respectively. Refer *Exhibit 3-3* for impact of discom payment risk on the net trading margin.

Exhibit 3-3: Impact of discom payment risk on trading margin

| S.N | Particular | Case 1 | Case 2 |
|-----|---|------------|-------------|
| 1 | Total energy transacted | 6832.06 | 6832.06 |
| 2 | Total margin earned | 36.81 | 36.81 |
| 3 | Trade receivables | 1275.50 | 1275.50 |
| 4 | Receivable days | 112.63 | 132.12 |
| 5 | Days past due date | 52.63 | 72.12 |
| 6 | Rate of interest | 10% | 10% |
| 7 | Interest cost for payables beyond 60 days | 59.60 | 69.63 |
| 8 | Per unit impact (paise/kWh) | 8.7 | 10.1 |

Source: SECI

The risk associated with discoms payment cycles or in other words, the amount which would be spent by SECI to finance the delayed payments by discoms is 8.7 paise/kWh and 10.1 paise/kWh for case 1 and case 2 respectively.

4 Assessment and quantification of Costs associated with the Trading Business

Solar Energy Corporation of India Ltd (SECI), set up on 20th Sept, 2011 is the only CPSU dedicated to the solar energy sector. In addition to be one of the Trading Licensees, SECI has a major role to play in the sector's development. The company is responsible for implementation of a number of schemes of MNRE, major ones being the VGF schemes for large-scale grid-connected projects under JNNSM, solar park scheme and grid-connected solar rooftop scheme, along with a host of other specialised schemes such as defence scheme, canal-top scheme, Indo-Pak border scheme etc. In addition, SECI has ventured into solar project development on turnkey basis for several PSUs. As a part of Trading business SECI is entering into Power Sale Agreement (PSA) with the Solar Project Developers (SPDs) set up under the schemes being implemented by it, for sale of its power to the state Discoms by signing Power Purchase Agreement (PPA) with them.

Most of the expenditures of fixed nature and manpower resources are shared for taking up activities as mentioned in above paragraph. However, as per the mandate in Trading Licence, SECI has specifically identified and allocated cost for carrying out Trading activities. In this section and paragraphs below an attempt has been made to capture the per unit fixed cost as well as transaction cost estimated to be incurred by SECI in fulfilling the obligations under PSA and PPA for Financial Year 2019-20. The projected figures have been used to ascertain the Trading Margin required to cover the cost if the provisions in the proposed Draft Regulation are to be fulfilled.

Considering various factors including proposed provisions of LC etc., it is expected that the projected expenses to be incurred by SECI for trading activities in case 1 scenario will be around 10.1 paise/unit and in case 2, it will be 11.6 paise/unit.

SECI has the power to regulate power tied up with discoms which have defaulted. However, PPAs with most of the defaulting discoms has been signed at tariffs of 4.5 Rs/kWh and 5.5 Rs/kWh. Given the market scenario, SECI may not be able to realise the same tariffs if it chooses to sell the contracted power elsewhere. In FY 2018-19 SECI sold 4900 MU and 1212 MU at the rate of 4.5 Rs/kWh and 5.5 Rs/ kWh respectively. In the same period the average market clearing price (MCP) at the power exchange was 3.86 Rs/kWh³. Considering that 5% of this power was sold at the exchange the difference in the total revenue would equate to Rs 25.34 crore. Considering the total sales figure of 6832.53 MU, the per unit impact come to 3.7 paise/kWh. The impact increases with increase in the percentage of power regulated. Exhibit 4-1 presents the impact of selling power on exchange, on SECI.

Exhibit 4-1: Impact of regulation of supply of power

| % of power regulated | Impact in Rs crore | Impact in paise/kWh |
|----------------------|--------------------|---------------------|
| 5% | 25.34 | 3.7 |
| 10% | 50.67 | 7.4 |

³ IEX

| | | |
|-----|--------|------|
| 15% | 76.01 | 11.1 |
| 20% | 101.34 | 14.8 |
| 25% | 126.68 | 18.5 |

Source: SECI

Therefore, the total cost on SECI if it chooses to sell even 5% of the power tied up with defaulting discoms to other off takers, would be in the range of **13.9 paise/ kWh to 15.3 paise/kWh.**

SECI is the designated nodal agency for developing and facilitating the establishment of the Grid connected Solar Power capacity in India in accordance with the Government policy for promotion of Solar Power in the country. In this context, it is important to mention that SECI's power trading operations are incidental to the larger role to be performed in furthering Government of India's ambitious Solar Power programme. The Power trading functions of SECI are not conducted like that of any other independent power trading company, but are specific to mainstreaming of the solar capacity that is being developed/facilitated by SECI. All contracts undertaken by SECI are long term in nature. If the generic trading margin stipulations under the draft regulations are imposed on these specialised SECI contracts, it will render them unviable for SECI and ultimately contrary to national interest.