
PROCEDURE AND FORMATS FOR

FORECASTING, SCHEDULING AND DEVIATION SETTLEMENT OF WIND AND

SOLAR GENERATION FOR IMPLEMENTATION OF

(FORECASTING: SCHEDULING, DEVIATION SETTLEMENT MECHANISM AND RELATED

MATTERS FOR SELLER OF WIND, SOLAR AND WS - HYBRID GENERATION SOURCES)

*REGULATIONS, **2026***

FSDSM WS SELLER REGULATIONS 2026

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PROCEDURE AND FORMATS FOR FORECASTING, SCHEDULING & DEVIATION SETTLEMENT OF WIND, SOLAR & WS HYBRID GENERATION SOURCES) REGULATIONS, 2026

1.0 OUTLINE

- 1.1 This procedure and formats are issued in pursuance to the Regulations 7.1 of Karnataka Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters for sellers of Wind, Solar & WS- Hybrid Generation Sources) Regulations, 2026.
- 1.2 This procedure shall be read in conjunction with Indian Electricity Grid Code (IEGC), Karnataka Electricity Grid Code (KEGC), Inter/Intra State Open Access Regulations and subsequent amendments issued thereof.
- 1.3 **Applicability:**

These Regulations are applicable to Sellers of Wind - Solar (WS) generating sources including hybrid (with or without ESS) having the **following combined contracted capacity** at the pooling station or at interface point in case of single generator, irrespective of whether they are supplying power to the ESCOMs or under Open access to third party or captive use within the State.

Sl. No.	Seller / Generating source	Contracted Capacity in MW
1	Wind Generators (with or without ESS)	10MW and above
2	Solar Generators (with or without ESS)	5 MW and above
3	Wind-Solar Generators (Hybrid-with or without ESS)	5 MW and above

2.0 REGISTRATION OF QCA / INDIVIDUAL GENERATORS ACTING AS QCA WITH SLDC, KARNATAKA:

- 2.1 The QCA shall obtain the consent letter from all the generators who have appointed him as a QCA and then apply for registration.
- 2.2 QCA shall submit separate application Registration form (Annexure-I) for each pooling station. Only one application per pooling station will be accepted from the QCA.
- 2.3 QCAs have to register with SLDC duly submitting the following documents:
- a) Registration Form (Annexure-I) along with a non-refundable processing fee of Rs.15000/- (Fifteen thousand Rupees only) plus applicable GST in favor of CEE,SLDC by DD/NEFT/RTGS.

- b) Details of wind and solar generators (Annexure-II)
 - c) Acceptance of terms & conditions for registration of QCA (To be provided by the QCA on a Rs.500/- stamp paper) (Annexure-IV)
 - d) Proof of registered address.
 - e) Consent/authorization letter from generators for appointment of QCA.
 - f) Evacuation approval issued by competent authority.
 - g) Pooling station-wise Bank Guarantee/Letter of Credit (LC) with a validity of 3 years to an extent of Rs.40,000/- per MW for solar generation and Rs.80,000/- per MW for wind generation to be furnished towards payment security.
 - h) Additional BG/LC for difference in enhanced BG amount to be furnished for existing PSS, within 60 days from intimation.
 - i) Commissioning Certificate issued by competent authority.
- 2.4 QCA shall submit all the relevant documents along with application and BG hardcopy and softcopy through SAMAST portal. After duly verifying the documents submitted by QCA, SLDC will register and allot a unique registration number to each eligible QCA for handling RE DSM.
- 2.5 An incomplete Application, and/or an Application not found to be in conformity with the Procedure and Regulations, shall be rejected.
- 2.6 The time period for registration of QCA shall be fifteen (15) working days from the date of receipt of all the documents & information in complete to SLDC.
- 2.7 In case QCA has obtained registration on the basis of false information or by suppressing material information, the registration of such entity shall be revoked after giving opportunity.

3.0 ROLES AND RESPONSIBILITIES OF THE QCA / INDIVIDUAL GENERATORS ACTING AS QCA:

- 3.1 The QCA shall be single point of contact between Karnataka SLDC and generators to whom it is representing at the Pooling Sub-station.
- 3.2 The QCA shall establish round the clock Data Acquisition Centre with technology matching with that of SLDC for seamless communication of information. The Data Acquisition Centre shall have facilities of voice and data communication such as telephone and internet connection available for all the 24 hours for communicating with SLDC and pooling stations.

- 3.3 The QCA shall establish protocol for communication with Individual Generators to implement the instructions of SLDC. The QCA shall comply with the instructions of the SLDC operator in normal condition as well as during emergencies, appropriate decisions taken by the System Operators in view of Grid security and safety.
- 3.4 If the QCA disobeys the instruction of SLDC during emergencies, appropriate decision will be taken by the Grid operator in view of grid security and safety.
- 3.5 QCA shall furnish week-ahead, day-ahead forecast (based on their own forecast or on the forecast done by SLDC) and intraday generation schedules as per Format-A & Format-B for each pooling station or each generating station separately as the case may be to REMC web portal.
- 3.6 QCA in coordination with Generator shall provide real time availability and generation data (at both pooling station & inverter /WTG level) as per Annexure -III.
- 3.7 In case of non-availability of real time data (at Turbine Level/inverter level), QCA in coordination with Generators shall maintain and provide time block-wise generation data at (turbine and inverter level) and weather data on weekly basis.
- (i) For wind plants, at the turbine level: Average wind speed, Average power generation at 15-min time block level
 - (ii) For solar plants, for all inverters: Average Solar Irradiation, Average power generation at 15-min time block level. [if a solar plant uses only smaller string inverters, then data may be provided at the plant level)
- 3.8 QCA shall undertake commercial settlement of all deviation-settlement charges and any other charges on behalf of the concerned. generators, as applicable under the KERC FS DSM Regulations 2026 as amended from time to time.
- 3.9 QCA shall maintain records and accounts of the time block-wise Schedules, the actual generation injected and the deviations, for the Pooling Sub-station and the individual Generators separately.
- 3.10 The QCA shall submit undertaking as per Annexure-IV for acceptance of Terms & Conditions for registration of QCA (To be provided by the QCA on Rs.500/- stamp paper).

3.11 All existing & new generating stations shall be facilitated DLMS Meter with Automatic Meter Reading (AMR) technologies for transfer, analysis and processing of interface ABT meter data to SLDC in line with Metering/AMR protocol and AMR/Metering Standards to be finalized by STU in accordance with provisions of Metering code and CEA Metering Regulations, as amended from time to time.

3.12 The QCA shall perform commercial settlement beyond the connection point (De-pooling arrangement among each generator in the Pooling Sub-station) and technical coordination amongst the generators within the Pooling Sub-station and up to the connection point as the case may be.

3.13 The QCA shall furnish the details of individual generators of Solar & wind farms as per Annexure-II and also the billing meter data of generators & other statistics information shall be uploaded to the SLDC through respective user access portal in the REMC/SLDC web portal.

The QCA shall furnish the details of automatic weather stations installed by individual generators at their Solar and Wind farms and furnish the weather details to NCMRWF as per CEA Guidelines Dated:07/07/2025.

3.14 The QCA, within seven (07) days, shall inform the details to SLDC in case there is any change in:

- i. The Generating Station (in case of individually connected generator),
- ii. Pooling Sub-station
- iii. Individual generators in the Pooling Sub-station
- iv. Reduction in authorization from generators in a Pooling Sub-station below majority of generators in terms of the total installed Capacity/contract capacity of the Pooling Sub-station.
- v. Tariff meter, CTs & PTs, etc., related to IF Point.

3.15 The QCA shall submit the indemnity bond duly signed (Format - C) on Non-Judicial Stamp Paper of value notified from time to time by the State Government at the time of registration.

3.16 QCA shall have to ensure confidentiality of all the data provided by the SLDC and the data shall not be shared without written permission from SLDC. In case of breach of data, CEA Cyber security guidelines will be followed.

3.17 The QCA shall maintain 5 years historical data, all necessary and required records, registers and accounts in respect of forecasting, scheduling and deviation settlement and shall furnish to SLDC on request.

Periodical testing and calibration of billing meters installed at the pooling stations shall be done as per the Central Electricity Authority (Installation and Operation of Meters) Regulations, as amended from time to time, and procedures of KPTCL.

- 3.18 The QCA shall possess/provide consent letters from all the Generators connected in the Pooling Sub-station in terms of their installed capacity for appointment as QCA (Not applicable if the Generator himself is a QCA) at the time of Registration.
- 3.19 QCA shall furnish a Bank Guarantee with 3-years validity period and 3 months claim period or irrevocable Letter of Credit for the amount equivalent to Rs. 40,000/- per MW for solar generation and Rs. 80,000/- per MW for wind generation. Extension of Bank Guarantees shall be furnished within validity period to maintain the QCA registration in force or else, SLDC may revoke BG/LCs in the claim period. Additional BG/LC for difference in enhanced BG amount to be furnished for existing PSS, within 60 days from intimation.
- 3.20 QCA shall furnish Pooling station-wise Bank guarantee or Letter of Credit to the SLDC (i.e. one BG or LC per pooling station). In the event of Non-payment or delay in payment of Deviation Charges by QCA for more than sixty days, the BG/LC of the default PSS intimated by QCA will be encashed without any further notice.
- QCA shall make good insufficient/encashed BG/LC amount within 15 days failing, the schedule furnished by QCA will be curtailed on prorata basis with respect to BG amount.
- 3.21 Further, the QCA shall submit all the documents/ information as may be desired by the SLDC which will enable them to ascertain the non-paying generators.
- 3.22 In case of non-receipt of the metered data online or AMR facility, QCA shall coordinate with ESCOMs/ STU for manual data downloading through MRI and submit the same as decided by SLDC/ within 2 days from the date of intimation.

4.0 ROLES & RESPONSIBILITIES OF GENERATORS

- 4.1 The Generator shall not appoint and authorize multiple QCAs for a particular Pooling Sub-station.
- 4.2 Once the QCA is registered, the generator/s shall not re-appoint another QCA, at least within one (1) year from the date of successful registration of the QCA at SLDC.

Provided that in case of defaults by the QCA, the generator/s can re-appoint another QCA by giving prior notice of one (1) month to SLDC and the process of registration with new QCA shall be carried in accordance with FS DSM Regulations and procedures.

- 4.3 All the generators shall save and store the block-wise generator injection data or any other data, as desired by the SLDC and make available the same to their respective QCA, so that it could be sent to SLDC within (7) days from the date of demand from SLDC.
- 4.4 All the Generators shall install Automatic weather stations at their plant as per CEA Guidelines for Automatic Weather Stations for Wind and Solar power plants (July-2025) dated:07/07/2025 and furnish the weather data to their QCAs.
- 4.5 Wind and Solar Generators (single legal owner) connected to the Grid through a dedicated feeder may appoint a QCA or may act as a QCA and shall be registered as a QCA at SLDC.
- 4.6 In case non-consensus among the generators connected to a pooling substation w.r.t. appointment of a QCA, the generators may consider appointing a QCA consented by majority of generators in terms of the installed capacity at a pooling sub-station.

5.0 ROLES AND RESPONSIBILITIES OF SLDC, KARNATAKA:

- 5.1 SLDC shall provide user ID to the QCAs for accessing the REMC web portal for:
 - 5.1.1 Uploading of Day-ahead and Week-ahead Generation Forecasts.
 - 5.1.2 Uploading of the revisions in Schedules in accordance with this procedure and Regulations.
 - 5.1.3 Communication of Grid Constraints and curtailments if any,
- 5.2 The SLDC shall maintain records and accounts of the week-ahead, day-ahead and intraday generation schedules for each pooling-station or each generating-station as the case may be.
- 5.3 REMC web portal of SLDC will forecast the wind and solar generation in the SLDC control area and publish in the REMC portal. However, the forecast by the SLDC shall be with the objective of ensuring secure grid operation.

- 5.4 The SLDC shall validate, process the Billing meter data and compute the net injections by each pooling station. The, SLDC will monitor such that there is no gaming by any generator or QCA in order to make an undue commercial gain.
- 5.5 In case of planned curtailment by the SLDC for certain time blocks, the SLDC shall communicate to the generator/QCA regarding the curtailments, and the Generator/ QCA shall be responsible to curtail the generation in accordance with the directions of the SLDC and amend its schedule as per advice of the SLDC. In case QCA/generator fails to revise the schedule after the same has been communicated by the SLDC, the scheduled is deemed to be revised as specified by the SLDC and the SLDC shall intimate the revised schedules and the penalty shall be levied as per the revised schedules.
- 5.6 QCA/Generator shall produce certified copy signed by both, generator and concerned KPTCL Operational division officer for curtailment due to KPTCL station and Transmission line constraints.

6.0 DATA TELEMETRY AND COMMUNICATION REQUIREMENT:

- 6.1 The RE Generator shall integrate evacuation bay along with billing meters at Sub Station duly paying integration charges as notified by KPTCL to provide real time generation data such as MW, MVAR, MWHr, Voltage and status of Circuit Breaker with control.
- 6.2 The data from pooling station as per Annexure-III to be made available to SLDC/REMC on 60870-5-104 protocol using any public communication media.
- 6.3 The Generators/QCA shall submit complete proposal along with schematic diagram, mode of data communication and format for transmission of data to SLDC for approval.

7.0 FORECASTING & SCHEDULING

- 7.1 QCA shall furnish all the schedules to SLDC through REMC WEB portal. The forecasting shall be given at the Interface point at Grid SS. The generators who are having a common Interface Billing Meter at interface point will not be allowed to provide individual schedules as the actual generation {Energy Meter reading} is not separately readable for each generator from the Common Interface Billing meter.

- 7.2 Submission of more than one schedule within a Pooling Station is not allowed.
- 7.3 QCA have to submit week-ahead Schedules {on every day for the next seven days) and Day Ahead {DA) Schedules as specified below:
- (a) DA1: Aggregate schedule along with pooling station wise breakup for each time block for 0000 hours to 2400 hours of the 'D' day by 6 AM on 'D-1' day.
 - (b) DA2 (between 06:00:00 to 15:00:00 of previous day)
 - (c) DA3 (between 15:00:00 to 24:00:00 of previous day)

Note: (i) DA1 is mandatory (shall be punched before 6 AM on 'D-1' day)
(ii) DA2 and DA3 are optional.
(iii) DA 1 to DA3 furnished previous day will be effective from 00 Hrs of the current day.

Intra-day schedules shall be furnished in a prescribed format (Formats A&B) to SLDC.

- 7.4 The Sub-station wise day-ahead revision schedules **on 15 minutes time block basis and week ahead 60 minutes time block basis** shall be submitted by QCA in MW (up to three decimal places, the fourth decimal place rounded off to third decimal place as per standard practice).
- 7.5 The QCA may revise schedules for the current day provided that, such revisions shall be effective from the seventh/eighth (7/8th) time block and a revision during the day starting from 00.00 hours of a particular day. SLDC will arrive at the final implemented schedules incorporating all revisions per day.
- 7.6 In the event of QCA/generators adopting forecast provided by REMC, charges shall be paid by the QCA/generators to SLDC (as notified from time to time by SLDC).
- 7.7 The consequences of any error in such forecast provided by SLDC which results in a deviation from scheduling shall be borne by the concerned Generators through their QCA and QCA shall indemnify SLDC on account of the commercial impact.

8.0 ENERGY DEVIATION & BILLING:

Tolerance limits and deviation bands:

The permissible deviation for wind, solar generators/sellers (Hybrid, with or without ESS) are as under:

SI. No.	Generators/sellers	Deviation range
1	Wind Generators/sellers	± 10 % (within the limits of >90% &<110%)
2	Solar Generators/sellers	± 5 % (within the limits of >95% &<105%)
3	Hybrid Generators/sellers	± 10 % (within the limits of >90% &<110%)
4	ESS (with Wind or Solar or WS- Hybrid) Generators/sellers	Nil

Time Block wise (15 minutes) implemented schedules shall be considered by the SLDC based on the schedules including any revisions.

8.1 Computation of error quantity for wind and solar (Hybrid, with or without ESS) Generators /seller

The following formula will be adopted for computation of deviation error:

$$\% \text{ Error(deviation)} = \frac{(\text{Actual Generation}-\text{Scheduled generation})}{(\text{Scheduled generation})} \times 100$$

Where Scheduled Generation $\neq 0$

Treatment of Zero Scheduled Generation in computation of error quantity:

In cases where the Scheduled Generation declared by the generator/QCA is zero but actual generation is available during the time block, a deemed Scheduled Generation of **1MW** shall be considered for computation of deviation percentage and applicable DSM charges.

8.2 Treatment of Actual Generation in case of data constraints in computation of error quantity:

In the event of Non availability of meter data due to Meter faulty/communicating issues, the actual generation shall be assessed as per the historical data for the relevant period for computation of deviation percentage and applicable DSM charges.

8.3 DSM charges in case of deviations beyond the permissible limits:

The Wind and Solar (Hybrid, with or without ESS) generators having PPA with the ESCOMs or directly supplying power to consumers within the State by availing open access for wheeling the power, shall be liable to pay to DSM pool account for any deviations of the schedules at the rates shown in the following table:

Table 1: Deviation Charge for under or over injection of wind and WS Hybrid generator/seller, for sale of power within Karnataka:

Sl. No.	Absolute error in % terms in 15-minute time block	Deviation charges payable to State deviation pool account (wind and WS Hybrid generator/seller)
	$\leq \pm 10\%$	Nil
2	$> \pm 10\%$ to $\leq \pm 20\%$	Rs 0.25 per kWh for the quantum of short fall or excess energy beyond $\pm 10\%$ and up to $\pm 20\%$ of deviation from the schedule
3	$> 20\%$ but $\leq \pm 30\%$	At Rs.0.25 per unit for the shortfall or excess beyond 10% and upto 20% + Rs. 0.50 per unit for the shortfall or excess energy beyond 20% and upto 30%
4	more than $> \pm 30\%$	At Rs. 0.25 per unit for the shortfall or excess beyond 10% and upto 20% + Rs. 0.50 per unit for the shortfall or excess beyond 20% and up to 30% + Rs.0.75 per unit for the shortfall or excess energy beyond 30%

Table 2: Deviation Charge for under or over injection of solar power, for sale of power within Karnataka:

Sl. No.	Absolute error in % terms in 15-minute time block	Deviation charges payable to State deviation pool account (solar generator/seller)
1	$\leq 5\%$	Nil
2	$> 5\%$ but $\leq \pm 15\%$	At Rs.0.25 per unit
3	$> 15\%$ but $\leq \pm 25\%$	At Rs.0.25 per unit for the shortfall or excess beyond 5% and upto 15%+ Rs. 0.50 per unit for the shortfall or excess energy beyond 15% and upto 25%
4	more than $> \pm 25\%$	At Rs. 0.25 per unit for the shortfall or excess beyond 5% and upto 15% + Rs. 0.50 per unit for the shortfall or excess beyond 15% and up to 25%+ Rs. 0.75 per unit for the shortfall or excess energy beyond 25% (to avoid discrimination)

Provided that the total deviation charges remitted on account of deviations by wind -solar (Hybrid, with or without ESS) generators into State Deviation Pool Account in a financial year (31st of March) shall be capped at the Ceiling Rate of 3 paise per kWh multiplied by the total annual generation at the respective Pooling sub-stations/QCA as applicable.

Any excess amount of deviation charges remitted beyond the capped amount as per deviation account statement over the financial year shall be adjusted in the subsequent bills without interest.

RE Energy deviation bill will be separate for solar generators/sellers (Aggregation of solar plants registered under respective QCA) and for wind/WS-Hybrid generators/sellers because of same bandwidth (Aggregation of wind and WS-Hybrid plants registered under respective QCA).

- 8.4 A statement of energy accounting i.e., energy deviations and deviation charges shall be prepared by the SLDC on monthly basis, based on schedule generation submitted by the QCA and actual generation as per billing meter data received from QCA & the concerned ESCOMs/STU.
- 8.5 SLDC shall compute the absolute error for QCA and shall calculate the DSM charges in accordance with the Regulation 13 of FS DSM Regulations 2026 and issue deviation bills to the QCAs. SLDC shall provide aggregated day-wise, block-wise Deviation Charges, Schedule and Actual to each QCA after 20th of every month.
- 8.6 The QCA shall communicate any discrepancies to SLDC within seven working days from receiving the data from SLDC. In case of any discrepancies in energy account the same shall be corrected forthwith by SLDC after due verification and revised RE DSM Bill shall be issued by SLDC.

9.0 STATE DEVIATION POOL ACCOUNT:

- 9.1 A separate 'State Deviation Pool Account Fund' account was created and maintained by SLDC in accordance with the provisions of the FS DSM Regulations 2015. Deviation Charges levied under the FS DSM Regulation 2026 and interest, if any, received for late payment shall be credited to the Deviation Pool Account.
- 9.2 Payment of all charges on account of energy accounting of wind and solar plants shall have a high priority and the concerned QCA shall pay the indicated amounts within 10(ten) days from the date of issue of the Statement by the SLDC. In case of default, the defaulting constituent shall have to pay interest at the rate of SBI MCLR applicable for the month.

10.0 EVENT OF BREACH OR DEFAULT AND CONSEQUENCES THEREOF:

10.1 Event of Breach on Default

Following events shall constitute event of breach or default by QCA /Generators:

- a. Non-payment or delay in payment of Deviation Charges.
- b. If the QCA fails to pay deviation charges even after a lapse of 60 days from the date issue of RE DSM bill, Process to encash the BG/LC amount shall be initiated beside any other action as permissible under law.
- c. Non-compliance of any of the directives issued by SLDC terms/ conditions/rules outlined under this procedure and RE DSM Regulations, 2026 as amended from time to time.
- d. Obtaining registration on the basis of false information or by suppressing material information.
- e. QCA fails to provide schedules continuously for 10 days. In such cases, the previous day's schedule for those non-submission days shall be considered and DSM charges shall be computed accordingly.
- f. In case the QCA has become insolvent.
- g. In case there is gaming by generator or QCA in order to make an undue commercial gain.
- h. In case of continued default of statutory compliances leading to declaration of the QCA as the willful defaulter by competent authority.

10.2 Consequences for Event of Default

- a. In the event of breach or default of the procedure without prejudice to other actions as may be taken by SLDC, the SLDC shall issue a notice of period not less than 15 days for revocation of registration of QCA and non-scheduling of pooling Sub-station to which said QCA represents and adequate opportunity shall be given to QCA to present its case before SLDC.
- b. In case QCA fails to address/rectify the breach expressed by SLDC in the notice within stipulated time, the SLDC shall proceed with revocation of registration of QCA and disconnection of the pooling stations from grid, besides en-cashing the Bank Guarantee/revolving LC towards recovery of arrears of DSM charges.

11.0 DE-REGISTRATION OF QUALIFIED CO-ORDINATING AGENCY (QCA):

(a) De-registration request by the QCA:

- 1) The QCA may request the SLDC for de-registration as QCA, however, in such cases it shall be the responsibility of the QCA to settle all the commercial obligations of both SLDC and Generators to whom it is representing.
- 2) One (1) month prior notice to be served to all the generators to whom it is representing for de-registration with copy to SLDC.
- 3) The generator/s shall be responsible for appointing new QCA and ensure registration of new QCA at SLDC within this notice period.

(b) De-registration due to non-authorization of Generator:

- 1) One (1) month prior notice to be served by the generator to the QCA for non-authorization with a copy to SLDC.
- 2) The generator/s shall be responsible for appointing new QCA and ensure registration of new QCA at SLDC within this notice period, failing which generation shall not be scheduled.
- 3) Before de-registration, the generator shall ensure that all the commercial settlements pertaining to it has been completed by the QCA with SLDC.

(c) De-registration under default condition:

- 1) The SLDC shall initiate the process of de-registration, in the event of breach of any of the procedure/Regulations by the QCA as specified under various clauses in this procedure/Regulations. All the commercial settlements related to QCA's de-registration shall be done within one month from the date of de registration, provided that the QCA has cleared all the dues pending towards SLDC.
- 2) The generator/s shall be responsible for appointing new QCA and ensure registration of new QCA at SLDC within one (1) month notice period, post which generation shall not be scheduled.

12.0 GRIEVANCE REDRESSAL:

- 12.1 SLDC shall refer the Complaints regarding unfair practices, delays, discrimination, lack of information, supply of wrong information or any other matters to the Commission for redressal.

12.2 Any disputes between QCA and concern generators shall be governed as per dispute resolution mechanism under their mutual agreement.

13.0 REMOVAL OF DIFFICULTIES:

In case of any difficulty in implementation of this procedure, SLDC/QCA/Individual generator may approach the Commission for review or revision of the procedure with requisite details.

**Chief Engineer (Electy).
SLDC, KPTCL, Bengaluru.**

QCA Registration Form

Annexure-I

Tick relevant box

1	New Registration		Change of Registration		Cancel Registration
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Tick relevant box

2	Wind Generation	Solar Generation	Hybrid Generation
(With OR With out ESS)			
3	Name of the Entity		

4	Primary Business (brief description)	
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5	Business address				
Phone		Mobile	Fax	E-mail	Website

6	Postal address	
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7	Contact person & Designation			
Phone		Mobile	Fax	E-Mail

8	Name of Directors	Position	Mobile	E mail
a				
b				
c				
d				
e				

9	Financial Details	
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10	No. of Pooling stations represented				
Pooling station Name and address		Total Installed Capacity in MW	KPTCL / ESCOM Injecting Station	Voltage Class	Type (Wind/ Solar)

Note: Details for each pooling station to be enclosed

11	Details of FBG/LC/Security deposit	Solar (with OR Without ESS)	MW capacity	Amount
		Wind (with OR Without ESS)	MW capacity	Amount

Declaration: All that is stated in the above is true and correct

Authorized Signature and official Seal
(for QCA)

Details to be submitted by QCAs	
Type: Wind/ Solar Generator / Hybrid/ With OR Without ESS	
Individual / on Behalf of Group of generators	
Name along with individual installed capacity of generation constituents to whom QCA is representing:	
If on Behalf of Group of generators, then details of consent letters to be attached	
Total Installed Capacity of Generating Station	
Total Number of Units with details	
Physical Address of the RE Generating Stations	
Whether any PPA has been signed: (Y/N)	If yes, 'then attach details
Connectivity details	Location/Voltage Level
Metering Details	Meter No. 1. Main 2. Check 3. ABT meter with associated details
Connectivity Diagram	{Please Enclose}
Communication arrangements with the SLDC for real time generation, meter reading for accounting, etc.	
Technical Details as required by the SLDC	
Contact Details of the Nodal Person	Name: Designation: Landline / Mobile Number: E-mail Address:
Contact Details of the Alternate Nodal Person	Name: Designation: Landline / Mobile Number: E-mail Address:

Real -time Data Telemetry requirement**Wind turbine generating plants**

- 1) Generator Status: whether On-line / Off-line - (for individual WTGs) this is required for calculation of availability of the WTG.
- 2) Turbine generation (MW / MV AR) - (for individual WTGs)
- 3) Total Generation of the Pooling station: MW and MVAR
- 4) Wind Speed (meter/ second) - (PSS wise)
- 5) Wind Direction (degrees from true north) - (PSS wise)
- 6) Voltage (Volt) al Interconnection point- (PSS wise)
- 7) Ambient air temperature (o C) - (PSS wise)
- 8) Barometric pressure (Pascal) - (PSS wise)
- 9) Relative humidity (in%) - (PSS wise)
- 10) Air Density (kg/ m3) - (PSS wise)

Solar Generating Plants

- 1) Solar Generation unit/ Inverter-wise (MW and MVAR)
- 2) Voltage at interconnection point (Volt) - (PSS wise)
- 3) Generator/ Inverter Status (on /_off- line)
- 4) Total Generation of the Pooling station: MW and MVAR
- 5) Global horizontal irradiance (GHI) -Watt per meter square- (PSS wise)
- 6) Ambient temperature (o C) - (PSS wise)
- 7) Diffuse irradiance - Watt per meter square - (PSS wise)
- 8) Direct irradiance -Watt per meter square - (PSS wise)
- 9) Sunrise and sunset timings- (PSS wise)
- 10) Cloud cover- (Okta) - (PSS wise)
- 11) Rainfall (mm) - (PSS wise)
- 12) Relative humidity (%)- (PSS wise)
- 13) Performance Ratio-(PSS wise)

Energy Storage System (ESS)

- 1) Operating Mode:
 - a) Grid connected/ Standalone mode
 - b) Automatic/ Manual mode
 - c) Charge/discharge
- 2) Measurements (Voltage, Current, P, Q, Status of Charging, charge/discharge rate freq., energy export/import)
- 3) Events and alarms Breaker position/operation
- 4) BESS Start Inhibit Status
- 5) Ambient Temperature
- 6) Parameters of PCS such as active power, reactive power, power factor, operating DC voltage etc.
- 7) Number of battery inverters in operation and Number of battery inverters available in BESS
- 8) Full pack energy: Estimated maximum energy capacity of the batteries
- 9) Energy remaining: Estimated energy remaining of the batteries
- 10) Available maximum capacity: State of energy available in batteries
- 11) Possible charge and discharge power

- 12) Local MW set point
- 13) Reference set points for voltage, power factor and reactive power control
- 14) Local limit for charge and discharge
- 15) Charge and discharge ramp up and ramp down rates
- 16) MW reference (AGC)
- 17) AGC availability status
- 18) Control mode: AGC/Local
- 19) Indication of frequency control status
- 20) Indication of control modes; voltage, power factor, reactive power
- 21) State of Charge (SOC) (Mwh)
- 22) Maximum/Minimum State of Charge (Mwh)

TERMS AND CONDITIONS FOR REGISTRATION OF QCA

Name: *Mis.....* (Name of QCA), (Postal Address)

(To be provided by the QCA on a Rs. 500/- stamp paper)

1. We, as a QCA will be regulated by ***Karnataka Electricity Regulatory Commission (Forecasting, Scheduling, Deviation Settlement Mechanism and related matters for Sellers of Wind, Solar and WS-Hybrid Generation sources) Regulations, 2026*** and all amendments thereof from time to time.
2. We, as a QCA will abide by the procedure and formats devised by SLDC.
3. The Deviation Settlement charges shall be as per the KERC guidelines for which we as QCA will be responsible for the pooling stations for which we represent as a QCA.
4. As per the KERC regulations, we as a QCA, agree to provide forecasting schedules to SLDC on week-ahead and day-ahead basis on behalf of wind and solar pooling stations connected to STU/ESCOM having a combined capacity of 10 MW and more in case of Wind generation and 5 MW and more in case of Solar generation and 5 MW and more in case of Hybrid generation. (with OR without ESS)
5. We as QCA agree to provide the authorization letter from all the generators connected to the pooling station for being appointed as the QCA.
6. We understand that we can revise the day ahead schedules as per the regulations.
7. We agree that if there is any deviation from the schedule, then for such energy, Deviation charges will be applicable as per the regulations including the amendments from time to time.
8. We shall be responsible for commercial settlements of the deviation charges to SLDC on behalf of wind and solar Hybrid (with or without ESS) generators connected to the pooling station.
9. We understand that SLDC will compute the comprehensive Deviation charges and raise bills for the deviation on a monthly basis.
10. Payment will be regulated as per KERC norms.
11. We understand that we will take the monthly meter reading as per IEGC/standard practices including ABT/Load Survey data.
12. We as QCA will abide by KERC Gazette Notification No: KERC/WS(DSM)/2026-27/2150 Dated 19.06.2026, Regulations for all transactions.
13. We shall establish necessary SCADA data of the Interface point and other turbine/plant data for the purpose of monitoring and billing as per KERC guidelines.

14. In the event of any fault in generating system resulting in lower generation then, we will revise the schedule and the same shall be intimated to SLDC as per the KERC Gazette Notification No. KERC/WS(DSM)/2026-27/2150 Dated 19.06.2026.
15. We agree to pay a Bank Guarantee for the amount equivalent to Rs. 40,000/MW for solar generation and Rs, 80,000/MW for wind generation.
16. We agree to provide Turbine / panel and pooling stations details as per the format specified by SLDC.

We are agreeing for the above terms and conditions for registering as QCA with SLDC, KPTCL, Karnataka.

Details of Bank Guarantee / LC / security deposit is enclosed

.....(Name and Postal address of QCA).....

QCA for Pooling station :

KPTCL / ESCOM Injecting

Station Voltage level at

injecting point:

List of generators connected to the pooling station along with installed capacity for which consent is obtained:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Declaration: all that is stated in the above is true and correct

QCA

Authorized Signatory

Forecast and Schedule Data to be submitted by QCA for Wind & Solar Generation

Format: A (i) Week Ahead Schedule

(To be submitted a week in advance) (to be modified by SLDC in accordance with Regulations)

60 min lime block (24 Blocks in a day)	Time	Available Capacity (MW)	Week Ahead Forecast (MW)	Week Ahead Schedule
1	00:00-01 :00			
2	01 :00-02:00		1	
3	02:00-03:00			
4	03:00-04:00			
5	04:00-05:00			
23	22:00-23:00			
24	23:00-24:00			

Format: A (ii) Day ahead schedule

(To be submitted a day in advance)

15 min time block (96 Blocks in a day)	Time	Available Capacity (MW)- Day Ahead	Day Ahead Forecast (MW)	Day Ahead Schedule (MW)
1	00:00-00:15			
2	00:15-00:30			
3	00:30-00:45			
4	00:45-01:00			
5				
95				
96				

Note: The forecast should ideally factor forecasting errors. As such schedule should ordinarily be same as forecast.

Format: B

To be submitted on the day of actual generation.

15 min time block (96 Blocks in a day)	Time	Day Ahead Schedule (MW)	Current Available Capacity (MW)	Revised Schedule (MW)
1	00:00-00:15			
2	00:15-00:30			
3	00:30-00:45			
4	00:45-01:00			
5				
95				
96				

Format-C

(On the Non-Judiciary Stamp Paper)

INDEMNIFICATION

The QCA shall keep Karnataka SLDC indemnified at all times and shall undertake to indemnify and save the SLDC from any and all damages, losses including commercial losses due to forecasting error, claims and actions including those relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of transactions undertaken by the QCA.

The QCA shall keep Karnataka SLDC indemnified at all times and shall undertake to indemnify, defend and save the SLDC harmless from any and all damages, losses including commercial losses due to forecasting error, claims and actions including those relating to injury to or death of any person or damage to property, demands, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of disputes with Karnataka SLDC, as well as with generators and QCA inclusive of confidentiality issues.

Date: _____

Place: _____

(QCA side)

(Generator/WPD/SPD side)

Sign: _____

Sign: _____

Authorized Signatory Name: _____

Authorized Signatory Name: _____

Designation: _____

Designation: _____

Name of QCA

Name of Generator/WPD/SPD

Seal

Seal

