

AJKED NET-METERING APPLICATION FORMS



AJKED NET METERING WING

AJKED House, Airport Road, Gharipan Chowk, Muzaffarabad
www.ajked.gok.pk

Eligibility & Documents Checklist for Submission of Application

Eligibility Criteria

| √ | Eligibility Criteria |
|--------------------------|---|
| <input type="checkbox"/> | Vendor/Installer/Service Provider has valid AJKED Net Metering Registration Certificate |
| <input type="checkbox"/> | Distributed Generator has 3 phase 400V or 11000V connection |
| <input type="checkbox"/> | DG capacity is not greater than 1.5 times of the Sanction Load |
| <input type="checkbox"/> | Name of Applicant and Name mentioned on the submitted paid Electricity Bill is same |

Documents Checklist

| √ | Document |
|--------------------------|---|
| <input type="checkbox"/> | Selected Vendor/Installer/Service Provider's AJKED issued Net Metering Registration Certificate |
| <input type="checkbox"/> | Standard Distributed Generation Application Form (Schedule-II) |
| <input type="checkbox"/> | Application For Grant Of License (for connections above 25kW) (Schedule-III) |
| <input type="checkbox"/> | Application for Exemption from Section 24 of the Companies Ordinance 1984 (Schedule-IV) |
| <input type="checkbox"/> | Affidavit on Judicial Paper of Rs. 50 (Schedule-VI) |
| <input type="checkbox"/> | Single Line Diagram |
| <input type="checkbox"/> | Customer Agreement (Schedule-X) |
| <input type="checkbox"/> | Customer Agreement (Schedule-X(a)) |
| <input type="checkbox"/> | Customer Agreement (Schedule-X(b)) |
| <input type="checkbox"/> | Customer Agreement (Schedule-X(c)) |
| <input type="checkbox"/> | Customer Agreement (Schedule-X(d)) |
| <input type="checkbox"/> | Customer Agreement (Schedule-X(e)) |
| <input type="checkbox"/> | Load Flow Study & Electrical Inspectorate NOC (for >250kW Connections) |
| <input type="checkbox"/> | Application Summary (Schedule-XII) |
| <input type="checkbox"/> | Copy of last Paid Electricity Bill |
| <input type="checkbox"/> | Technical data/Data Sheet of all components including solar modules, inverters, breakers, wires, cables, disconnect switch etc. |

All the relevant documents are signed & stamped by the Vendor/Installer/Service Provider (Y/N): ____

List of Unfilled Documents* also to be Attached by the Applicant

| √ | Document |
|--------------------------|---|
| <input type="checkbox"/> | Agreement (Schedule-I) |
| <input type="checkbox"/> | Schedule-VII |
| <input type="checkbox"/> | Schedule-IX |
| <input type="checkbox"/> | Schedule-XIV |
| <input type="checkbox"/> | Form No: NM/B2 |
| <input type="checkbox"/> | Form No: NM/B3 |
| <input type="checkbox"/> | Form No: NM/B4 |
| <input type="checkbox"/> | Form No: NM/B5 |
| <input type="checkbox"/> | Form No: NM/B6(a) (as per load requirement) |
| <input type="checkbox"/> | Form No: NM/B6(b) (as per load requirement) |
| <input type="checkbox"/> | Form No: NM/B7 |
| <input type="checkbox"/> | Form No: NM/B8 |

NOTE: The Schedules and Forms mentioned above can be viewed/downloaded from the AJKED's website www.ajked.gok.pk.

* To be filled by the Department or both by the Applicant & Department as per the requirement on later stage



SCHEDULE-II

**AJK ELECTRICITY DEPARTMENT
STANDARD DISTRIBUTED GENERATION APPLICATION FORM
(As specified in Rule 3(1))**

| This Portion to be Filled by the AJKED | |
|--|------------------------|
| Application Tracking ID | NM/____/____/____/____ |
| Receiving Date | |

1. Contact Information: The applicant is the person that is legally responsible for the generating system.

| Applicant's Name | Applicant's Father Name |
|------------------|-------------------------|
| | |

CNIC of Applicant/CUIN in case of Company (Copy to be attached)

| Applicant's Mailing Address: |
|------------------------------|
| |

| Applicant's Phone Number & Email Address | |
|--|--------|
| Office: | Fax: |
| Cell: | Email: |

| Emergency Contact Numbers |
|---------------------------|
| |

2. Location of Generation System

| |
|--|
| Address at which the DG Facility is located |
| |
| Latitude-Longitude (i.e. E-49° 32' 06", N-91° 64' 18") |
| |

3. Applicant / consumer electricity account reference number

| |
|--|
| |
|--|

4. Applicant's Ownership Interest in the Generation System

| |
|--|
| Owner _____ Co-Owner _____ Lease _____ Other _____ |
| |



| | |
|---|-----------|
| 5. Primary Intent of the generation system | |
| | |
| | |
| (a) Anticipated annual electricity consumption of the facility or site: | (kWh)/yr. |
| (b) Anticipated annual electricity production of the generation system: | (kWh)/yr. |
| (c) Anticipated annual electricity purchase (i.e. (a) minus (b)) | (kWh)/yr. |
| | |

| | |
|---|-----------------------|
| 7. Installing Contractor Information | |
| Contractor's Name | |
| | |
| Name of Firm | |
| | |
| Contractor's Phone Number | E-Mail Address |
| | |
| Mailing Address | |
| | |

| |
|-------------------------------------|
| 8. Requested In-Service Date |
| |

| | |
|--|-----------------|
| 9. Provide One-Line Schematic Diagram of the System | |
| Schematic is Attached | Number of pages |
| | |

| | |
|---|-----------------------------|
| 10. Generator / Inverter Information | |
| Manufacturer | Model No. |
| | |
| Version No. | Serial No. |
| | |
| Generation Type (Check One) | Generation Type (Check One) |



| | | | |
|---|--------------------------------------|-----------------------------------|--------------------------------------|
| <input type="checkbox"/> Single Phase | <input type="checkbox"/> Three Phase | <input type="checkbox"/> Inverter | <input type="checkbox"/> Other _____ |
| Name Plate AC Ratings (Check One) | | | |
| _____ kW _____ kVA _____ volts | | | |
| Primary Energy Source | | | |
| | | | |
| Note: if there is more than one inverters, attach an additional sheet describing each | | | |

| |
|--|
| 11. Site Plan showing location of the External Disconnect Switch (attach additional sheets as needed) |
| |

| |
|--|
| 12. Design Requirements |
| (a) Has the proposed distributed generation paralleling equipment been certified by Electrical Inspector? Y_____ N_____ |

| |
|--|
| 13. Other Comments, Specification and Exceptions (attach additional sheets if needed) |
| |

| |
|---|
| 14. Application and Installer Signature |
| To the best of my knowledge, all the information provided in this application form is completed and correct |

| | |
|--|-------------|
| Applicant Signature | Date |
| | |
| Installer Signature (If Applicable) | Date |
| | |



SCHEDULE-III

AJK ELECTRICITY DEPARTMENT

APPLICATION FOR GRANT OF LICENSE (ABOVE 25KW)

(As specified in Rule 4(2))

| | |
|--|---|
| 1. Name of Applicant: | |
| 1(a) CNIC of Applicant/CUIN in case of Company (Copy to be attached) | |
| 1(b) Address: | |
| 1(c) Contact Nos: | Office: _____ Fax: _____ Cell: _____ |
| 1(d) Email Address: | |
| 2. Location of DG Facility: | |
| 3. Name of Operation Division with which the DG facility is proposed to be interconnected | |
| 4. Size of DG Facility: | |
| 5. Approximate monthly energy proposed to be supplied to AJKED (kWh): | |
| 6. Fee to be deposited: (Non-Refundable) | |

Applicant's Signature

| |
|--|
| |
|--|

Date

| |
|--|
| |
|--|

SCHEDULE-IV

AJK ELECTRICITY DEPARTMENT

(As specified in Rule 4(2(b)))

Application for Exemption from Section 24 of the Companies Ordinance 1984

As Adapted in AJ&K

I/we **(Name of the Distributed Generator)** for the purpose of grant of License of Distributed Generator under AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022, hereby request the AJKED for grant of exemption from the requirement of being registered as a company under the Companies Ordinance, 1984 (XLVII of 1984) under section 24 of the Act.

Name & Address of Distributed Generator

Stamp

SCHEDULE-V

AJK ELECTRICITY DEPARTMENT

FEE SCHEDULE

(As specified in Rule 4(2(c)))

A Distributed Generator shall be bound to pay the onetime fee through pay order in favor of
AJK Electricity Department (AJKED) as per following fee schedule.

| Sr.# | Size of DG Facility | Amount |
|------|---------------------|------------|
| 1. | 0-25 KW | Rs. 1000/- |
| 2. | >25-250 KW | Rs. 2000/- |
| 3. | Above 250 KW | Rs. 5000/- |

SCHEDULE-VI

AJK ELECTRICITY DEPARTMENT

AFFIDAVIT

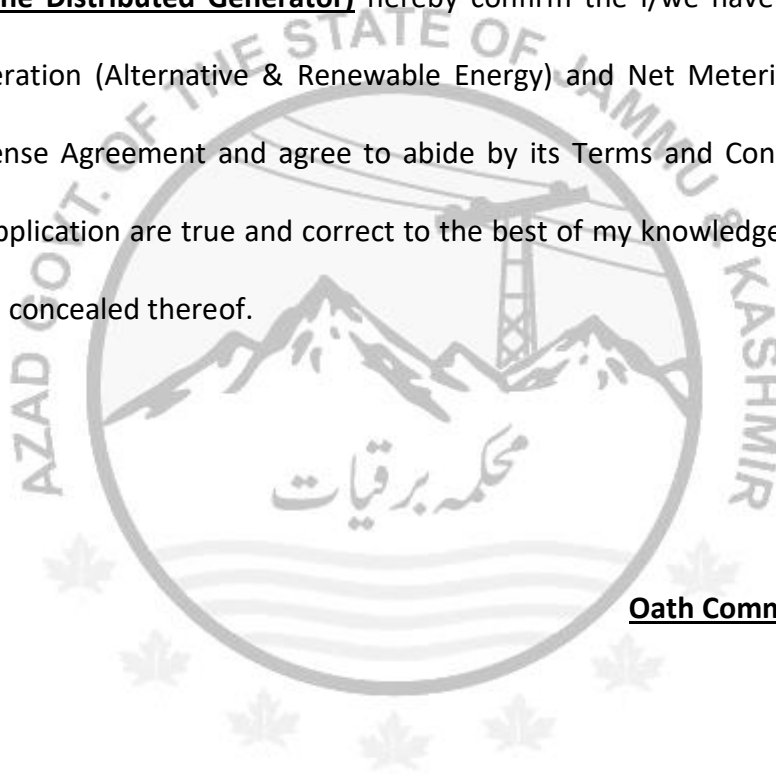
(On Judicial paper of Rs. 50/-)

(As specified in Rule 4(2(d)))

I/we **(Name of the Distributed Generator)** hereby confirm the I/we have read the AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022, AJKED License Agreement and agree to abide by its Terms and Conditions and the content of the Application are true and correct to the best of my knowledge and belief and nothing has been concealed thereof.

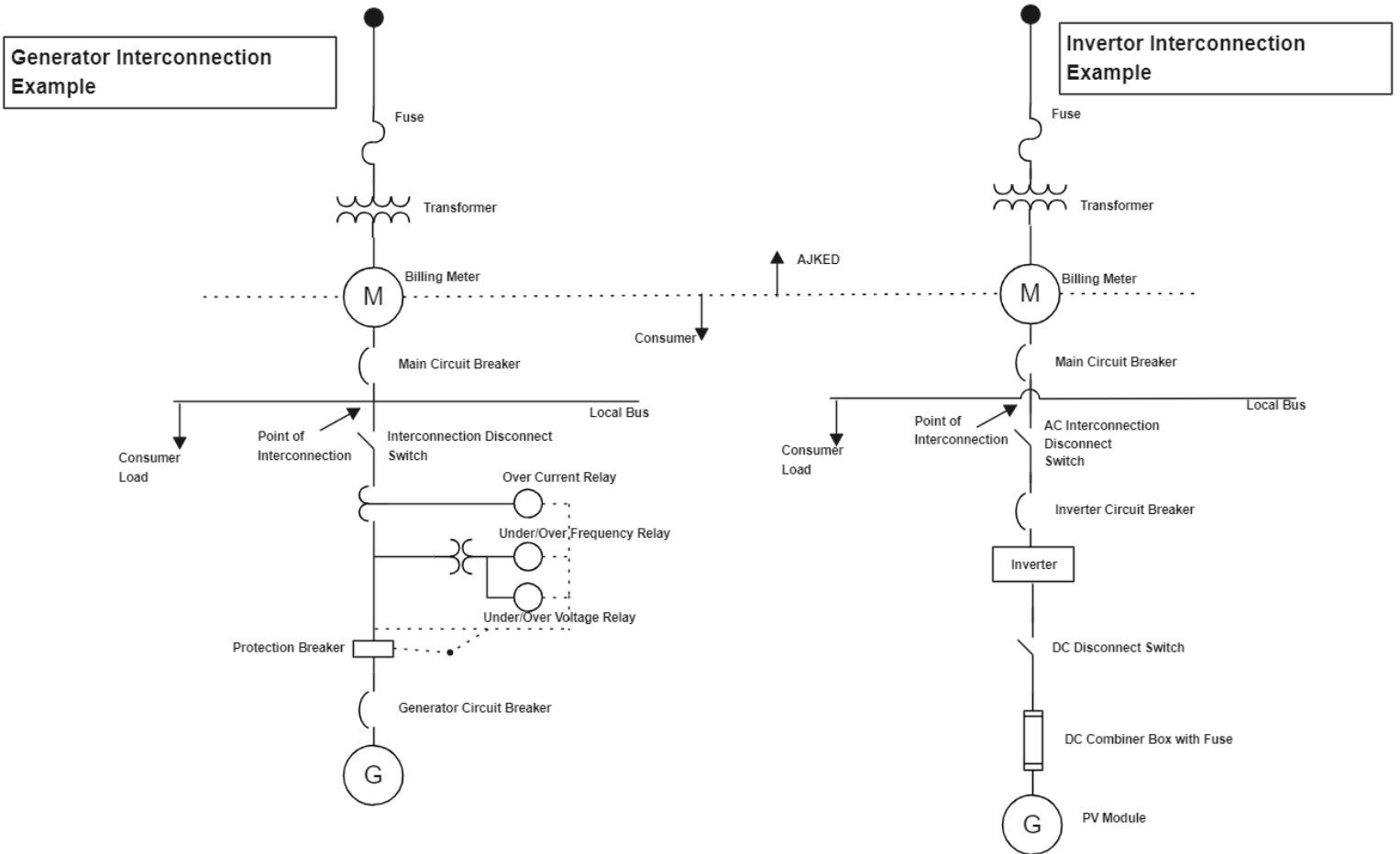
Deponent

Oath Commissioner



SCHEDULE-VIII

(As specified in Rule 9)



Note:
a) Trip of either Breaker is acceptable
b) Compliance with IEEE 1347 & UL 1741 required

SCHEDULE-X

CUSTOMER AGREEMENT (in pursuant to regulation 3 sub-regulation 10)

(to be signed between DG Installer and Customer)

1. This Agreement is made on _____ Day _____ Month _____ Year between M/s _____ having a registered office at _____, registered with AJKED as certified Vendor/Installer/Service Provider (hereinafter called “the DG Installer”) having Registration Number AJKED/NM/____/____/____ and _____ Mr./Ms. _____ having an address: _____ (hereinafter referred to as “the Customer”).

Whereas:-

- 2.1. The Customer has agreed to purchase Wind / Photovoltaic Distributed Generating (DG) system of _____ KWp with _____ KW grid tie inverter amounting to PKR _____.
- 2.2. The DG Installer is involved in the business of designing, supply and installation of Wind / PV systems including after sale support.
- 2.3. The Customer is desirous of installing Wind / Photovoltaic Distributed Generation Facility (hereinafter referred to as “the DG Facility”) at the address of _____.
- 2.4. The DG Installer is registered with AJK Electricity Department Net Metering Wing, listed under the Directory of the Registered DG Installers with registration number AJKED/NM/____/____/____ and is listed at AJKED’s website at www.ajked.gok.pk.

Whereby it is agreed as follows:

- 3.1. The agreement includes (enter Yes or NO at appropriate column)

| Sr.# | Services | Yes/No | Remarks |
|------|--|--------|---|
| 1 | Supply and Installation DG Facility based on net metering, complete in all respect. | | Does not include provisioning and installation of bi-directional energy meter |
| 2 | Consultancy services for technical design and supervision of the planned DG Facility | | Technical matters only |
| 3 | Services for documentation and its processing with relevant institutions till | | |

| | | | |
|---|---|--|---|
| | award of Net Metering license/connection | | |
| 4 | Maintenance services for DG Facility | | On annual or other terms basis |
| 5 | Services related to bi-directional meter | | May include provisioning and support in installation |
| 6 | Any other related to net metering subject | | To be decided by installer and customer independently |

- 3.2. The Customer hereby appoints the DG Installer to Supply and Install the DG Facility at the Address as stated in Regulation 3 sub-regulation 10 as per requirements of AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022 as amended time to time. The DG Installer shall strictly comply with the specifications and requirements as stated in the Regulations and standards for the components of the DG Facility as specified by AEDB/AJKED. Compliance certificate shall also be rendered by DG Facility as per Schedule-X(e) attached.
- 3.3. The DG Installer shall be responsible to initiate and get processed application of net metering connection on behalf of the Customer from start till energization of the connection.
- 3.4. The Products and Components and services required for the DG Facility are as set out the quote which has been agreed between the two parties and are set out in the Schedule-X(a) and Schedule-X(b) attached.
Any changes (after signing this agreement) to the brand of the products as set out in the Schedule-X(a) have to be mutually agreed, in writing and made a part of this agreement, by both the Customer and the DG Installer. Copy of the same has also to be provided to concerned Operation Division of AJKED for update of its records.
- 3.5. The DG Installer hereby agrees to provide the Customer the DG Facility performance expectancy as set out in the Schedule-X(d), attached.
- 3.6. The Customer hereby agrees to pay the DG Installer for the products (including components) and installation charges as set out in the Schedule-X(c).
- 3.7. All payments by the Customer to the DG Installer shall be in the form of cheque, bank draft (cashier's order) or electronic transfer. No payment in CASH, shall be made by the Customer to the DG Installer. All payments must be acknowledged by official receipts issued by the DG Installer.
- 3.8. The Customer and DG Installer hereby agree to abide and comply with all rules, regulations, directives and any written requirement as set out by AJKED / NEPRA / AEDB / any other relevant authority.
- 3.9. All documents in respect of AJKED for the DG Facility shall be executed by the Customer. However, DG Installer shall provide services in completing the documentation and processing for obtaining Net Metering Connection as per Regulations.
- 3.10. The Customer hereby agrees and covenants to allow the DG Installer, its employees and person/persons authorized by the DG Installer to enter the address of the

Customer for the purpose of carrying out site survey prior to commencement of works, the supply and installation of the DG Facility and any other related services and maintenance.

- 3.11. The DG Installer agrees to provide a warranty as set out Schedule-X(d). Minimum warranties required are as follows.
 - a. Warranty, PV Modules against manufacturing defects, 10 Years.
 - b. PV Modules, standard performance warranty, 25 Years.
 - c. Workmanship including locally supplied parts (Except Frames), 5 Years.
 - d. PV mounting Frames and associated parts, 25 Years.
 - e. Grid tie inverters, including hybrid, 5 years.
- 3.12. The DG Installer shall be responsible to the Customer on any warranty claims on components and equipment.
- 3.13. Both the Customer and the DG Installer hereby agree and covenant that they shall not, for the duration of this Agreement executed between them, terminate this Agreement without the written consent of the other party. Provided that written consent shall only be granted when the party that intends to terminate the agreement has met all its obligations under this Agreement. The Customer may terminate the agreement if the DG Installer fails to deliver satisfactory performance as per agreed schedule. Similarly DG Installer may terminate this agreement if payment schedule is not met.
- 3.14. The duration of this agreement shall start from the date of signing this Agreement and will continue for the period mentioned in warranty clauses.
- 3.15. The Schedules attached i.e. Schedule-X(a), Schedule-X(b), Schedule-X(c), Schedule-X(d), Schedule-X(e), to this Agreement shall form part and parcel of this Agreement and shall be read as part of this Agreement.
- 3.16. Any date or period mentioned in this Agreement may with the written consent of the parties be extended failing which time shall be of the essence of this Agreement.
- 3.17. The provisions of this Agreement shall be binding upon the personal representatives of each of the parties being an individual.
- 3.18. Each party confirms that this Agreement sets out the entire agreement and understanding between the parties and that it supersedes all prior agreement, arrangement and understanding between them and that they are not entering into this Agreement or any arrangement contemplated or in reliance upon any representation or warranty not expressly set out in this Agreement.
- 3.19. No failure or delay by any party in exercise of any right, power or privilege under this Agreement shall operate as a waiver of it nor shall any single or partial exercise by such party of any right, power or privilege preclude any further exercise of it or the exercise of any other right or privilege.
- 3.20. No party shall have the right to assign any of the rights, liabilities or benefits set out in this Agreement without the prior written consent of the other party having been first obtained.
- 3.21. Each party shall bear its own costs, legal fees and other expenses. The stamp duty for this Agreement, if any, shall be borne by the Customer.
- 3.22. No provision of this Agreement shall be amended, modified, varied, waived or discharged otherwise than by the express written agreement of the parties to it nor



- may any breach of any provision of this Agreement be waived or discharged except by the written consent the other party.
- 3.23. In the event of any conflict between the provisions of this Agreement and any other document, the provision of this Agreement shall prevail.
 - 3.24. All notices required to be given under this Agreement shall be in writing and shall be given or sent to the party concerned by hand or by Registered Post at the address set out in this Agreement or at such other address as the parties may so inform the other in writing.
 - 3.25. This Agreement shall be deemed to be a contract made in AJ&K and shall be interpreted in all respect in accordance with Laws of AJ&K/Pakistan.

IN WITNESS WHEREOF the parties hereto have hereunto set their hands the day and year first above written.

SIGNED by _____, Designation _____,
CNIC _____ for and on behalf of _____
Registration with AJKED No.: AJKED/NM/____/____/____ (as the **DG Installer**) in the
presence of:-

Company Stamp

Witness

Name, _____, Designation _____,
CNIC _____.

SIGNED by _____ for and on behalf of _____
_____ (as the **Customer**) in the presence of:-

Witness

Name, _____, Designation _____,
CNIC _____.

SCHEDULE-X(a)

Products and Components to be supplied by the DG Installer for the DG Facility

| S# | Product description | Brand | S# of Equipment | Remarks |
|----|-----------------------------------|-------|-----------------|---------|
| 1 | PV Modules | | | |
| 2 | Inverter | | | |
| 3 | DC cables | | | |
| 4 | AC cables | | | |
| 5 | PV frames | | | |
| 6 | Earthing | | | |
| 7 | AC breakers , fuse links | | | |
| 8 | DC breakers and fuse links | | | |
| 9 | AC surge protectors | | | |
| 10 | DC surge protectors | | | |
| 11 | Residual Current detector (RCD) | | | |
| 12 | Bus bar | | | |
| 13 | Manual disconnect | | | |
| 14 | Any other accessories/attachments | | | |

Please attach a separate page if required.

SCHEDULE-X(b)

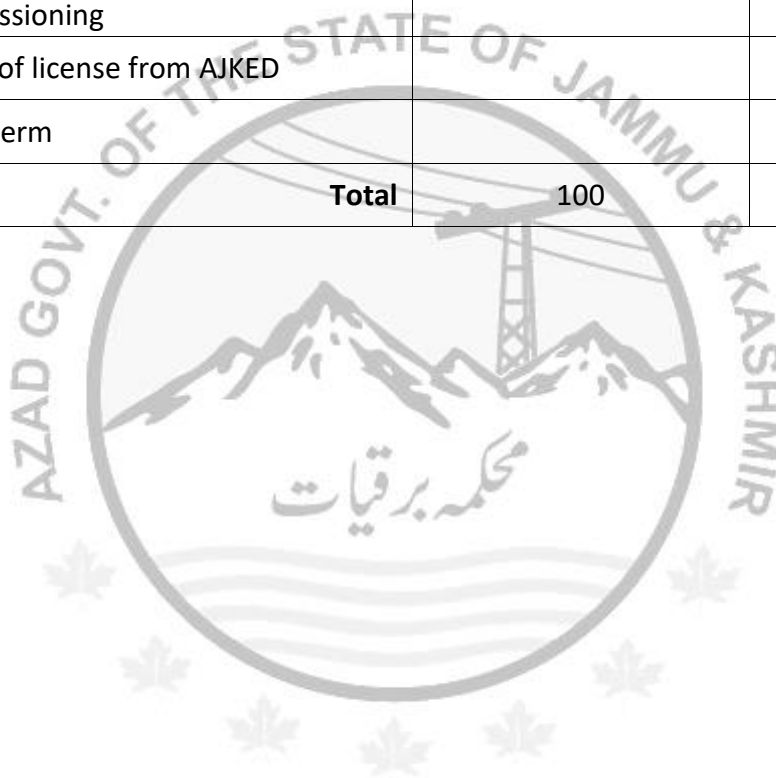
Quotation by DG installer (on company letter head and bearing company stamp) and bearing acceptance signatures, name, date and CNIC Number of the customers



SCHEDULE-X(c)

PAYMENT SCHEDULE

| S# | Milestone | % of the Total Amount | Amount (PKR) |
|----|--|-----------------------|--------------|
| 1 | Upon signing of Agreement | | |
| 2 | Upon completion of installation, testing and commissioning | | |
| 3 | On receipt of license from AJKED | | |
| 4 | Any other term | | |
| | Total | 100 | |



SCHEDULE-X(d)

SYSTEM AND COMPONENTS WARRANTIES

1. Warranty, PV Modules against manufacturing defects: _____ Years
2. PV Modules, standard performance warranty: _____ Years
3. Workmanship including locally supplied parts (Except Frames): _____ Years
4. PV mounting Frames including fixing screw, nut/bolt and washers etc.: _____ Years
5. Grid tie inverters, including hybrid (On-grid/Off-Grid as one unit): _____ Years
6. Guaranteed Annual Energy Yield at given site: _____ KWh/Yr.

Note:

- I. In case the system does not yield promised yield, installer promises to rectify till guaranteed yield is delivered.
- II. This guarantee is subject to:
 - a. No tempering by any un-authorized person
 - b. Regular maintenance services hired from installer.
 - c. Not valid under force majeure condition, natural or man-made disasters.
 - d. Yield could vary $\pm 10\%$ depending upon location.

SCHEDULE-X(e)

CERTIFICATE BY INSTALLER ABOUT COMPLIANCE TO STANDARDS

Certificate by Installer about compliance to standards as specified by AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022 and AJKED Net Metering Wing guidelines and as amended time to time.

Certificate of Compliance with Mandatory requirements

We, _____ (Name, address, contact info of installer) having been prequalified by AJK Electricity Department Net Metering Wing vide reference number AJKED/NM/___/___/___ have installed the system as per requirements of AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022 and all other standards of the components of the DG Facility as specified by AJKED. We specifically certify the following:-

- 1. Compliance to quality, safety and environmental standards and technical requirements as specified by AJKED:**
 - a) The design of the DG facility and its sizing complies with minimum technical requirements and specifications
 - b) The components of the DG Facility as supplied to customer complies with the quality, safety and environment standards
 - c) The warranties given to the customer for components of DG Facility complies with the requirements
 - d) The installation of the DG Facility complies with the quality and safety requirements, recommendations and precautions

- 2. Compliance to Protection Requirements as specified by AJKED:**
 - a) The protection and control diagrams for the interconnection of the DG Facility has been designed in accordance with the provision of Grid and Distribution codes and approved by AJKED prior to commissioning of proposed interconnection facilities. Reference has been derived from typical single line diagram specified at Schedule VIII of the net metering regulations.
 - b) The distributed generator is provided with equipment including without limitation, electrical lines/circuits, transformer, switch gear, safety and protective devices. Meters to be used for interconnection shall be either arranged in consultation with or (after submission of fee/charges) to be obtained from AJKED.
 - c) The protective functions are equipped with automatic means to prevent reconnection of distributed generation facility with the distribution facilities of AJKED.
 - d) The distributed generator is equipped with a manual lockable disconnect switch that has a visual break to isolate the distributed generator facility from distribution facilities.
 - e) The Grid connected generator complies with Underwriter laboratories UL1741 standards and addresses the electrical interconnection design of various forms of generating equipment IEEE 1547 2003, IEC 61215. Compliance proof or Manufacturers certificate to this effect is attached.

3. Compliance to Prevention of interference:

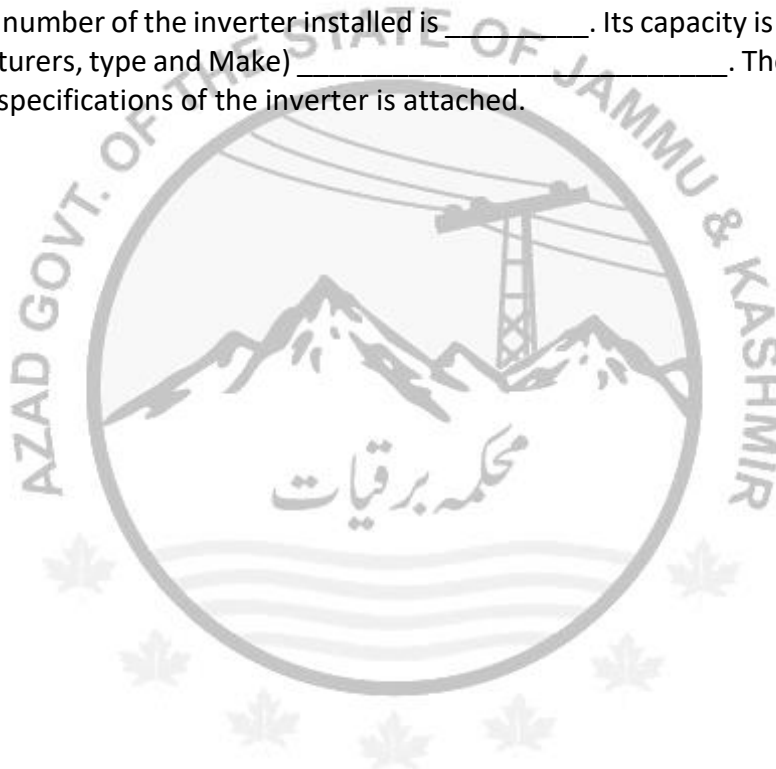
The DG Facility is designed to free from interference generation. Proper shielding and earthing is provided to avoid any such generation and suppression. The THD of the inverter used is _____ (Value) which is less than permitted 3%.

4. Compliance to Voltage and Frequency Range:

- a) The maximum variation in output voltages of the inverter used _____ (Value) which is less than permissible $\pm 5\%$
- b) The maximum variation in output frequency of the inverter used _____ (Value) which is less than permissible $\pm 1\%$

5. Technical details of the inverter

The serial number of the inverter installed is _____. Its capacity is of _____ KW and (Manufacturers, type and Make) _____. The literature containing technical specifications of the inverter is attached.



SCHEDULE-XI

LOAD FLOW STUDY

Software used: _____

DG Capacity (kW): _____



SCHEDULE-XII

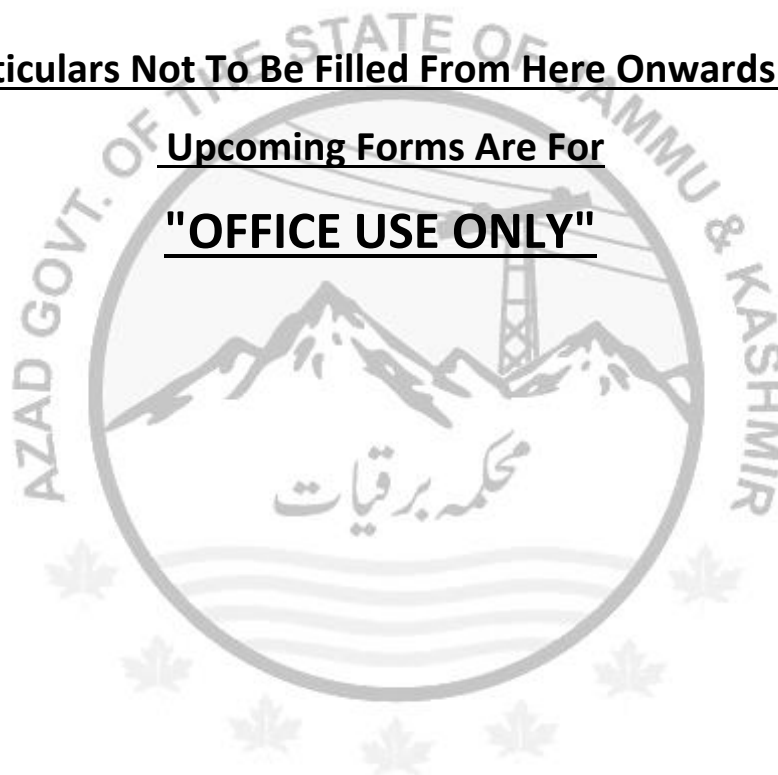
APPLICATION SUMMARY

| CLIENT INFORMATION | | | | | |
|--|--------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|-------------------------------------|
| Name | | | | | |
| CNIC | | | | | |
| Address | | | | | |
| Mailing Address | | | | | |
| Cell Ph. # | | Email Address | | | |
| Subdivision | | Feeder Name | | | |
| Reference No. | | Customer ID | | | |
| Meter Number | | Bill Tariff | | | |
| Issuance Date of Attached Bill | | | | | |
| Sanction Load | | | Required Load | | |
| Net Metering Details | Residential Consumption of Client | Total kWh Production | | Surplus kWh | |
| | | | | | |
| VENDOR/INSTALLER/SERVICE PROVIDER'S INFORMATION | | | | | |
| Company Name | | | | | |
| Company Address | | | | | |
| AJKED Net Metering Registration Number | AJKED/NM/____/____/____ | | | | |
| Installing Engineer | | | | | |
| Installer's CNIC | | | | | |
| Installer's Phone# | | | Installer's Email | | |
| SYSTEM INFORMATION | | | | | |
| PV System Category | Residential <input type="checkbox"/> | Commercial <input type="checkbox"/> | Industrial <input type="checkbox"/> | Agricultural <input type="checkbox"/> | |
| Supply Voltage Level | 11 kV <input type="checkbox"/> | 400 V <input type="checkbox"/> | | | |
| System Size | | | | | |
| Panel Make | | | Panel Model | | |
| Inverter Capacity | Rated Capacity = | | Inverter Type | On Grid <input type="checkbox"/> | Off Grid <input type="checkbox"/> |
| Inverter Make | | | Inverter Model | | |
| Inverter Serial No. | | | | | |
| For more than one make/model of panels on a single inverter, use this area to define the additional solar panels | | | | | |
| Second Set of Solar Panels | Make | Model | No. of Panels | Watts/Panel | kW of 2 nd Set of Panels |
| | | | | | |
| Second Set of Solar Panels | Make | Model | Rated Capacity | Inverter Serial Number | |
| | | | | | |
| Overall System Size (kW) | | | | | |

Particulars Not To Be Filled From Here Onwards As

Upcoming Forms Are For

"OFFICE USE ONLY"



SCHEDULE – I

DISTRIBUTED GENERATION INTERCONNECTION AGREEMENT (OF __KW) BETWEEN AJK ELECTRICITY DEPARTMENT (AJKED) & DISTRIBUTED GENERATOR (DG) (As specified in Rule 2(c))

The Distributed Generation Interconnection Agreement (the “Agreement”), is made and entered in to this _____ (day) of _____ (month), _____ (year) by and between _____ hereinafter called “AJKED” and _____ hereinafter called the “Applicant”. Applicant shall be 3 phase 400V or 11kV AJKED’s consumer. AJKED and the Applicant are hereinafter collectively referred to as the “Parties” and individually as a “Party”.

RECITALS

- A. AJKED is the owner of the electric distribution system in the state of Azad Jammu & Kashmir (AJ&K).
- B. Applicant desires to install a Distributed Generator (DG) facility or energy storage device using solar or wind energy resources with a capacity greater than 1 KW but no more than 1 MW, including related interconnection equipment (the “DG Facility”) and to interconnect the DG Facility to the AJKED’s distribution system.
- C. AJKED has previously reviewed and approved Applicant’s DG Interconnection Applicant Form dated _____, and supporting materials (the Application”). The completed Application is attached as Exhibit 1 and incorporated into this Agreement.
- D. Applicant wishes to interconnect the DG Facility to AJKED’s distribution system and AJKED is willing to permit such interconnection subject to the terms and conditions set forth: (1) The completed Application approved by AJKED; (2) this Agreement.
- E. No agency or partnership is created with the interconnection of the applicants DG Facility.

AGREEMENT

NOW THEREFORE, in consideration of the foregoing Recitals and for good and valuable consideration, the AJKED and Applicant agree as follows:

1. Design Requirement:

The DG Facility shall be installed in compliance with the AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022.

2. Applicant’s Representations and Warranties:

Applicant represents and warrants that:

- i The DG Facility is fully and accurately described in the Application;

- ii All information in the Application is true and correct;
- iii The DG Facility has been installed to Applicant's satisfaction;
- iv Application has been given warranty information and an operation manual for the DG Facility;
- v Applicant has been adequately instructed in the operation and maintenance of the DG Facility.

3. Interconnection Disconnect Switch:

AJKED may require that the Applicant furnish and install an interconnection disconnect switch that opens, with a visual break, all underground poles of the interconnection circuit. The interconnection disconnect switch shall be rated for the voltage and fault current requirements of the DG Facility, and shall meet all applicable IEC, IEEE Standards, as well as applicable requirements of the Grid Code. The switch enclosure shall be properly grounded. The interconnection disconnect switch shall be accessible at all times, located for ease of access of AJKED personnel, and shall be capable of being locked in the open position. The Applicant shall follow AJKED's recommended switching, clearance, tagging, and locking procedures.

4. Modifications to the DG Facility:

Applicant shall notify AJKED of plans for any material modification to the DG Facility by providing at least forty working days of advance notice. "Material Modification" is defined as any modification that changes the maximum electrical output of the DG Facility or changes the interconnection equipment. The notification shall consist of a completed, revised Application and such supporting materials as may be reasonably requested by AJKED. Applicant agrees not to commence installation of any material modification to the DG Facility until AJKED has approved the revised Application.

5. Insurance, Indemnification, Liability:

- 5.1 Distributed Generator shall obtain and maintain appropriate insurance for third party personal injury and general commercial liability.
- 5.2 Each party as indemnitor shall defend, hold harmless, and indemnify the other party and the directors, officers, employees, and agents of the other party against and from any and all loss, liability, damage, claim, cost, charge, demand, or expense (including any direct, indirect or consequential loss, liability, damage, claim, cost, charge, demand, or expense, including attorneys' fees) for injury or death to persons, including employees of either party, and damage to property, including property of either party, arising out of or in connection with (a) the engineering, design, construction, maintenance, repair, operation, supervision, inspection, testing, protection or ownership of the indemnitor's facilities, or (b) the making of replacements, additions, betterments to, or reconstruction of the indemnitor's facilities. This indemnity shall apply notwithstanding the active or passive negligence of the indemnitee. However,

neither party shall be indemnified hereunder for its loss, liability, damage, claim, cost, charge, demand, or expense resulting from its sole negligence or willful misconduct.

- 5.3 The indemnitor shall, on the other party's request, defend any suit asserting a claim covered by this indemnity and shall pay for all costs, including reasonable attorney fees, that may be incurred by the other party in enforcing this indemnity.
- 5.4 The provisions of this Section shall not be construed to relieve any insurer of its obligations to pay any insurance claims in accordance with the provisions of any valid insurance policy.
- 5.5 Except as otherwise provided in this section, neither party shall be liable to the other party for consequential or remote damages incurred by that party.

6. DG Facility Commissioning Testing:

Applicant shall notify AJKED in writing that installation of DG Facility is complete and that the interconnection equipment is available for testing by AJKED at least fifteen working days duly certified by Electrical Inspector AJK before Applicant interconnects the DG Facility with AJKED's Distribution System. AJKED shall thereupon have the right to test the DG Facility. AJKED shall also have the right to witness any testing by Applicant of the DG Facility. Any AJKED testing of the DG Facility shall be completed within ten working days. After the testing which is to the satisfaction of both parties, the DG facility may be interconnected with the distribution system of AJKED to be witnessed by representatives of both parties within thirty eight days.

7. Access to DG Facility:

Applicant shall permit AJKED's employees and agents to enter the property on which the DG Facility is located at any reasonable time for the purposes of inspecting and/or testing Applicant's DG Facility to ensure its continued safe and satisfactory operation and the accuracy of AJKED meters. Such inspections shall not relieve Applicant from its obligation to maintain the DG Facility and any related equipment owned by Applicant in safe and satisfactory operating conditions. AJKED shall have the right to witness any testing by Applicant of the DG Facility.

8. Temporary Disconnection of a DG Facility:

AJKED may limit the operation and/or disconnect or require the disconnection of a DG facility from AJKED's Distribution System at any time, with or without notice, in the event of fault. AJKED may also limit the operation and/or disconnect or require the disconnection of DG facility from AJKED's Distribution System upon the provision of 30 days written notice for the conditions to allow for routine maintenance repairs or modifications to AJKED's Distribution System:

9. Disputes; Right to Appeal to AJKED:

In case of any dispute between the applicant and concerning Electricity Operation Division/Net Metering Wing of AJKED, the applicant may file a petition to concerning Chief

Engineer Electricity. The decision of the Chief Engineer shall be final and binding on both the applicant and Electricity Operation Division/Net Metering Wing AJKED.

10. Amendments; Non-Waiver:

Any amendment or modification to this Agreement must be in writing and executed by Applicant and AJKED. The failure of Applicant or AJKED's to insist on performance by the other Party of any provision of this Agreement shall not waive the right of the Party who failed to insist on performance to enforce the same provision at a later time.

11. Term and Termination of Agreement:

The term of Agreement between Distributed Generator and AJKED shall be seven years with effect from the date of commissioning of DG facility. At the expiry of initial term, the Agreement may be automatically renewed by the mutual understanding between Distributed Generator and AJKED for another term of seven years and so on.

- a) AJKED may limit the operation and/or disconnect or require the disconnection of a DG facility from AJKED's Distribution System at any time, with or without notice, in the event of fault. AJKED may also limit the operation and/or disconnect or require the disconnection of DG facility from AJKED's Distribution System upon the provision of 30 days written notice for the conditions which including as follows
 - To allow for routine maintenance, repairs or modifications to AJKED's Distribution System;
 - Upon AJKED's determination that DG facility is not in compliance with these Rules;
 - Upon termination of the Agreement.
- b) This Agreement may be terminated in accordance with the AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022.
- c) The Distributed Generator may terminate the agreement upon thirty days written notice if the Distributed Generator determines to discontinue the sale of electricity to AJKED.
- d) The concerning Electricity Operation Division shall not terminate the Agreement in any event without prior approval of the Net Metering Wing AJKED/Chief Engineer.
- e) All rights and obligations accrued up to termination shall continue in force upon termination.

12. Successors and Assigns:

- a) Assignment by Applicant: Applicant shall not assign its rights and obligations under this Agreement in whole or in part without the prior written consent of AJKED, which consent shall not be unreasonably withheld or unduly delayed. AJKED may withhold its consent to any proposed assignment if the proposed assignee fails to assume the obligations of Applicant under this Agreement in writing.

- b) Assignment by AJKED. AJKED shall have the right to assign this agreement in whole upon written notification to the Applicant.
- c) Successors. This Agreement shall be binding upon the personal representatives, heirs, successors, and permitted assigns of the respective Parties.

13. Applicant and AJKED Signature and Seal:

IN WITNESS WHEREOF, Applicant and AJKED have executed this Agreement as of the year and date first set forth above.

| Applicant Signature & Date | AJKED's Signature with Seal & Date |
|--|---|
| | |
| Title | Title |
| | |
| Witness No.1 (Name & Signature) | Witness No.1 (Name & Signature) |
| | |
| Witness No.2 (Name & Signature) | Witness No.2 (Name & Signature) |
| | |

SCHEDULE-VII

AJK ELECTRICITY DEPARTMENT

GENERATION LICENSE TEMPLATE FOR ABOVE 25KW

(As specified in Rule 4(3))

Application Tracking ID: NM/___/___/___/___

Date: _____

1. AJKED hereby grants Generation license to (_____)
under Regulation 4 of the AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022 for a period of _____ Years. This License is valid upto 20____.
2. The License shall abide by the provision under AJK Distributed Generation (Alternative & Renewable) and Net Metering Regulation 2022, during the currency of the License.
3. The technical parameters of the net metering arrangement are shown hereunder;
 - i. Primary Energy Source: Solar/Wind
 - ii. Size of DG Facility: مختم برقیات KW
 - iii. Generator/Inverter information:
Manufacturer _____, Model No. _____
 - iv. Generation Type: Inverter/Other
4. This License may be renewed subject to AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022.

AJKED

**Name & Address of
Distributed Generator**

SCHEDULE-IX

**AJK ELECTRICITY DEPARTMENT
NET METERING APPROVAL
(As specified in Rule 3(7-a))**

No. _____

Dated _____

To,

Applicant Name: _____

Applicant Address: _____

Contact No.: _____

Subject: NET METERING APPROVAL

1. The Executive Engineer Operation Division _____ AJK Electricity Department hereby grants Net Metering approval to *write applicant name*, for _____ KW photovoltaic solar based Distributed Generation facility, having **Application Tracking ID** NM/____/____/____/____, located at *write applicant address*, under the AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022, for a period of seven (7) Years. This approval is valid upto *write expiry date*.
2. The Net Metering approved Distributed Generator shall abide by the provisions under the AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022, during the currency of Net Metering connection.
3. The Technical parameters of Net-Metering arrangement are as under:

| | | |
|-----------|---|----------|
| 1. | Primary Energy Source | Solar |
| 2. | Size of Distributed Generation Facility | _____ kW |
| 3. | Generator/Inverter Information | |
| | Manufacture | _____ |
| | Mode No. | _____ |
| 4. | Vendor/Installer | _____ |
| 5. | Generation Type | Inverter |

4. This approval may be renewed subject to AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022.

Executive Engineer
Operation Division _____
AJK Electricity Department

Copy to:

1. Superintending Engineer (E), Circle _____
2. Deputy Director (Net Metering Wing), Directorate P&M AJKED Muzaffarabad.
3. Sub Divisional Officer Operation Sub Division _____.
4. Revenue Officer (E), Operation Division _____.

Executive Engineer
Operation Division _____
AJK Electricity Department

SCHEDULE-XIV

NOC for Generation License

To,

Electricity Operation Division _____,
AJ&K.

AJK Electricity Department Net Metering Wing on ____ - ____ -20 ____
hereby grants **No Objection Certificate** (NOC) for the issuance of
License in favour of Applicant _____
having DG facility of ____ kWp & **Application Tracking ID**
NM/____/____/____/____.

Note: This NOC does not impose the compulsion for the issuance of Net Metering connection/generation license. The Net Metering connection issuance is subjected to fulfilling all the conditions given in the AJ&K Distributed Generation (Alternative & Renewable Energy) and Net Metering Regulations, 2022 and AJKED approved guidelines/SOPs for Net Metering.

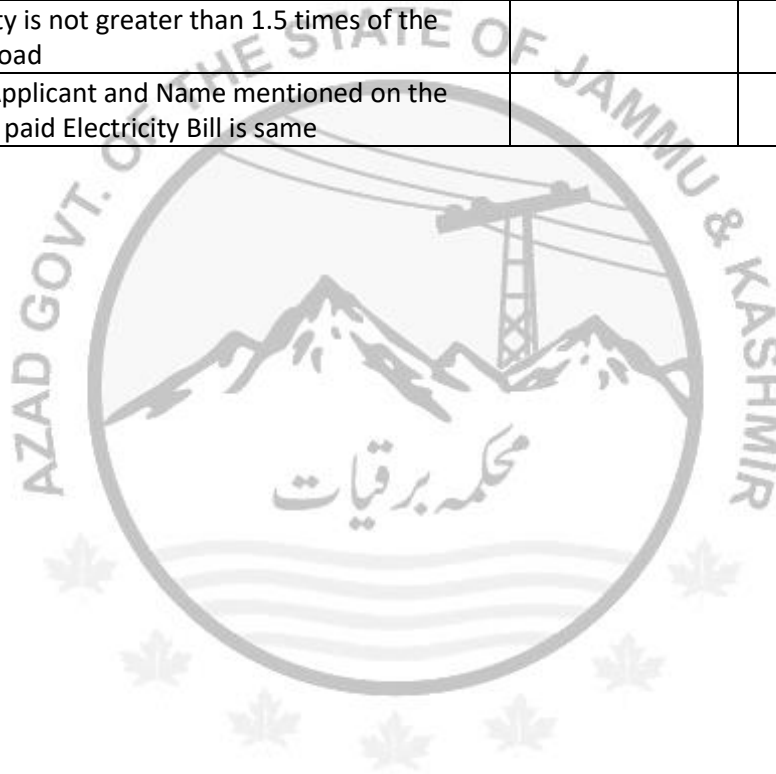
Director
Planning & Monitoring
AJKED

FORM NO: NM/B2

FORM FOR INITIAL ELIGIBILITY CRITERIA CHECK

Application Tracking ID: NM/____/____/____/_____

| Sr. | Eligibility Criteria | Compliant | Non-Compliant |
|-----|---|-----------|---------------|
| 1. | Vendor/Installer/Service Provider has valid AJKED Net Metering Registration Certificate | | |
| 2. | Distributed Generator has 3 phase 400V or 11000V connection | | |
| 3. | DG capacity is not greater than 1.5 times of the Sanction Load | | |
| 4. | Name of Applicant and Name mentioned on the submitted paid Electricity Bill is same | | |



Name: _____

Designation: _____

Date: _____

Signature: _____

FORM NO: NM/B3

DOCUMENTS CHECKLIST

Application Tracking ID: NM/____/____/____/_____

| Sr. | Document | Attached | N/A | Missing |
|-----|---|----------|-----|---------|
| 1. | Selected Vendor/Installer/Service Provider's AJKED issued Net Metering Registration Certificate | | | |
| 2. | Standard Distributed Generation Application Form (Schedule-II) | | | |
| 3. | Application For Grant Of License (for connections above 25kW) (Schedule-III) | | | |
| 4. | Application for Exemption from Section 24 of the Companies Ordinance 1984 (Schedule-IV) | | | |
| 5. | Affidavit on Judicial Paper of Rs. 50 (Schedule-VI) | | | |
| 6. | Single Line Diagram | | | |
| 7. | Customer Agreement (Schedule-X) | | | |
| 8. | Customer Agreement (Schedule-X(a)) | | | |
| 9. | Customer Agreement (Schedule-X(b)) | | | |
| 10. | Customer Agreement (Schedule-X(c)) | | | |
| 11. | Customer Agreement (Schedule-X(d)) | | | |
| 12. | Customer Agreement (Schedule-X(e)) | | | |
| 13. | Load Flow Study & Electrical Inspectorate NOC (for >250kW Connections) | | | |
| 14. | Application Summary (Schedule-XII) | | | |
| 15. | Copy of last Paid Electricity Bill | | | |
| 16. | Technical data/Data Sheet of all components including solar modules, inverters, breakers, wires, cables, disconnect switch etc. | | | |

All the relevant documents are signed & stamped by the Vendor/Installer/Service Provider (Y/N): _____

NOTE: The Schedules mentioned above can be viewed/downloaded from the AJKED's website www.ajked.gok.pk.

Name: _____ **Designation:** _____

Date: _____ **Signature:** _____



FORM NO: NM/B4

Application Return Form

Application Tracking ID: NM/____/____/____/_____

The eligibility criteria labelled as symbol “√” (if any) in the table given below, required for the registration as Vendor/Installer/Service Provider with AJKED is non-compliant:

| Sr. | Eligibility Criteria | Non-Compliant |
|-----|---|---------------|
| 1. | Vendor/Installer/Service Provider has valid AJKED Net Metering Registration Certificate | |
| 2. | Distributed Generator has 3 phase 400V or 11000V connection | |
| 3. | DG capacity is not greater than 1.5 times of the Sanction Load | |
| 4. | Name of Applicant & Name mentioned on the submitted paid Electricity Bill is same | |

The documents labelled as symbol “√” (if any) in the table given below, required for the registration as Vendor/Installer/Service Provider with AJKED are missing/invalid:

| Sr. | Document | Missing/Invalid |
|-----|---|-----------------|
| 1. | Selected Vendor/Installer/Service Provider’s AJKED issued Net Metering Registration Certificate | |
| 2. | Standard Distributed Generation Application Form (Schedule-II) | |
| 3. | Application For Grant of License (for connections above 25kW) (Schedule-III) | |
| 4. | Application for Exemption from Section 24 of the Companies Ordinance 1984 (Schedule-IV) | |
| 5. | Affidavit on Judicial Paper of Rs. 50 (Schedule-VI) | |
| 6. | Single Line Diagram | |
| 7. | Customer Agreement (Schedule-X) | |
| 8. | Customer Agreement (Schedule-X(a)) | |
| 9. | Customer Agreement (Schedule-X(b)) | |
| 10. | Customer Agreement (Schedule-X(c)) | |
| 11. | Customer Agreement (Schedule-X(d)) | |
| 12. | Customer Agreement (Schedule-X(e)) | |
| 13. | Load Flow Study & Electrical Inspectorate NOC (for >250kW Connections) | |
| 14. | Application Summary (Schedule-XII) | |
| 15. | Copy of last Paid Electricity Bill | |
| 16. | Technical data/Data Sheet of all components including solar modules, inverters, breakers, wires, cables, disconnect switch etc. | |

Other Comments/Reasons (if any):

Name: _____ Designation: _____

Date: _____ Signature: _____



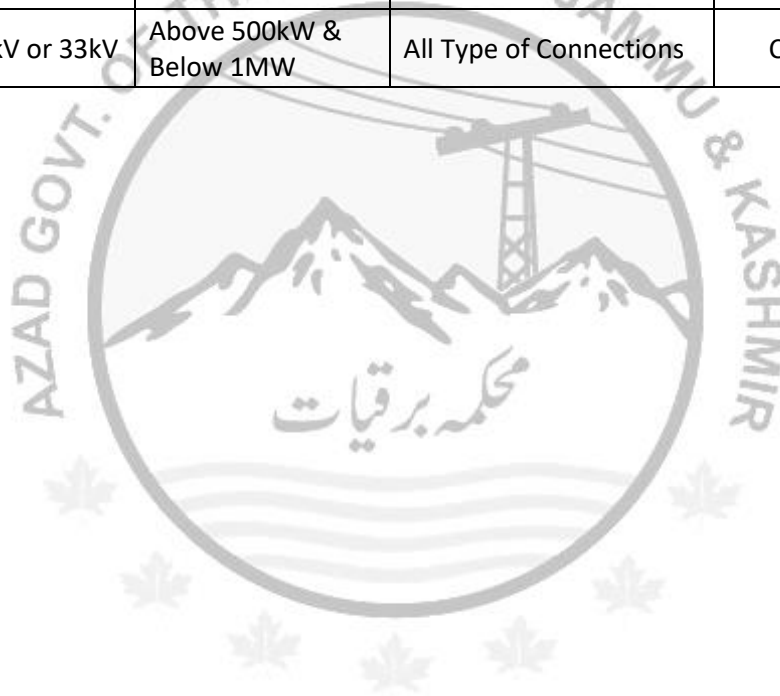
FORM NO: NM/B5

Load Sanctioning Authority

Application Tracking ID: NM/____/____/____/____

Date: _____

| Connection Category | Voltage | Load | Tariff Category | Sanctioning Officer | Forwarded To (√) |
|---------------------|--------------|--------------------------|-------------------------|---------------------|------------------|
| Category 1 | 230/400 V | Up to 70kW | All Type of Connections | XEN (O) | |
| Category 2 | 230/400 V | Above 70kW & Below 500kW | All Type of Connections | SE (O) | |
| Category 3 | 11kV or 33kV | Above 500kW & Below 1MW | All Type of Connections | CE (E) | |



Name: _____

Designation: _____

Date: _____

Signature: _____



FORM NO: NM/B6(a)

Net-Metering Technical Feasibility Report for Connections up to 15kW

Application Tracking ID: NM/____/____/____/____

Date: _____

| Service Connection Details | | | |
|---|--|-------------------|--|
| Consumer Name | | | |
| Address | | | |
| Contact No. | | | |
| Email Address | | | |
| Sanction Load (kW) | | | |
| Reference No. | | Applicable Tariff | |
| Subdivision | | Feeder/code | |
| Grid Station | | | |
| Details of already existing energy meter (to be removed): | | | |
| Make | | Type | |
| Meter Readings | | | |
| Serial Number | | | |
| Month/Year of Manufacturer | | | |

| Details of Distribution Transformer | |
|--|--|
| Capacity of Distribution Transformer in KVA | |
| Voltage ratio of Distribution Transformer | |
| Solar PV capacity already connected to this Distribution Transformer in KW | |
| Proposed Solar PV capacity in KW | |
| Total Solar PV capacity including the proposed new capacity | |

| Feeder Details | |
|---|--|
| Type and Size of the Conductor | |
| Current carrying capacity of the feeder | |
| Maximum load reached on the feeder (KW) | |
| Total connected Distribution Transformer capacity on this 11kV feeder (KVA) | |
| Solar Photovoltaic generators connected on this feeder, if any, and their capacity in KW. | |

DM: _____

L.S. (O): _____

SDO (O): _____



FORM NO: NM/B6(a)

Net-Metering Technical Feasibility Report for Connections above 15kW

Application Tracking ID: NM/____/____/____/____

Date: _____

| Service Connection Details | | | |
|---|--|-------------------|--|
| Consumer Name | | | |
| Address | | | |
| Contact No. | | | |
| Email Address | | | |
| Sanction Load (kW) | | | |
| Reference No. | | Applicable Tariff | |
| Subdivision | | Feeder/code | |
| Grid Station | | | |
| Details of already existing energy meter (to be removed): | | | |
| Make | | Type | |
| Meter Readings | | | |
| Serial Number | | | |
| Month/Year of Manufacturer | | | |

| Details of Distribution Transformer | |
|--|--|
| Capacity of Distribution Transformer in KVA | |
| Voltage ratio of Distribution Transformer | |
| Solar PV capacity already connected to this Distribution Transformer in KW | |
| Proposed Solar PV capacity in KW | |
| Total Solar PV capacity including the proposed new capacity | |

| Feeder Details | |
|---|--|
| Type and Size of the Conductor | |
| Current carrying capacity of the feeder | |
| Maximum load reached on the feeder (KW) | |
| Total connected Distribution Transformer capacity on this 11kV feeder (KVA) | |
| Solar Photovoltaic generators connected on this feeder, if any, and their capacity in KW. | |

L.S. (O): _____

SDO (M&T): _____

SDO (O): _____



FORM NO: NM/B6(b)

Net-Metering Technical Feasibility Report for Connections up to 15kW

Application Tracking ID: NM/____/____/____/_____

Date: _____

Distribution System Check:

| Sr.# | Requirement | Compliance | Non-Compliance |
|------|--|------------|----------------|
| 01 | Total solar PV capacity in kW is not more than 30% of the Distribution Transformer capacity in KVA | | |
| 02 | Proposed solar PV capacity in kW does not exceed the 1.5 times of the sanctioned load of the service connection in kW | | |
| 03 | Net Metering connections cumulative load is not more than 15% of the connected HT/LT conductor capacity | | |
| 04 | Cumulative Load of normal/ conventional/ non-net metering connections, already installed DG facilities and proposed DG facility, is less than 80% of the connected Distribution Transformer's capacity | | |
| 05 | Proposed interconnection does not require upgrading the capacity of existing distribution network | | |

DG Facility Check:

| Sr.# | Description | Compliance | Non-Compliance |
|------|-------------------------------|------------|----------------|
| 01 | Inverter | | |
| 02 | Earthing Protection | | |
| 03 | Lightening & Surge Protection | | |
| 04 | Anti-Islanding | | |
| 05 | Circuit Breakers | | |

It is technically feasible to connect the proposed solar PV system to the service connection (Yes or No): _____

DM: _____

L.S. (O): _____

SDO (O): _____

FORM NO: NM/B6(b)

Net-Metering Technical Feasibility Report for Connections above 70kW

Application Tracking ID: NM/____/____/____/_____

Date: _____

Distribution System Check:

| Sr.# | Requirement | Compliance | Non-Compliance |
|------|--|------------|----------------|
| 01 | Total solar PV capacity in kW is not more than 30% of the Distribution Transformer capacity in KVA | | |
| 02 | Proposed solar PV capacity in kW does not exceed the 1.5 times of the sanctioned load of the service connection in kW | | |
| 03 | Net Metering connections cumulative load is not more than 15% of the connected HT/LT conductor capacity | | |
| 04 | Cumulative Load of normal/ conventional/ non-net metering connections, already installed DG facilities and proposed DG facility, is less than 80% of the connected Distribution Transformer's capacity | | |
| 05 | Proposed interconnection does not require upgrading the capacity of existing distribution network | | |

DG Facility Check:

| Sr.# | Description | Compliance | Non-Compliance |
|------|-------------------------------|------------|----------------|
| 01 | Inverter | | |
| 02 | Earthing Protection | | |
| 03 | Lightening & Surge Protection | | |
| 04 | Anti-Islanding | | |
| 05 | Circuit Breakers | | |

It is technically feasible to connect the proposed solar PV system to the service connection (Yes or No): _____

L.S. (O): _____

SDO (M&T): _____

SDO (O): _____



FORM NO: NM/B7

Inspection / Test Check Proforma

Application Tracking ID: NM/____/____/____/____

Date: _____

| Details of the Newly Installed Bidirectional Meter | |
|--|------|
| Make | Type |
| Serial Number | |
| Month/Year of Manufacturer | |
| Capacity | |
| Meter constant (for CT-operated meters) | |
| Import register reading (kWh) | |
| Export register reading (kWh) | |
| Accuracy | |

| Solar Generation Check | |
|---|------|
| Make | Type |
| Month/Year of Manufacturer | |
| kWh Reading | |
| Meter constant (for CT-Operated Meters) | |
| Accuracy | |

| Solar Grid Inverter | |
|---|--|
| Make | |
| Serial Number | |
| Capacity | |
| Input DC voltage | |
| Anti-Islanding Protection Check – If the grid fails the status of the contactor (on or off) | |

| Solar PV Modules | |
|--------------------------------------|--|
| Total capacity of solar modules (KW) | |

| Cross-check | |
|---|--------|
| Detail | Yes/No |
| Approved Single Line Diagram (SLD) has been followed | |
| Only information provided hardware (as in the application) is installed | |

SDO (O)

SDO (M&T)

XEN (O)
