

FEDERAL COLLEGE OF EDUCATION (FCE)

H-9, Islamabad
Ph. No. 051-9265180

TENDER DOCUMENTS

SOLARIZATION OF FCE H-9, ISLAMABAD ALLIED FACILITIES

Issued to:

Name: _____

December 2025

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Contents

Quick Contents (manual):

- 1. Instructions to Bidders (ITB)
- 2. Evaluation Criteria
- 3. Standard Forms
- 4. General Conditions of Contract
- 5. Particular Conditions of Contract (Part A & Part B)
- 6. Schedules (incl. BOQ)
- 7. Specifications
- 8. Drawings

1. Instructions to Bidders (ITB)

Note: These Instructions to Bidders (ITB) shall not form part of the Contract and shall cease to have effect once the Contract is signed.

1.1 ITB Title Data

Scope of Works

Design, supply and installation of PV modules, required and elevated structures, inverters, distribution boards and cables, DC and AC earthing, lightning arrestors and associated equipment. The scope also includes interconnection of the installed PV system with the national grid. All coordination with IESCO and associated fee(s) for installation and activation of the green meter shall be the responsibility of the Contractor.

Eligibility / Qualification Requirements

- Duly licensed by PEC in Category C-5 or above, with specialization code EE11.
- Duly certified installers by PPIB under AEDB (Certification) Regulations, 2021 in Category C-3 or above.
- Must be in the Active Taxpayer List (ATL).
- Only one bid per bidder is allowed. Joint Ventures (JVs) are not allowed.
- The company must be operational for the last ten years.
- At least completed 5 systems in the Education sector.
- ISO certification is compulsory such as: (ISO 45001, ISO 27001, EN ISO 14001, EN ISO 9001)
- The company must have at least 10 registered engineers in different specializations.

Preference: Duly enlisted with Ministry of Federal Education & Professional Training/Federal College of Education (FCE) H-9, Islamabad.

Cost of Bidding

Bidders shall bear all costs associated with the preparation and submission of bids.

Site Visit

Bidders are advised to visit and examine the Site of Works and obtain all necessary information on their own responsibility for preparing the bid and entering into a contract for execution of the Works. All costs in this respect shall be at the bidder's own expense.

Contents of Bidding Documents

Bidding Documents consist of:

- Instructions to Bidders
- Standard Forms
- Evaluation Criteria
- General Conditions of Contract

- Particular Conditions of Contract
- Schedules
- Specifications
- Drawings

1.2 Clarification and Amendment of Bidding Documents

Prospective bidders may request clarification in writing to the Employer. The Employer will respond in writing, and copies of the response will be forwarded to all purchasers of the Bidding Documents.

The Employer may modify the Bidding Documents by issuing an addendum prior to the submission deadline (whether due to its own initiative or in response to a clarification request). Any addendum shall become part of the Bidding Documents and must be acknowledged by bidders.

1.3 Language of Bid

The bid shall be in English.

1.4 Documents Accompanying the Bid

The bid shall be submitted in a single sealed outer envelope containing two separately sealed inner envelopes: (i) Technical Bid and (ii) Financial Bid, clearly marked accordingly.

Technical Bid shall comprise:

- Bid Security (CDR).
 - Name and proof of ownership of company.
 - Valid SECP Certificate of Incorporation (in case of company).
 - Valid PEC Registration Certificate.
 - Valid PPIB Registration Certificate.
 - Valid NTN / FBR Registration Certificate.
 - Written confirmation authorizing the signatory of the bidder for the Bid.
 - Pending litigation information on notarized stamp paper.
 - Proposed construction schedule.
 - Integrity Pact (signed and stamped).
 - Company profile including Work Orders, Contract Agreements, Performance Certificates.
 - All Bidding Documents (except BOQ) duly signed and stamped.
 - Minutes of Pre-Bid Meeting (if any).
 - Addenda (if any).
 - Any other document required to be submitted in accordance with these Bidding Documents.
- Preference:** Valid Ministry of Education & Professional Training/Federal College of Education (FCE) H-9, Islamabad Enlistment Certificate.

Financial Bid shall comprise:

- Letter of Financial Bid (Bidder to draft).
- Filled, signed, and stamped Bill of Quantities (BOQ).

1.5 Pricing, Currencies, Validity, and Securities

The Contract is for the whole of the Works based on unit rates/prices. All items in the BOQ must have rates/prices entered; unpriced items shall be deemed covered by other rates. All duties, taxes and levies as of 28 days prior to the bid submission deadline shall be included in the rates and total Bid Price.

Currencies of Bid and Payment: Unit rates and prices shall be quoted entirely in Pakistani Rupees (PKR).

Bid Validity: Bids shall remain valid for **sixty (60)** days after the bid submission deadline.

Bid Security: PKR 1,000,000/- (Pakistani Rupees One Million only) in the form of a CDR in favor of Federal College of Education (FCE) H-9, Islamabad from a Scheduled Bank in Pakistan, valid for twenty-eight (28) days beyond Bid Validity.

1.6 Pre-Bid Meeting

A pre-bid meeting shall be held on **20th July 2026** at 10:30 hours in the Conference Room, Federal College of Education (FCE) H-9, Islamabad. Bidders should submit questions three (3) days prior. Minutes will be circulated to all purchasers. Absence is not a cause for disqualification, however presence is necessary for further informed proceedings.

1.7 Submission, Opening, and Confidentiality

Deadline for Submission of Bids: **17th July, 2026 at 11:30 a.m.** (Federal College of Education (FCE) H-9, Islamabad).

Bid Opening: **17th July at 12:00 p.m.** in the presence of prospective bidders and Federal College of Education (FCE) H-9, Islamabad Purchase/Procurement Committee.

Bids will be opened in two phases:

1. Technical Bid **23rd July at 12:00 p.m.**
2. Financial Bid **23rd July at 12:00 p.m.**

Late Bids: Any bid received after the deadline will be returned unopened.

Confidentiality: Information relating to examination, evaluation, and comparison of bids shall be kept confidential.

1.8 Responsiveness, Corrections, Evaluation, and Award

Bids will be examined for substantial responsiveness. A responsive bid meets eligibility and evaluation criteria, is properly signed, includes Bid Security and Integrity Pact, and conforms to all Bidding Documents without material deviation.

Arithmetic Errors: Words shall govern over/supersede figures. The unit rate shall govern over the line-item total (unless there is an obvious gross decimal misplacement). The corrected price shall be binding; refusal to accept correction may forfeit the Bid Security.

Award of Contract: The Contract shall be awarded to the most advantageous bidder, based on combined technical and financial evaluations in accordance with the Evaluation Criteria. The Employer is under no obligation to accept the lowest priced bid and reserves the right to accept or reject any or all bids.

Performance Security: The successful bidder shall furnish Performance Security equal to ten percent (10%) of the amount stated in the Letter of Acceptance within fourteen (14) days of receipt of the LOA.

2. Evaluation Criteria

2.1 Criteria for Evaluation of Bids

Evaluation will be based on the bidder's past experience, personnel capabilities, equipment capabilities and financial status. The Employer reserves the right to waive minor deviations that do not materially affect the bidder's capability to perform the contract.

2.2 Technical Bid (50%)

Category	Marks	Remarks
Past Experience (last 10 years) and work in hand	50	40 + 10 (incl. method statement/schedule)
Personnel Capabilities	20	
Financial Status	20	
Equipment Capabilities	10	

Minimum requirement: 50% marks in each category and overall 70% to qualify for opening of Financial Bid.

2.3 Financial Bid (50%)

Lowest financial proposal receives highest score; others evaluated proportionally.

2.4 Criteria for Award

Contract awarded to the most advantageous bid based on combined 50% technical and 50% financial evaluation.

3. Standard Forms

3.1 Performance Security (Bank Guarantee) - Template

Guarantee No.: _____

Executed on: _____

Expiry date: _____

[Letter by the Guarantor to the Employer]

Name of Guarantor (Bank) with address: _____ (Scheduled Bank in Pakistan)

Name of Principal (Contractor) with address: _____

Penal Sum of Security (in words and figures): _____

Letter of Acceptance No.: _____ Dated: _____

Full guarantee text as per issued tender documents (cleaned for spelling and punctuation only).

3.2 Form of Contract Agreement - Template

Contract Agreement template included (cleaned for spelling and punctuation only).

4. General Conditions of Contract

FIDIC Short Form of Contract (Green Book), Second Edition, 2021. The successful bidder shall provide one (1) copy for incorporation into the Contract Agreement.

5. Particular Conditions of Contract

The Particular Conditions comprise: (i) Part A - Contract Data, and (ii) Part B - Special Provisions. In case of conflict, Part B takes precedence over equivalent provisions of the General Conditions, and Part A takes precedence over Part B.

5.1 Part A - Contract Data (Key Data)

Document	Sub-Clause	Identification / Data
Contract Agreement	1.1.6 & 1.5.1(a)	FCE/Solarization/1-01
Letter of Acceptance	1.1.6 & 1.5.1(a)	FCE/Solarization/1-02
Letter of Bid	1.1.6 & 1.5.1(a)	FCE/Solarization/1-03
Particular Conditions - Part A	1.1.6 & 1.5.1(a)	FCE/Solarization/1-04
Particular Conditions - Part B	1.1.6 & 1.5.1(a)	FCE/Solarization/1-05

Employer: Federal College of Education (FCE) H-9, Islamabad, H-9, Islamabad.

Email: director@fce.edu.pk

Time for Completion: 120 days. Delay Damages: 0.1% per day (max 10%).

Advance Payment: 15% (Advance Payment Security required). Retention: 5% (limit 5%).

Currency: PKR. Adjudicator: Administrator, Federal College of Education (FCE) H-9, Islamabad.

5.2 Part B - Special Provisions (Summary)

- Employer's Liabilities: Added Sub-Clause ~~2.4~~ (as issued).
- General Obligations: Sub-Clause ~~4.1.2~~ amended (as issued).
- Advance Payment Security: Added Sub-Clause ~~8.2.5~~ (as issued).
- Termination by Employer: Added grounds under Sub-Clause ~~10.2.3~~ (as issued).
- Arbitration: Sub-Clause ~~14.2~~ deleted in its entirety (as issued).
- Payment will be disbursed through AGPR Islamabad in Installments.

6. Schedules

6.1 Bill of Quantities - Locations Summary

S. No.	Location	Sanction Load	Proposed PV System	Structure / Remarks
1	Admin Block	10 kW	12 kW	Elevated - Already 5 kW installed; additional 7 kW
2	Library	10 kW	20 kW	Required
3	Hostels	20 kW	25 kW	Required
4	Academic Block-A	8 kW	12 kW	Required
5	Academic Block-B	20 kW	25 kW	Required
6	Academic Block-C	8 kW	12 kW	Required
7	Academic Block-D	8 kW	12 kW	Required

6.2 BOQ Preparation Requirements (Summary)

- Tier-1, Grade-A 580-585W N-Type bifacial PV modules (Canadian Solar/LONGi/Jinko)
- On-grid inverter(s) Huawei or Solis (or equivalent, as specified).
- Hot-dip galvanized iron structures and all related civil works as required.
- PV cables, AC power cables, breakers/fuses, IP-rated enclosures, MCCB, MC4/Anderson connectors.
- AC, DC and lightning arrester earthing up to water table (100-120 ft), complete with materials.
- IESCO coordination: file preparation, load extension (if required), green meter installation/activation.
- Rates to include all applicable taxes; all costs for compliance deemed included in Contract Price.

7. Specifications

Minimum technical requirements for solar panels and allied equipment. Products shall comply with relevant IEC standards/specifications; where IEC is not available, equivalent international standards may be used.

7.1 Solar PV Modules - Minimum Requirements

Parameter	Minimum Requirement
Module Make	Tier-1 (verifiable for procurement year)
Module Capacity	580 W or above (as per design)
Cell Quality	A Grade (verifiable)
Module Efficiency	19% or higher
Power Tolerance	+3% or more
Operating Temperature	-40°C to +85°C
Temperature Coefficient	-0.4%/°C or less
Junction Box	IP67 or better
Connectors	MC4 and Anderson (as and where required) or comparable weatherproof
Warranty	10-year product; output ≥90% at 10 years; ≥80% at 25 years

7.2 On-Grid Smart Inverter - Minimum Requirements (Summary)

- Huawei or Solis; grid synchronized pure sine wave; generator synchronization capable.
- Preferred IP65; standby ≤3W; efficiency ≥95%.
- Protections: short circuit, surge, reverse polarity, anti-islanding, leakage, etc.
- Monitoring: app/web/cloud; real-time alerts and statistics including net metering.
- Warranty: ≥5 years; applicable IEC/UL/IEEE standards as specified.

8. Drawings

Drawings referenced in the Bidding Documents shall be provided/attached as issued by the Employer. Any low-legibility scans should be replaced with clear originals prior to final issue.

List of Abbreviations and Full Forms (For Government Tender Documents – Pakistan)

Sr. No.	Abbreviation	Full Form
1.	AEDB	Alternative Energy Development Board
2.	AGPR	Accountant General Pakistan Revenues
3.	AIT	Advance Income Tax
4.	ATL	Active Taxpayers List
5.	BID	Business Identification Document
6.	BOQ	Bill of Quantities
7.	BPS	Basic Pay Scale
8.	CDR	Call Deposit Receipt
9.	CNIC	Computerized National Identity Card
10.	CPEC	China–Pakistan Economic Corridor
11.	CPR	Certified Payment Receipt
12.	CPV	Central Pay Voucher
13.	CST	Central Sales Tax
14.	DAC	Departmental Accounts Committee
15.	DD	Demand Draft
16.	DP	Delivery Period
17.	DRC	Dispute Resolution Committee
18.	EMD	Earnest Money Deposit
19.	EPC	Engineering, Procurement and Construction
20.	FBR	Federal Board of Revenue
21.	FD	Fixed Deposit
22.	FDR	Fixed Deposit Receipt
23.	FOB	Free on Board
24.	FY	Financial Year
25.	GFR	General Financial Rules
26.	GOP	Government of Pakistan
27.	GST	General Sales Tax
28.	HVAC	Heating, Ventilation and Air Conditioning
29.	IFMIS	Integrated Financial Management Information System
30.	IT	Information Technology
31.	KPK	Khyber Pakhtunkhwa
32.	LC	Letter of Credit
33.	LD	Liquidated Damages
34.	LOI	Letter of Intent
35.	LOA	Letter of Acceptance
36.	MBR	Market Based Rate
37.	MOU	Memorandum of Understanding
38.	NEC	National Engineering Council
39.	NITB	National Information Technology Board

40.	NTN	National Tax Number
41.	OEM	Original Equipment Manufacturer
42.	OGRA	Oil and Gas Regulatory Authority
43.	PAC	Public Accounts Committee
44.	PEC	Pakistan Engineering Council
45.	PIFRA	Project to Improve Financial Reporting and Auditing
46.	PKR	Pakistani Rupee
47.	PO	Purchase Order
48.	PPIB	Private Power and Infrastructure Board
49.	PPRA	Public Procurement Regulatory Authority
50.	PSDP	Public Sector Development Programme
51.	RFQ	Request for Quotation
52.	RFP	Request for Proposal
53.	ROI	Return on Investment
54.	SD	Security Deposit
55.	SECP	Securities and Exchange Commission of Pakistan
56.	SBD	Standard Bidding Document
57.	SLA	Service Level Agreement
58.	SOP	Standard Operating Procedure
59.	SPPRA	Sindh Public Procurement Regulatory Authority
60.	STRN	Sales Tax Registration Number
61.	TA	Technical Assistance
62.	TORs	Terms of Reference
63.	VAT	Value Added Tax
64.	WHT	Withholding Tax

ANNEXURES
DIAGRAMS

FEDERAL COLLEGE OF EDUCATION (FCE), H-9 ISLAMABAD

On-Grid Solar PV System (IESCO Net Metering)
Unit-wise Single Line Diagrams (SLDs)

ANNEXURE-1: Admin Block (SLD-FCE-ONG-01)

Sanction Load: 10 kW | Proposed PV System: 12 kW

Remarks: Elevated structure; existing 5 kW + additional 7 kW

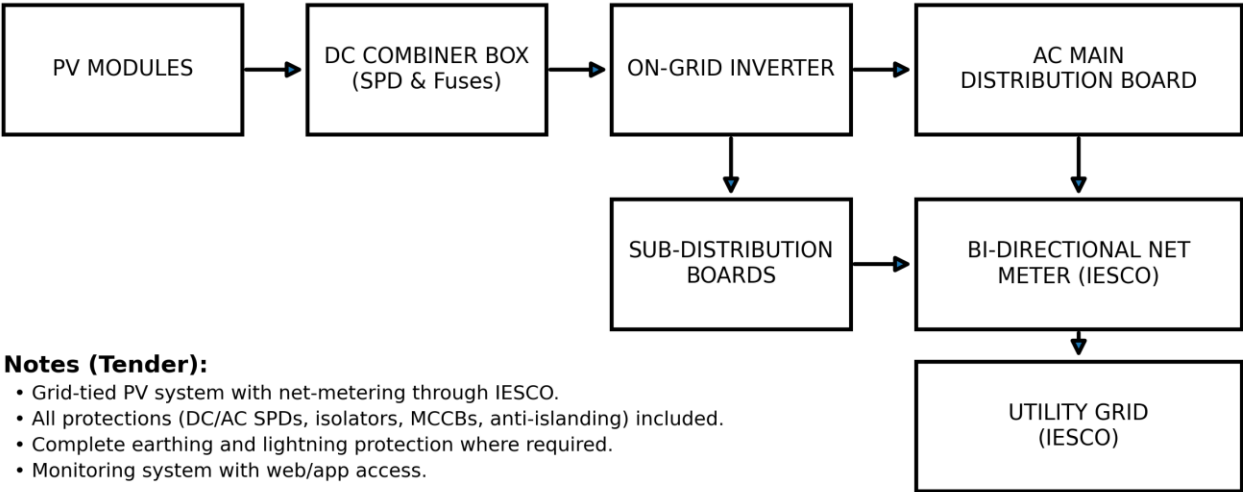
FEDERAL COLLEGE OF EDUCATION (FCE), H-9 ISLAMABAD

ON-GRID SOLAR PV SYSTEM – SINGLE LINE DIAGRAM

SLD No: FCE-ONG-01

Unit: Admin Block

Sanction Load: 10 kW Proposed PV: 12 kW



Notes (Tender):

- Grid-tied PV system with net-metering through IESCO.
- All protections (DC/AC SPDs, isolators, MCCBs, anti-islanding) included.
- Complete earthing and lightning protection where required.
- Monitoring system with web/app access.

ANNEXURE-2: Library (SLD-FCE-ONG-02)

Sanction Load: 10 kW | Proposed PV System: 20 kW

Remarks: Required

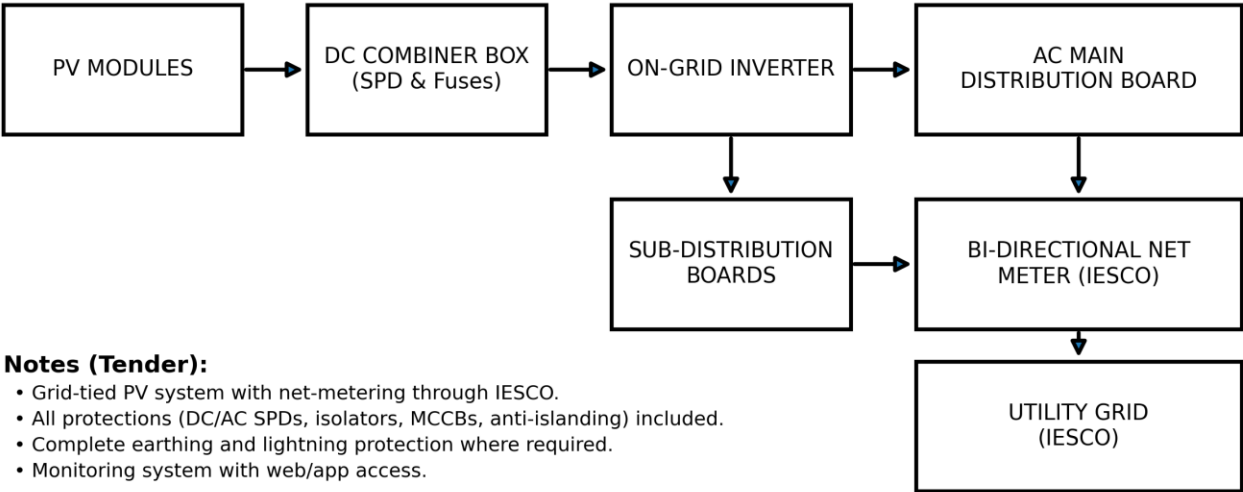
FEDERAL COLLEGE OF EDUCATION (FCE), H-9 ISLAMABAD

ON-GRID SOLAR PV SYSTEM – SINGLE LINE DIAGRAM

SLD No: FCE-ONG-02

Unit: Library

Sanction Load: 10 kW Proposed PV: 20 kW



Notes (Tender):

- Grid-tied PV system with net-metering through IESCO.
- All protections (DC/AC SPDs, isolators, MCCBs, anti-islanding) included.
- Complete earthing and lightning protection where required.
- Monitoring system with web/app access.

ANNEXURE-3: Hostels (SLD-FCE-ONG-03)

Sanction Load: 20 kW | Proposed PV System: 25 kW

Remarks: Required

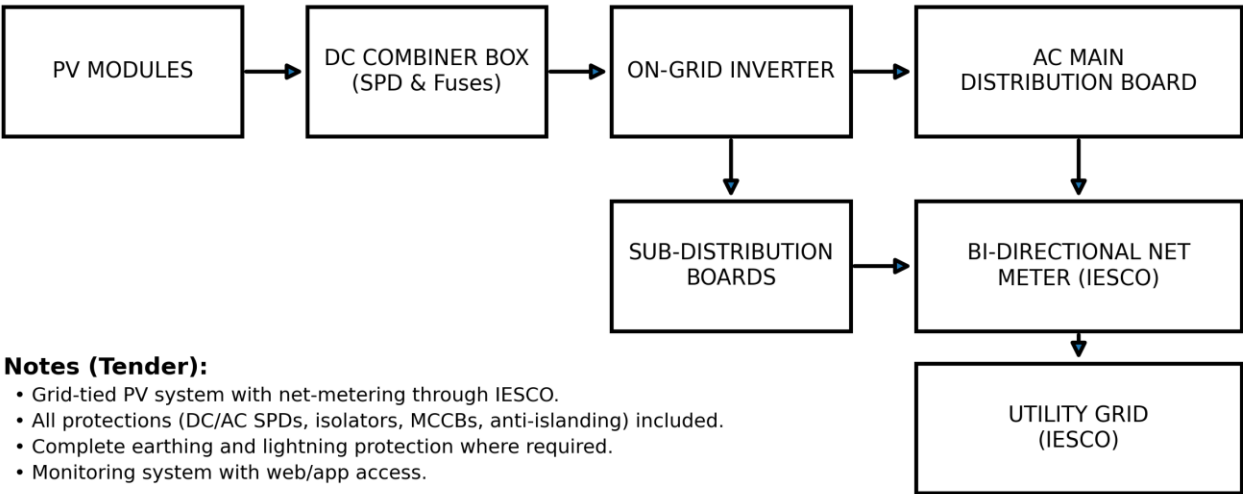
FEDERAL COLLEGE OF EDUCATION (FCE), H-9 ISLAMABAD

ON-GRID SOLAR PV SYSTEM – SINGLE LINE DIAGRAM

SLD No: FCE-ONG-03

Unit: Hostels

Sanction Load: 20 kW Proposed PV: 25 kW



Notes (Tender):

- Grid-tied PV system with net-metering through IESCO.
- All protections (DC/AC SPDs, isolators, MCCBs, anti-islanding) included.
- Complete earthing and lightning protection where required.
- Monitoring system with web/app access.

ANNEXURE-4: Academic Block-A (SLD-FCE-ONG-04)

Sanction Load: 8 kW | Proposed PV System: 12 kW

Remarks: Required

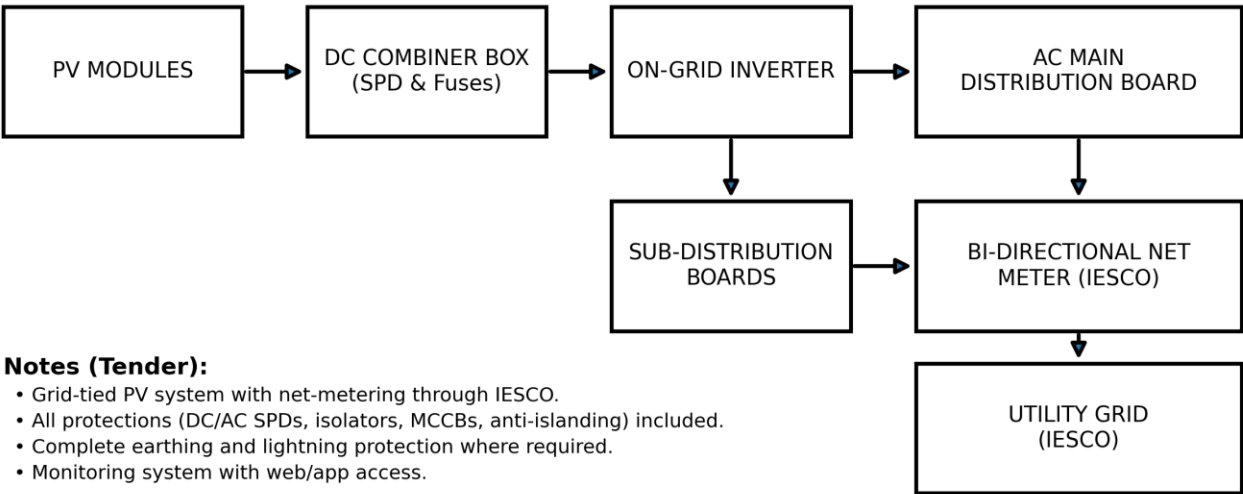
FEDERAL COLLEGE OF EDUCATION (FCE), H-9 ISLAMABAD

ON-GRID SOLAR PV SYSTEM – SINGLE LINE DIAGRAM

SLD No: FCE-ONG-04

Unit: Academic Block-A

Sanction Load: 8 kW Proposed PV: 12 kW



Notes (Tender):

- Grid-tied PV system with net-metering through IESCO.
- All protections (DC/AC SPDs, isolators, MCCBs, anti-islanding) included.
- Complete earthing and lightning protection where required.
- Monitoring system with web/app access.

ANNEXURE-5: Academic Block-B (SLD-FCE-ONG-05)

Sanction Load: 20 kW | Proposed PV System: 25 kW

Remarks: Required

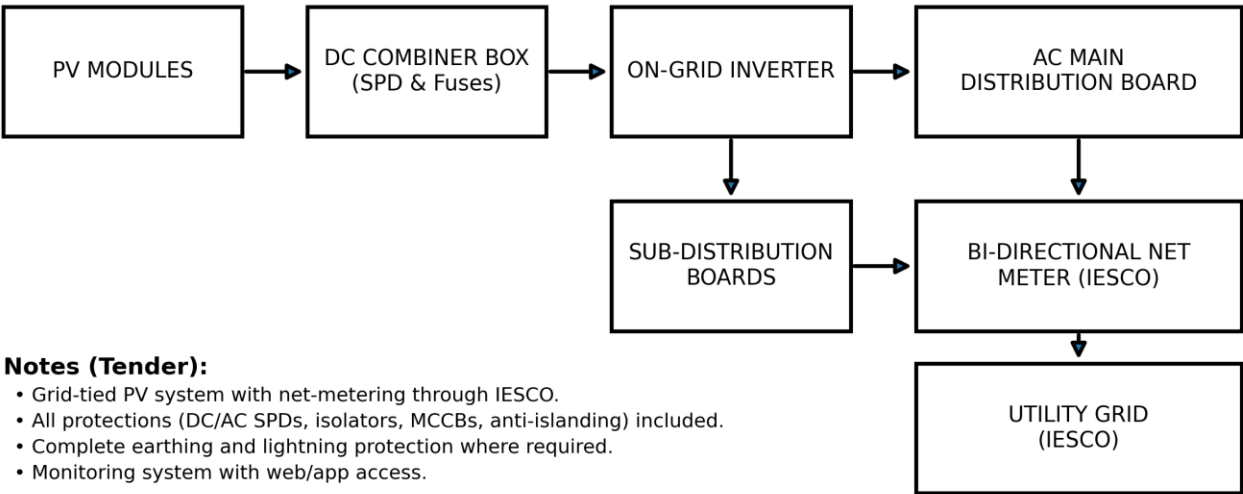
FEDERAL COLLEGE OF EDUCATION (FCE), H-9 ISLAMABAD

ON-GRID SOLAR PV SYSTEM – SINGLE LINE DIAGRAM

SLD No: FCE-ONG-05

Unit: Academic Block-B

Sanction Load: 20 kW Proposed PV: 25 kW



Notes (Tender):

- Grid-tied PV system with net-metering through IESCO.
- All protections (DC/AC SPDs, isolators, MCCBs, anti-islanding) included.
- Complete earthing and lightning protection where required.
- Monitoring system with web/app access.

ANNEXURE-6: Academic Block-C (SLD-FCE-ONG-06)

Sanction Load: 8 kW | Proposed PV System: 12 kW

Remarks: Required

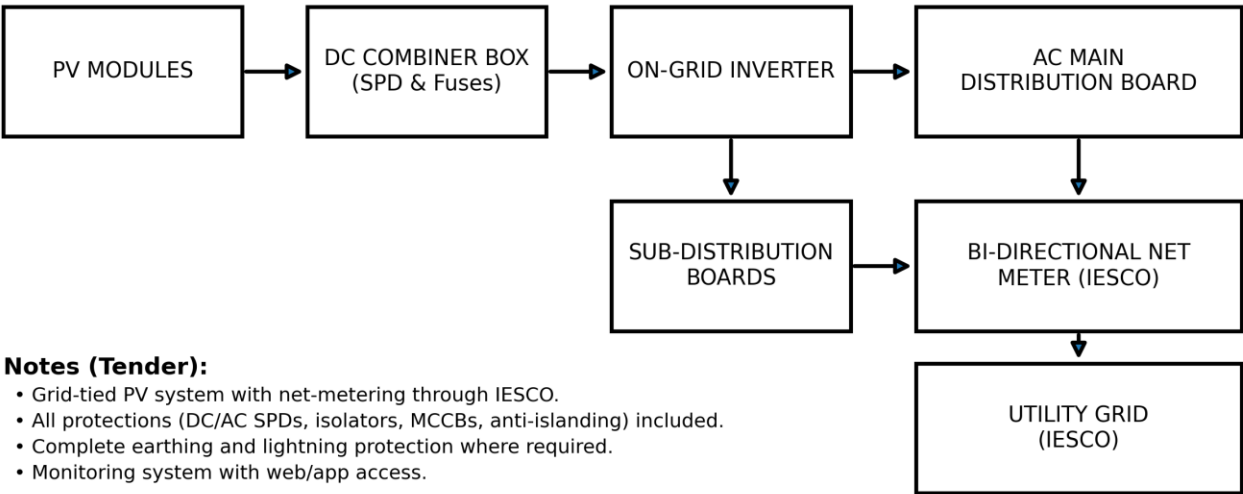
FEDERAL COLLEGE OF EDUCATION (FCE), H-9 ISLAMABAD

ON-GRID SOLAR PV SYSTEM – SINGLE LINE DIAGRAM

SLD No: FCE-ONG-06

Unit: Academic Block-C

Sanction Load: 8 kW Proposed PV: 12 kW



Notes (Tender):

- Grid-tied PV system with net-metering through IESCO.
- All protections (DC/AC SPDs, isolators, MCCBs, anti-islanding) included.
- Complete earthing and lightning protection where required.
- Monitoring system with web/app access.

ANNEXURE-7: Academic Block-D (SLD-FCE-ONG-07)

Sanction Load: 8 kW | Proposed PV System: 12 kW

Remarks: Required

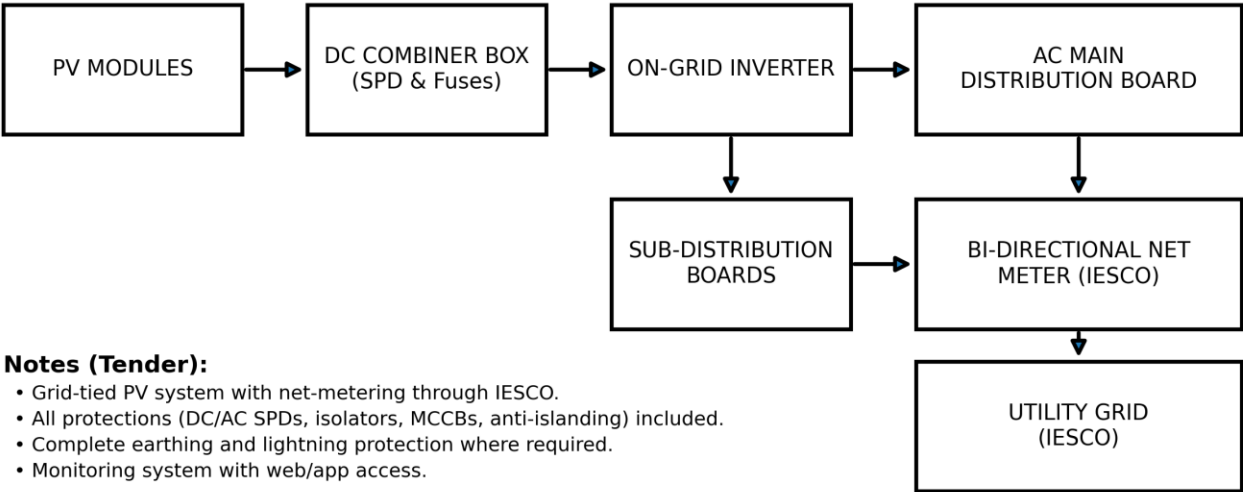
FEDERAL COLLEGE OF EDUCATION (FCE), H-9 ISLAMABAD

ON-GRID SOLAR PV SYSTEM – SINGLE LINE DIAGRAM

SLD No: FCE-ONG-07

Unit: Academic Block-D

Sanction Load: 8 kW Proposed PV: 12 kW



Notes (Tender):

- Grid-tied PV system with net-metering through IESCO.
- All protections (DC/AC SPDs, isolators, MCCBs, anti-islanding) included.
- Complete earthing and lightning protection where required.
- Monitoring system with web/app access.

END OF DOCUMENT