

SJVN Limited

(A Joint Venture of Govt. of India & Govt. of Himachal Pradesh)
(An ISO-9001-2015, Mini Ratna & Schedule-A PSU)
SJVN Corporate Head Quarters, Shanan Shimla-06.
SHIMLA – 171006 (H.P.), INDIA
CIN: L4010HP1988GO1008409

"Our Shared Vision: 5,000 MW by 2023, 12,000 MW by 2030 and 25,000 MW by 2040"

NOTICE INVITING EXPRESSION OF INTEREST (EOI)

FROM

INDEPENDENT POWER PRODUCERS (IPP's), POWER GENERATION COMPANIES, POWER PLANT DEVELOPERS, STATE ELECTRICITY BOARDS, LENDERS ETC. FOR OFFERING THEIR HYDRO/SOLAR/WIND POWER PROJECTS IN INDIA

FOR ACQUISITION BY SJVN

EOI No.: SJVN-CCD-EOI-2021-03

SHIMLA April 2021

CONTENTS

Sr. No.	Section	Name of Section
1.	SECTION – 1.0	EXPRESSION OF INTEREST (EOI)
2.	SECTION – 2.0	ANNEXURE 1 TO 15

SECTION - 1.0

EXPRESSION OF INTEREST (EOI)

SECTION - 1.0

EXPRESSION OF INTEREST (EOI)

1.0 Introduction to SJVN:

SJVN Limited, a Mini Ratna: Category-I and Schedule -'A' CPSE under administrative control of Ministry of Power, Govt. of India, was incorporated on May 24, 1988 as a joint venture of the Government of India (GOI) and the Government of Himachal Pradesh (GOHP). SJVN is now a listed Company having shareholding pattern of 61.93% with Govt. of India, 26.85% with Govt. of Himachal Pradesh and rest of 11.22% with Public. The present paid up capital of SJVN is Rs. 3,930 Crore.

The present installed capacity of SJVN is 2015.2 MW comprising of 1912 MW of Hydropower (from 1500 MW Nathpa Jhakri HPS + 412 MW Rampur HPS in Himachal Pradesh) and 97.6 MW of Wind Power (47.6 MW Khirvire WPP in Maharashtra + 50 MW Sadla HEP) and 5.6 MW Charanaka Solar Plant. In addition, 86 ckm 400 kV Transmission Line (CPTC- JV -26% Share) for trade of energy between Nepal & India is also in operation.

Beginning with a single Project and single state operation (i.e. India's largest 1500 MW Nathpa Jhakri Hydro Power Station in Himachal Pradesh), SJVN has expanded its horizons and envisions developing itself into a fully diversified transnational Power Sector Company in all forms of conventional & non-conventional sources of energy as well as Power Transmission. The Company is presently having Power Projects in Himachal Pradesh, Uttarakhand, Gujarat, Bihar and Maharashtra in India besides neighbouring countries viz. Nepal and Bhutan.

(Please visit our website https://www.sjvn.nic.in for more information)

2.0 Intent of this EOI:

SJVN wishes to become a 25000 MW Power Producer Company by 2040. In order to increase its Geo-strategic reach, SJVN is planning for acquisition of Hydro/Solar/Wind Power Projects in Indian states under various stages of Operation & Maintenance / Construction / Survey & Investigation as mentioned below in Clause 3.0.

Accordingly, Applications are invited from Independent Power Producers (IPP's), Power Generation Companies, Power Plant Developers, State Electricity Boards, Lenders etc. for offering their Hydro/Solar/Wind Power Projects in India for acquisition by SJVN.

Selection of parties shall be done by SJVN on its sole discretion based on preliminary technical and financial data submitted by parties and accordingly projects shall be shortlisted for carrying out detailed due diligence for a possible acquisition.

3.0 Eligibility:

Any Independent Power Producers (IPP's), Power Generation Companies, Power Plant Developers, State Electricity Boards, Lenders etc. owning Hydro/Solar/Wind Power Projects in Indian States having requisite statutory clearances (under various stages / approvals) / Land & other facilities, Power Purchase Agreement etc., are

eligible for offering Hydro/Solar/Wind Power Projects for possible acquisition by SJVN as below:

- (i) **Hydro Power Projects:** Under Operation & Maintenance / Construction / Survey & Investigation Stage of any Capacity.
- (ii) **Solar Power Projects:** Under Operation & Maintenance / Construction / Survey & Investigation Stage with Installed/Proposed Capacity of 25 MW and above.
- (iii) **Wind Power Projects:** Operation & Maintenance Stage with Installed Capacity of 50 MW and above.

4.0 Key Particulars

Sr. No.	Description of Item(s)	Particulars
1.	Cost of EOI document	NIL
2.	EOI document comprises of	SECTION – 1.0 - EXPRESSION OF INTEREST (EOI) SECTION – 2.0 - ANNEXURE 1 TO 15
3.	Website for downloading of EOI document	https://www.sjvn.nic.in https://www.eprocure.gov.in/CPPP
4.	Date & Time for Pre-EOI meeting (Through Video Conferencing or Video call - if required)	Shall be intimated separately on above-mentioned websites
5.	Date and time for submission of Applications for the first tranche	Date: 31.05.2021 & Time: 18:00 Hrs. Please refer Clause 6.0 (i) below
6.	Date & Time of Opening of Applications for the first tranche	Date: 01.06.2021 & Time: 15:00 Hrs. Please refer Clause 6.0 (i) below
7.	Address for submission of sealed hard copy of requisite document & opening of Applications	HOD (Civil Contracts), Corporate Civil Contracts Deptt, SJVN Limited, Corporate Headquarters, Shakti Sadan, Shanan, Malyana, Shimla- 171006 (H.P.)
8.	Applicant's Eligibility	Applicant intending to participate in this EOI shall fulfill the eligibility as per Clause no. 3.0 of Section – 1.0

5.0 Submission of Applications

- i) Interested parties are required to submit the requisite application complete in all respect as per the enclosed formats (Refer Section 2.0). Documentary evidence substantiating the fulfillment of Eligibility and other relevant documents like proof of land possession, statutory clearances, PPA entered etc. shall also have to be furnished.
- ii) Each and every page of the application shall be duly **signed & stamped** by the authorized signatory and the contents and pages should be indicated in the index page.
- iii) Submission of EOI will be done in the manner prescribed below:

ENVELOPE-1:

Following documents should be sealed in a separate envelope duly superscribed as "ENVELOPE-1" & "DO NOT OPEN BEFORE XX.XX.2021 (day) at 15:00 (Hrs.)"

- a. Cover Letter as per Annexure-1 of Section 2.0.
- **b.** Certificate of Incorporation and Memorandum & Articles of Association.
- c. Power of Attorney: Authorization of the person/signatory submitting the Application on behalf of Independent Power Producers (IPP's), Power Generation Companies, Power Plant Developers, State Electricity Boards, Lenders etc. in the form of a Power of Attorney (as per Annexure-2 of Section 2.0) duly notarized by a Notary Public. Duly Notarized Power of Attorney must be supported with necessary documentary evidence of the person/authority giving power of attorney like Board Resolution etc. (in original or notary attested copy) indicating that the person/authority issuing the POA is authorized to issue such POA in line with Clause 10.0 of Section 1.0.
- d. Integrity Pact duly signed by the parties (Annexure-3 of Section 2.0)
- e. Duly filled in Performa regarding Blacklisting (Annexure-4 of Section 2.0)

ENVELOPE-2:

EOI Response Sheet (Project wise) for Hydro Power Projects (**ANNEXURE** – **5 to 8**) duly filled along with relevant information & documentary evidences towards fulfillment of Eligibility should be submitted in a sealed and a separate envelope duly super-scribed as "**ANNEXURE** – **5 to 8**" & "DO NOT OPEN BEFORE XX.XX.2021 (day) at 15:00 (Hrs.)"

EOI Response Sheet (Project wise) for Solar Power Projects (ANNEXURE - 9 to 12) duly filled along with relevant information & documentary evidences towards fulfillment of Eligibility should be submitted in a sealed and a separate envelope duly super-scribed as "ANNEXURE - 9 to 12" & "DO NOT OPEN BEFORE XX.XX.2021 (day) at 15:00 (Hrs.)"

EOI Response Sheet (Project wise) for Wind Power Projects (ANNEXURE - 13 to 15) duly filled along with relevant information & documentary evidences towards fulfillment of Eligibility should be submitted in a sealed and a separate envelope duly super-scribed as "ANNEXURE - 13 to 15" & "DO NOT OPEN BEFORE XX.XX.2021 (day) at 15:00 (Hrs.)"

iv) Above envelopes (Envelope-1 and Envelope-2) shall then be sealed in an outer/bigger envelope duly superscribed as "EXPRESSION OF INTEREST (EOI) FOR OFFERING HYDRO/SOLAR/WIND POWER PROJECTS IN INDIA FOR ACQUISITION BY SJVN" (as the case may be) & "DO NOT OPEN BEFORE XX.XX.2021 (day) at 15.00 (Hrs.)" shall be submitted through Speed/Registered Post/Courier at the address given below (Applications received by Fax/E-Mail will not be entertained): -

HOD (Civil Contracts)

Corporate Civil Contracts Deptt, SJVN Limited Corporate Headquarters Shakti Sadan,

Shanan, Malyana, Shimla (H.P.) – PIN: 171006

Email: civilcontract@sjvn.nic.in

v) Applications, which do not have proper documentary evidences substantiating fulfillment of Eligibility Criteria or not having duly notarized Power of Attorney or applications not received within the prescribed date of submission shall be liable for rejection.

6.0 Instructions to Applicants

i. For this Expression of Interest (EOI), date for submission and opening of application(s) for the first tranche are 31.05.2021 and 01.06.2021 respectively.

However, for the application(s) received after 31.05.2021, schedule of opening of application(s) shall be as per the table below:

Sr. No.	Application(s) received Up to	Application(s) Opening Date
1.	31.07.2021 (18:00 Hrs)	01.08.2021 (15:00 Hrs)
2.	30.09.2021 (18:00 Hrs)	01.10.2021 (15:00 Hrs)
3.	31.12.2021 (18:00 Hrs)	01.01.2022 (15:00 Hrs)
4.	30.03.2022 (18:00 Hrs)	31.03.2022 (15:00 Hrs)

- ii. Applicant shall provide access / supply all information and documents to SJVN that are deemed necessary for preliminary as well as detailed due diligence to be carried out by SJVN for possible Acquisition.
- iii. Before the last date of submission of the Applications, SJVN may modify/amend this EOI Document for possible Acquisition by issuing Addendum/Corrigendum/Clarification, as considered necessary. The same shall also be uploaded in the Company's website https://www.sjvn.nic.in and <a href="
- iv. SJVN reserves the right to extend the last date of submission/opening of Applications at its discretion.
- v. SJVN may seek written additional information, as it may deem necessary, from the Applicants with respect to the Applications submitted.

- vi. SJVN reserves the right to accept or reject any or all the Applications or to annul the EOI process at any stage without assigning any reasons thereof and shall not be liable, in any way, for such actions and no claim/dispute in this respect shall be entertained.
- vii. SJVN reserves the right to relax or waive any of the conditions stipulated in this Document as deemed necessary in the best interest of the Company without assigning any reasons thereof.
- viii. Applicant shall bear all cost towards preparation, submission of its offer or discussions with SJVN. SJVN shall in no case be responsible or liable for those costs, regardless of conduct or outcome of the EOI process.
- ix. Any change in status/constitution of the Entities, during the process of short listing shall have to be informed to SJVN immediately. Such change in status/constitution, if, in the opinion of SJVN is found to be unsuitable for continuation of short listing, will render the name of the Entity to be removed from the process.
- x. SJVN shall not be responsible for any late receipt of Applications for reasons whatsoever. The Applications received after the specified date shall not be considered.
- xi. For any enquiry/clarification for registration, submission of proposal and any other information, the Applicants may contact to the following officials:

Sr. No.	Designation	Address	Phone No.
1.	General Manager	Corporate Civil Contracts Deptt, SJVN Limited, Corporate Headquarters Shakti Sadan, Shanan, Malyana, Shimla171006 (H.P.)	0177 - 2660162
2.	General Manager	Business Development & Expansion Deptt., SJVN Limited, Corporate Headquarters Shakti Sadan, Shanan, Malyana, Shimla171006 (H.P.)	0177 - 2660223

- xii. The Applications shall be opened at address mentioned above in the presence of representative of Entities who wishes to attend the same. If the last date of request for Clarification, submission and opening of the EOI, happens to be a holiday, the timelines for the same shall be on the next working day with the same time schedule.
- xiii. Throughout this document, the terms "Application" and "Applicant" and their derivatives (Proposal/Offer/Bid, Bidder/Firm, etc.) are synonymous.

7.0 Confidentiality

All information provided by one party to the other in connection with the negotiation or performance of this EOI will be treated as confidential and will not be disclosed to any third party without the other party's prior written consent.

8.0 Disclaimer

Issue of this document does not in any way commit or otherwise binds SJVN to proceed with all or any part of acquisition process. The EOI Request is not the subject of any process contract or any contractual obligations between SJVN and the applicants to the EOI. Further, SJVN may, at its absolute discretion either modify or abandon any part or whole of the document and / or process, without giving prior notice to any or all the Applicants. All Expression of Interest documents, upon submission by any applicant to this EOI shall become the property of SJVN. SJVN is not liable for any costs or compensation in relation to the consideration of this EOI.

9.0 Applicable Law and Settlement of Disputes

The EOI shall include provisions dealing with the applicable law, which should be the law applicable in India and the jurisdiction for the settlement of disputes shall be Shimla.

10.0 Power of Attorney

Duly Notarized Power of Attorney in original of the signatory of the Application to commit the Applicant shall be as below:-

- i. In case of a General Power of Attorney, a true copy of the POA shall be duly notarized by Notary Public alongwith a declaration from the Company Secretary /Corporate Secretary endorsing the validity of the Power of Attorney.
- ii. In case of a specific Power of Attorney, the original POA alongwith a copy of the resolution of Board of Directors for the specific appointment. In case of delegation by a General POA holder, the documents as sought under i) above shall be submitted alongwith the original specific POA.

The Application should be signed by legally authorized signatory as under:-.

- a) If the Application is submitted by an individual, it shall be signed by the proprietor above his full name and name of the firm with its current business address.
- b) If the Application is submitted by a proprietary firm, it shall be signed by the proprietor above his full name and full name of the firm with its current business address.
- c) If the Application is submitted by a firm in partnership, it shall be signed by a partner holding the power of attorney for the firm for signing the application, in which case a certified copy of the power of attorney shall accompany the application. A certified copy of the partnership deed duly registered and current business address of all the partners of the firm shall also accompany the application.
- d) If the Application is submitted by a limited company or a limited corporation, it shall be signed by a duly authorized person holding the power of attorney or any other legally valid document for signing the application, in which case a certified copy of the power of attorney or any such legally valid document shall accompany the application.

e) All witnesses shall be persons of status and their full names, occupations and addresses shall be stated below their signatures.

11.0 Integrity Pact

Eligible Parties should not be under a declaration of ineligibility for corrupt/fraudulent coercion/collusion practices and defaults committed under Integrity pact by the Central Government / State Government or any of its agency / department, public sector undertaking or autonomous body or any authority by whatever name called.

To improve transparency and fairness in the process, the SJVN is implementing Integrity Pact.

The Integrity Pact, signed by all the prospective parties and the SJVN, shall commit the persons/officials of both the parties, not to exercise any corrupt /fraudulent/collusive/coercive practices in the process and also during implementation of this EOI. Only those parties who have entered into Integrity Pact with the SJVN shall be eligible to participate in the EOI process. Entering into Integrity Pact as per enclosed Performa is a basic qualifying requirement. Parties signing Integrity Pact shall not approach the Courts while representing the matter to IEMs and he/she will await the decision in the matter.

The Integrity Pact signed on behalf of SJVN is enclosed.

To oversee the compliance of obligation under the Integrity Pact, two Independent External Monitor(s) (IEMs) have been appointed. The details and address of correspondence with IEMs is as under:

- (i) Smt. Archana Pandey Tiwari, IRS (Retd.), Independent External Monitor, C-32, Nangal Dewat, Vasant Kunj, New Delhi, 110070 email – ampandey2001@yahoo.com
- (ii) Sh. S.P. Srivastava Independent External Monitor, 1/125, Vineet Khand, Gomtinagar, Lucknow, UP – 226010 e-mail: sps_ips@yahoo.com

The Integrity Pact duly signed on behalf of the SJVN is given alongwith EOI document (Annexure-3 of Section 2).

The Integrity Pact shall be downloaded, printed and signed by the Authorized person and the hard copy shall be submitted as provided in clause 5.0 of Section 1.0.

The successful party shall submit duly executed Integrity Pact on Non-Judicial stamp paper of appropriate value prior to signing of Contract Agreement/Acquisition of Projects.

SECTION - 2.0

ANNEXURE 1 TO 15

COVERING LETTER

(To be submitted on the Letter Head of the Applicant)

Re	f No: _	
Da	ted:	
To	•	
Co SJ Co Sh Sh	rporate VN Lim rporate	Headquarters lan, Shanan, Malyana 1006 Submission of EOI for offering Hydro/Solar/Wind Power Projects for
ΕC)I Ref N	Acquisition by SJVN No: SJVN-CCD-EOI-2021-03 Dated: 06.04.2021
Sir		, or 20 11 1 2 2 2 2 1 2 0 2 1 1 0 1 1 2 1 1 1 2 1
1.	having	undersigned, being legally authorized to represent and act on behalf of
2	I certi	fy that all the information provided in this Application is true and correct

- 2. I certify that all the information provided in this Application is true and correct and that all accompanying documents are true copies of their respective originals.
- 3. I shall make available all additional information that SJVN may seek to supplement or authenticate the Application submitted.
- 4. I acknowledge the right of SJVN to evaluate my Application as per their assessment criteria, reject my Application or annul the EOI process at any stage without assigning any reason thereof and hereby waive my right to challenge the same on any account whatsoever.
- 5. I hereby irrevocably waive my right or remedy which I may have at any stage in Law or howsoever otherwise arising, to challenge or question any decision taken by SJVN in the process of short listing of the Applicants.
- 6. The signing of this letter by the undersigned guarantees the truth and accuracy of all statements/information submitted along with this Application.

	Signature:
	Name:
De	esignation:
Mailing Address	
Telex:	
Fax:	
Telephone:	
(Place & Date)	

POWER OF ATTORNEY

(On Non-Judicial Stamp Paper of Appropriate value)

					THESE				
M/S					 NG UNDEF				, A
COMI	PANY ORC	GANISEI	O AND	EXISTI	ING UNDEF	R TH	E LAWS	OF (NAME	E OF
COUN	NTRY				 E /PL <i>A</i>) ANI	D HAVING	ITS
REGIS	STERED/PI	RINCIPA	L	OFFIC	E /PLA	CE	OF	BUSIN	ESS
AT							REPRESE	ENTED	BY
(NAM	E OF PE	RSONS)	(THE	"EXEC	CUTANT")	DO	HEREBY	' NOMINA	ATE,
CONS	STITUTE,	AUTHO	ORIZE	AND	APPOINT	M	R. [Name	of
Attorn	ey	.] ,	SON	OF	[], RE	ESIDENT	OF
[]		AND	PRESEN	Γ LY
EMPL	OYED	WITH	[],	A	COMPA	NY/
CORP	ORATION	ORGA	NISED	AND	EXISTING	G UI	NDER TI	HE LAWS	OF
					. (NAME	OF '	THE CO	Untry) <i>A</i>	AND
HAVI					PRINCIPAL				
					AS OUR	TR	UE AN	ID LAW	FUL
ATTO	RNEY (TI	HE "AT	TORNE	(Y'') TO	DO IN C)UR	NAME A	AND ON (DUR
					LLOWING A				
					CT OF OR 1				
					EST				
	/			,	MPANY O				
					AND HA				
					INESS (UNI				
					PDATED)				
					. - 171006, I				
					RIBED IN			CE INVIT	ING
EXPR	ESSION O	F INTER	EST (T	HE "EC	I") THAT IS	S TO	SAY:		

- 1. TO PREPARE, OFFER, SIGN, SUBMIT AND DELIVER TO THE SJVN THE EXECUTANT'S APPLICATION FOR THE OFFER PURSUANT TO THE EOI (THE "APPLICATION") INCLUDING TO MAKE, SIGN, SUBMIT, DELIVER, EXECUTE, AND ACCEPT ALL DOCUMENTS, INCLUDING JOINT VENTURE/CONSORTIUM/SHAREHOLDERS AGREEMENT, INFORMATION, APPLICATIONS AND OTHER WRITINGS NECESSARY FOR OR INCIDENTAL TO THE SIGNING, SUBMISSION AND DELIVERY OF THE APPLICATION TO THE SJVN;
- 2. TO NEGOTIATE, ENTER INTO, SIGN AND EXECUTE, ACCEPT AND DELIVER ALL AGREEMENT, UNDERTAKINGS, ACCEPTANCES AND OTHER WRITINGS CONSEQUENT UPON ACCEPTANCE OF THE EXECUTANT'S APPLICATION;
- 3. PARTICIPATE IN APPLICANTS' AND OTHER CONFERENCES AND PROVIDE ALL INFORMATION REQUIRED BY THE SJVN AND TO FURNISH/SEEK CLARIFICATIONS ARISING OUT OF OR RELATING TO THE EOI AND, UPON ANY AGREEMENT, INFORMATION, APPLICATIONS AND OTHER WRITINGS CONSEQUENT TO THE ACCEPTANCE OF THE EXECUTANT'S APPLICATION BY THE SJVN;

- 4. TO REPRESENT AND ACT ON BEHALF OF THE EXECUTANT IN RESPECT OF ALL MATTERS BEFORE THE SJVN RELATING TO THE EXECUTANT TO SUBMIT APPLICATION AND UPON ACCEPTANCE OF THE EXECUTANT'S APPLICATION BY THE SJVN INCLUDING THE RESULTANT TAKE-OVER/TRANSFER AGREEMENT ON SUCH THE ACCEPTANCE OF THE EXECUTANT'S APPLICATION (THE "TAKE-OVER/TRANSFER AGREEMENT") IN RESPECT OF ALL MATTERS RELATING TO OR ARISING OUT OF OR CONCERNING THE TAKE-OVER/TRANSFER AGREEMENT AND TO GENERALLY DEAL WITH THE SJVN ON BEHALF OF THE EXECUTANT IN ALL MATTERS ARISING OUT OF OR IN CONNECTION WITH OR RELATING TO OR ARISING OUT OF THE EXECUTANT'S APPLICATION, THE EOI AND THE TAKE-OVER/TRANSFER AGREEMENT IN THE EVENT OF ACCEPTANCE OF THE EXECUTANT'S APPLICATION BY THE SJVN;
- 5. AND GENERALLY TO DO ANY AND ALL OTHER AND FURTHER ACTS, DEEDS AND THINGS WHICH ARE NECESSARY FOR OR INCIDENTAL TO OR DEEMED APPROPRIATE FOR MORE EFFECTUAL EXERCISE OF THE POWERS HEREBY CONFERRED.

AND We, the Executant above named do hereby agree and undertake to ratify and confirm and do hereby ratify and confirm all acts, deeds and things lawfully done or caused to be done by our said Attorney pursuant to and in exercise of the powers hereby conferred and all acts, deeds and things done or caused to be done by our said Attorney pursuant hereto shall always be deemed to be the acts, deeds and things done by the Company itself.

	WHEREOF, THIS POWER OF ATTORNEY ON THIS []
	has been executed under the common seal of the(name of place).
	For [Name of the Executant]
	By(Name of Officer)
	Title
(Acceptance by	y Power of Attorney)
WITNESSES	

- 1. Name, Signature and Address
- 2. Name, Signature and Address

[Notarized]

Notes:

The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure.

- ♦ The Applicant should submit for verification the extract of the charter documents and documents such as a resolution of its Board of Director/ power of attorney in favour of the person executing this Power of Attorney for delegation of power hereunder on behalf of the Applicant.
- ◆ For a Power of Attorney executed and issued overseas, shall be duly apostilled as per Hague Convention 1961 or duly stamped in accordance with Indian Stamp Act, 1899 within three months from the date of receipt of POA in India.

Integrity Pact duly signed by the parties

(SJVN Signed copy uploaded separately)

Duly Filled in Performa regarding Black-listing

(SJVN Signed copy uploaded separately)

PROFILE OF APPLICANT (FOR HYDRO POWER PROJECTS)

Sr. No.	Parameters	Details to be furnished by the Applicant	List of Documents to be attached.
1.0	Name of applicant		
2.0	Address of applicant Telephone No. Mobile No. Fax No. Email Address		
3.0	Year of Incorporation of the company		Certificate of incorporation of company under Indian Companies Act, 1956 or 2013 to be enclosed.
4.0	Name & Sign of Authorized Representative		
5.0	Brief Description of the company including its main lines of business area in Hydro Power domain in which the firm and / or its parent company / associates / joint venture / other significant collaborating arrangement etc. are operating.		
6.0	Financial Performance of the company in last 3 financial years ending 31st March, 2020		Audited Annual Report for last 3 Financial years to be submitted.
7.0	Cash Flow Projection for next 10 Years along with Yearly Cash Generated from the Operation of the Project since commissioning (in case of commissioned Project).		

ADDITIONAL INFORMATION FOR HYDRO POWER PROJECTS (PROJECT-WISE)

Format for Submission of Information

Developer/Owner:	
27 27	
Name of Project	
Total Generation	
Capacity of Project	
Salient Features* of	
Project	
Location, Longitude	
& Latitude of Project	

Sr. No.	Parameters	Details to be filled by Applicant	Remarks
-	B B I		
1.	Power Purchase Agreemen		I
a)	PPA signed for the Project	Yes/No	
b)	Basis of PPA	CERC/SERC/Competitive	
		Bidding	
c)	Quantum of power for	%	
	which PPA has been		
	signed (Whether 100% or		
	70-99% or 50-70% or		
	<50%)		
d)	Quantum of power for	MW	
	which PPA is yet to be	(Long Term/Short Term)	
	entered		
e)	Agency with whom PPA		Submit
	is signed		Supporting
			document
f)	Period of PPA	(In years)	Copy of PPA to
			be furnished
g)	Status of PPA		
h)	First Year Tariff		
i)	Levelised Tariff		
j)	Whether Grid		
	connectivity agreement		
	signed / LTA Details		
k)	Proposal for sale of Power		
	for which PPA has not yet		
	been signed		
2.	Land		
a)	Total Land envisaged for	Acres/Ha	
•	the project		
b)	Land acquired and	Acres/Ha	
	possessed, free from all		

	encumbrances		Submit
c)	Land acquired but to be	Acres/Ha	Supporting
	possessed, free from all	Actes/11a	Documents, if any
	encumbrances		Documents, if any
d)	Land under forest area	Yes/No	_
e)	Land proposed to be	Acres/ha	_
	acquired	I teres/ na	
f)	Location of land		
1)	(Location, state, District,		
	Latitude & longitude)		
g)	Govt. Land	Yes/no acres	
8)	30 v. 2mu	100,110	
h)	Private land	Yes/no acres	_
i)	Leasehold/ freehold	Yes/ noacres	
j)	Dumping area details and		
37	their adequacy.		
3.	Access to the site	Yes/no	
4.	Site Photographs		
5.	Project Layout		Detailed
			Drawings to be
			provided.
6.	Statutory/Regulatory		
	Clearances		
a)	Implementation	Yes/No	
	agreement/MOU		
b)	Free Power Details	Yes/No	
c)	All clearances Obtained	Yes/No	
d)	TEC	Yes/No	
e)	MoEF Clearances	Yes/No	
f)	NCSDP Clearance	Yes/No	
g)	PCB Clearance	Yes/No	
h)	PWD Clearance	Yes/No	
i)	Details of quarries for		To be provided.
	construction material,		
	their approval, Mining		
	Licence and adequacy of		
	material available.	T7 /	TC 4 1 1 1
j)	Whether DPR/PFR is	Yes/no	If yes then submit
1)	prepared Ctatas of DDD /DED	A 1/ 1	copy of DPR/PFR
k)	Status of DPR/PFR	Approved/not approved.	TPL - 1' 1
1)	Enlist /status clearances		The list to be
	obtained/yet to be obtained		attached
			separately.
m)	Regulatory Clearance For Fire		
n)	Regulatory Clearance For		
	Pollution Control Plant,		
	DG set, Lift etc.		
7.	Project Details		
a)	Planned Capacity	MW	
b)	Unit size	MW	

c)	Project Implementation Status	Under operation / Fully Commissioned / Partly Commissioned / Under Construction / Under Planning	
d)	Capacity under Operation	MW	
e)	Capacity under Erection & Commissioning	MW	
f)	Interference with any Upstream/Downstream project in respect of FRL/TWL.	Yes/No	Details to be provided.
g)	E-flows and Free flows stretch details		Details to be provided.
h)	Power evacuation: Details of Power evacuation system and its readiness/stages clearances/Grant of convention/LTA/LTOA.		
i)	Name & Address of Civil Contractor for the Project		Calamit the datail
	I. Status of component wise work completed II. Status of component wise Balance Work		Submit the detail of work.
j)	Supplier Name, Make of the Hydro-mechanical package awarded/proposed to be awarded		
	I. Status of component wise work completed. II. Status of component wise Balance Work		Submit the detail of work.
k)	Supplier Name, Make of the Electro-Mechanical package awarded/proposed to be awarded		
	I. Status of component wise work completed. II. Status of component wise Balance Work		Submit the detail of work.
8.	Project Cost		
a)	Estimated cost for the project	Rs	
b)	Expected cost of completion	Rs Cr	
c)	Capex incurred till date	Rs Cr	
9.	Project Financing		

-)	D-1-4/Eit D-4i		
a)	Debt/Equity Ratio		
b)	Source of equity		
<u>c)</u>	Details of Debt Funding		
<u>d)</u>	Details of Lenders		
e)	Quantum, tenure, interest		
	rate and other specific		
	conditions of loan		
	agreement		
10.	Manpower status for the		
	project		
a)	Total Manpower on	Nos.	
	permanent employment		
b)	Total Manpower on	Nos.	
	Contract Basis		
11.	Legal Issues		
a)	Details of pending		
	litigations, if any		
b)	Law & Order Issues, if		
	any		
12.	Rehabilitation &		
	Resettlement (R&R)		
	Aspects		
a)	Total Area of private land		
	to be acquired/acquired.		
b)	Total number of Districts		
	under the		
	acquired/proposed land		
	(with name).		
c)	Total number of		
	Panchayat affected (with		
	name).		
d)	Total number of affected		
	villages (with name).		
e)	Total number of Project		
	Affected Families due to		
	acquisition of		
	land/house/livelihood.		
f)	Total number of families		
	displaced/houseless.		
g)	Total number of landless		
	families on account of		
	acquisition of land.		
h)	Whether land acquisition		
	process initiated. If yes		
	what is the present stage,		
	mentioning the name of		
	the land Act invoked.		
i)	Whether Social Impact		
	Assessment (SIA) study		
	conducted. If yes copy be		
	provided.		

		T	
j)	Whether Socio-Economic		
	survey conducted. If yes		
	copy be provided.		
k)	Whether R&R plan		
	prepared in line with		
	prevailing Act. If yes then		
	cost of R&R plan.		
1)	Details of land		
	compensation paid to		
	PAFs if any.		
m)	Details R&R expenditure		
	incurred if any.		
n)	Whether resettlement site		
	identified/developed for		
	resettlement of displaced		
	families/houseless PAFs.		
13 (a)	Financial Performance of		Audited Annual
	the Project/Unit in last 3		Report for last 3
	financial years ending		Financial years to
	31st March, 2020		be submitted.
	Cash Flow Projection for		
(b)	next 10 Years along with	Cash Flow Projections	
	Yearly Cash Generated		
	from the Operation of the		
	Project since		
	commissioning (in case of		
	commissioned Project).		
14.	Details of Movable and		
	Non- Movable Enabling		
	Infrastructure available at		
	site.		

^{*}Detailed Salient feature should include data in line with the requirements as – (Diversion structure, Intake, Desilting tank, Channel/HRT, Surge shaft, Vessel shaft, PPV, Penstock, Powerhouse, T/F hall, Switchyard, TRT, Outfall)

CHECKLIST FOR HYDRO POWER PROJECTS UNDER OPERATION & MAINTENANCE STAGE

S.NO	CHECK POINTS	REMARKS
	CTRO-MECHANICAL ASPECTS	KEWIAKKS
A	Unit Maintenance Details	
1.	Activities taken during Annual Plant Maintenance (APM)	
2.	Frequency of Replacement of underwater parts	
3.	Repair/Reuse of Underwater Parts	
4.	Status of Erosion by Silt	
5.	Details of Forced Outages during last One Year	
6.	How the APM is planned i.e. Timing, Manpower, Spares etc.	
7.	How Periodical/Preventive maintenance is undertaken i.e.	
/.	Manpower etc.	
8.	Types of various faults during last one year.	
9.	Manpower Details (<i>Permanent, Contractual & Outsourced</i>)	
10.	Any Major repair works of Project components carried out	
10.	and expenditure incurred on the same.	
11.	Any left out work which was essential as per the approved	
11.	DPR/Regulations.	
	DITOTOGULUTORS.	
В	Inventory/Spares Management	
1.	How Inventory is maintained for major spares like Runner,	
	Guide Vanes and other underwater parts.	
2.	Procurement source i.e. OEM or from Market.	
3.	List of OEM for all Main Equipments.	
4.	Level of Inventory for major components.	
5.	Total Value of Inventory.	
6.	Tools for Annual Maintenance:	
	a) Special Devices	
	b) General T&P	
7.	Tools for Testing and Commissioning i.e. Meggar, HV Test	
	Kit, DC Test Kit, Tachometer, Multimeter etc.	
8.	Consumable Details (Oil/Lubricant Type & Quantity/Unit)	
C	Operation Details	
1.	Deployment of manpower for operations in shifts.	
2.	Scheduling details.	
3.	Interconnection details with SLDC.	
4.	Last 2 (two) years Generation details i.e. Total, Ex-bus	
	against Design Energy, Auxiliary consumption, voltage etc.	
5.	Sources for Black start.	
6.	Type of CMS and its integration with SCADA system.	
7.	Fire Fighting arrangement details i.e. General, Generator	
	Transformer (GT), Oil Pressure Unit (OPU), Fire Tanks etc.	
	Source of water.	
8.	AC & Ventilation Details.	
9.	Log Books, PTW (Permit to Work) Book for last one year.	

-		
D	Major Equipment Details	
1.	Generator Bearing.	
2.	Turbine Bearing.	
3.	Bearing Cooling Arrangement.	
4.	Total Cooling Water Requirement.	
5.	Cooling Water Source.	
6.	Spiral Design Pressure & Test Pressure.	
7.	Drainage & Dewatering Arrangement.	
8.	MIV/PPV & its seals operating mechanism.	
9.	Governor operating mechanism.	
10.	EOT Crane details with lifting tools i.e. slings, shackles etc.	
11.	MV & LV Scheme.	
12.	Number of DG sets.	
13.	Voice & Data Communication & Other Communication	
	system.	
E	Drawings and Documents	
1.	Drawings (Manufacturing, Installation, Arrangement,	
	Cabling, Piping & C&I Drawing)	
2.	Manuals:-	
	a) O&M	
	b) Safety	
	c) Storage	
	d) Preservation	
3.	Quality System.	
4.	Contract Documents and subsequent Amendments.	
5.	Commissioning Test Details.	
F	Any Major Technical Issues	
G	Material Handling in Power House and in Stores	
Н	Roads & Bridges condition from Major City	
I	Miscellaneous	
1.	Copy of DPR.	
2.	Silt Data.	
3.	Water Petrographic & Chemical Analysis Report.	
4.	Performance Guarantees of Equipments.	
5.	GTP's of EM equipments.	
6.	Welding and NDT details.	
II) H	YDRO-MECHANICAL ASPECTS	
1.	As Build Drawings for Intake Gates & Penstock.	
2.	O&M Manuals.	
3.	Material of the Penstock used & its Test Certificates.	
4.	Dimensions of the Penstock-Diameter, Thickness, Support	
	etc.	

_			
5.	Design Pressure of Penstock.		
6.	Leakage, Noise & Vibrations.		
7.	Condition of Paint and Rust.		
8.	Frequency & Operation Process of Gate.		
9.	Pressure Rise during sudden Load Rejection.		
10.	Fabrication details.		
11.	Welding and NDT details on the Penstock during fabrication		
	and also at site		
12.	Maintenance Schedules for the Gates.		
13.	Spares available.		
14.	Gate Hoisting/Handling Mechanism.		
15.	Maximum & Minimum water temperature.		
III)	CIVIL ASPECTS		
1.	Interference with any Upstream/ Downstream Project in		
	respect of FRL/TWL.		
2.	Recorded HFL (Flood History) at Diversion location and		
	Power House / Tail Race Channel/ Outlet.		
3.	Seismic Zone for which structure has been designed.		
4.	Construction Drawing/Deviation in Construction from		
	Approved DPR.		
5.	Quality Checks/ Test Results during Construction.		
6.	Monitoring / Instrumentation details.		
7.	Periodic Inspection reports during Operation.		
8.	Identified vulnerable slopes near Civil Structures.		
9.	Seepage details in/through Civil Structures.		
10.	General Conditions of the Power House Structure.		
11.	Cracks in Civil Structures.		
12.	Rusting Conditions of Saddle Supports, Roof truss etc.		
13.	Maintenance/Cleaning schedule for Diversion Structure.		
14.	Civil Structures which are assessable.		
		Condition of Approach Road to Power House and other Civil	
15.			
15.			
15. 16.	Condition of Approach Road to Power House and other Civil		

Note1: The above checklist (Annexure-7) is indicative and for reference purpose. However, any other point not considered above may also be provided.

Note2: Information already provided in Annexure-6 need not to be repeated in the Annexure-7.

CHECK LIST FOR TECHNICAL ASSESSMENT OF HYDRO POWER PROJECTS UNDER CONSTRUCTION PROJECTS

S.NO	CHECK POINTS	REMARKS
	VIL & GEOLOGICAL ASPECTS	KENT KKS
	ruction Stage	
a) Ge		
1.	Design Consultant details.	
2.	Detailed designs of Components.	Detailed Design – Dam Stability, Intake Design, HRT Support, Lining, Plugs, Surge Shaft and PH Structural Analysis
3.	Construction Drawings issued.	As per list attached as APPENDIX-A
4.	Model Studies details.	Sedimentation Study
5.	Implementation Schedule.	Component wise Detailed Schedule for remaining works of Civil, EM, HM and misc. works
6.	Component wise quantities executed so far and remaining for completion	Component wise for Civil, EM, HM and misc. works
7.	Quality Checks in respect of Materials used.	Sample copy of Material test certificate, witness test etc. with Quality Plan.
8.	Recorded Floods and their levels etc.	Flood details of 2018 or any other witnessed so far.
9.	Deviations in Tender Engineering w.r.t DPR	
b) Slo	pes, Pits & Structures	
1.	Geological mapping of surface slopes/pits.	As per APPENDIX-B
2.	Slope stabilization details.	
3.	Identified vulnerable slopes near Civil Structures.	
4.	Seepage details in/through Civil Structures.	
5.	General Conditions of the Civil Structures.	
6.	Cracks in Civil Structures.	
7.	Details of instrumentations data if any.	As per APPENDIX-B
8.	Rusting Conditions of Saddle Supports, Roof trusses etc.	
c) Un	derground	
1.	Geological maps & sections along tunnel/cavities alignment.	

3.	& their interpretation.	
٦.	Low Rock cover areas	
4.	Rock mass classification in	
	Tunnels/Cavities	
5.	Rock wise Support System installed in	
_	tunnels/Cavities	
6.	Details of Cavities encountered and measures taken thereof.	
7.	Identified weak zones in the	
/.	Tunnels/Cavities	
8.	Other Geological surprises encountered in	
	Tunnels/Cavities.	
9.	Lining Details	Phase wise details to be provided
10.	Grouting Details	Phase wise details to be provided
d) Ot		
1.	Quality Checks/ Test Results during	Methodology and one sample
	Construction.	copy of test certificate
2.	Pending payments/ liability	Payment against already executed works
3.	Litigations /disputes with the Contractors	
4	/ suppliers	
4.	Local issues	Description
5.	Overall quality of Construction.	Descriptive
6.	Condition of Approach Roads to various Civil Structures.	
7.	Machinery (Owned/Hired) deployment	
/.	and their condition.	
8.	Details of Crushers/Batching Plant and	
	their capacities.	
9.	Construction Facilities, Labour camps etc.	
10.	Any additional information felt necessary for disclosure.	Camp details, CSR details & Committed R&R detail.

S.No	Check Points	Remarks
II)	ELECTRO-MECHANICAL ASPECTS	
A	General Details	
1.	All LOAs including 11kV line package	
2.	Contract Agreements	Scope, BoQ, Defect liability details, Insurance – Marine/Storage/Comprehensive, mandatory spares, Electrical & Mechanical Workshop items and functional guarantees, Water petrographic and Chemical Analysis reports.
3.	Contract Value (Pkg.Wise)	
4.	Payment Released as on date (Pkg.Wise)	

	D-1 D (Dl Wi)	T	
5.	Balance Payment (Pkg.Wise) Deviations Details		
6.			
7.	Manpower employed by the contractor		
8.	Storage Arrangement	G 01	
9.	1	Copy of latest L	icense
10.	Other Statutory Requirement		
11.	Insurance Premium status –	Copy of Latest 1	Premium
10	Marine/Storage/Comprehensive		
12.	Total Projected cost to completion		
В	Equipment Technical Parameters		
1.	Cooling Water Source		
2.	Spiral Design Pressure & Test Pressure	Drawing & Des	
3.	MIV/PPV & its seals operating mechanism	Seal Arrangeme	nt Drawing
4.	EOT Crane details with lifting hooks, slings,		
	shackles etc.		
5.		Completion stat	us
6.	PLCC, Data & Voice Communication with		
	NRLDC/SLDC		
C	Component Wise Details (Percentage		
	Completed)		
S.N.	Description	Supply (%)	Installation
			(%)
1.	Turbine and associated auxiliaries		
2.	Cooling water system		
3.	Compressed air system		
4.	Drainage & dewatering system		
5.	Governors & associated auxiliaries		
6.	MIV& associated auxiliaries		
7.	PPV& associated auxiliaries		
8.	Generator & associated auxiliaries		
9.	7		
10.			
11.	Generator transformer		
12.	Auxiliary transformers (dry type)		
13.	Protection system		
14.	Control & monitoring system		
15.	Gas insulated switchgear/AIS		
16.	Pot head yard		
17.	Cable & cable trays		
18.	DC system		
19.	LT system		
20.	MV system		
21.	Illumination system		
22.	EOT cranes & lifting devices		
1	· · · · · · · · · · · · · · · · · · ·	1	
23.	Fire protection system		
23. 24.	Fire protection system Ventilation & air conditioning system		
	Fire protection system Ventilation & air conditioning system Elevators		
24.	Ventilation & air conditioning system		

27.	PA & Communication system	
28.		
E	Drawings and Documents	1
1.	Drawings (Manufacturing, Installation,	As per APPENDIX-C
	Arrangement, Cabling, Piping & C&I	1
	Drawing)	
2.	Manuals:- O&M, Safety, Storage &	
	Preservation	
3.	Quality System	Write up
F	Any Major Technical Issues	•
G	Miscellaneous	
1	Welding and NDT details	
2	Unit Alignment	Procedure & Document to be
	Č	provided
3	Machine (Barrel) Box Up	Status
4	Unit Box Up (MIV to DT)	Status
5	Readiness for Wet Spinning	Status
6	Power Supply Arrangement	
7.	Sizes of Stores for O&M Stage	Permanent Stores
a	Indoor	
b	Outdoor	
8.	Civil, Hydro-Mechanical Interface Problem	
0.	if any	
III)	HYDRO-MECHANICAL ASPECTS	
111)		S D-O D-f4 1:-1:1:4-
1 1		
1.	Contract Agreements	Scope, BoQ, Defect liability
1.	Contract Agreements	details, Insurance –
1.	Contract Agreements	details, Insurance – Marine/Storage/Comprehensive
		details, Insurance –
2.	Drawings for Gates, Hoists, Penstock,	details, Insurance – Marine/Storage/Comprehensive
	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational	details, Insurance – Marine/Storage/Comprehensive
	Drawings for Gates, Hoists, Penstock,	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares.
2.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc.	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing
2.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc.	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating
2.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc.	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting
2.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc.	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating
3.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc.
3.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test
3.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test	details, Insurance – Marine/Storage/Comprehensive, Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the
3.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test Certificates	details, Insurance – Marine/Storage/Comprehensive, Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding,
3.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test	details, Insurance – Marine/Storage/Comprehensive, Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding, fabrication and NDT details,
3.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test Certificates Complete Design and Drawing of Pressure Shaft incl. Supporting Structure.	details, Insurance – Marine/Storage/Comprehensive, Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding, fabrication and NDT details, WPS, PQR
3.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test Certificates Complete Design and Drawing of Pressure	details, Insurance – Marine/Storage/Comprehensive, Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding, fabrication and NDT details, WPS, PQR Paint specifications, Painting
2. 3. 4. 5.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test Certificates Complete Design and Drawing of Pressure Shaft incl. Supporting Structure.	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding, fabrication and NDT details, WPS, PQR Paint specifications, Painting procedure, paint thickness,
2. 3. 4. 5.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test Certificates Complete Design and Drawing of Pressure Shaft incl. Supporting Structure.	details, Insurance – Marine/Storage/Comprehensive, Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding, fabrication and NDT details, WPS, PQR Paint specifications, Painting procedure, paint thickness, primer etc. on inside and
2. 3. 4. 5. 6.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test Certificates Complete Design and Drawing of Pressure Shaft incl. Supporting Structure. Paint used in Pressure Shaft.	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding, fabrication and NDT details, WPS, PQR Paint specifications, Painting procedure, paint thickness, primer etc. on inside and outside
2. 3. 4. 5. 6.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test Certificates Complete Design and Drawing of Pressure Shaft incl. Supporting Structure. Paint used in Pressure Shaft.	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding, fabrication and NDT details, WPS, PQR Paint specifications, Painting procedure, paint thickness, primer etc. on inside and outside List
2. 3. 4. 5. 6.	Drawings for Gates, Hoists, Penstock, TRCM, Power packs and operational arrangements for radial gates etc. O&M Manuals Material of the Penstock used & its Test Certificates Complete Design and Drawing of Pressure Shaft incl. Supporting Structure. Paint used in Pressure Shaft.	details, Insurance – Marine/Storage/Comprehensive , Mandatory spares. Type of operation, sealing arrangement, operating procedure and hoisting arrangements etc. Sample copy of Material test certificates for all the thicknesses, QAP for welding, fabrication and NDT details, WPS, PQR Paint specifications, Painting procedure, paint thickness, primer etc. on inside and outside

		Gates, access gates to HRT, Stop logs, Hoists, TRCM, Penstocks/Pressure Shaft etc.
10.	Dry and Wet Testing Procedure	
11.	ARMAC Details	

Note1: The above checklist (Annexure-8) is indicative and for reference purpose. However, any other point not considered above may also be provided.

Note2: Information already provided in Annexure-6 need not to be repeated in the Annexure-8.

APPENDIX-A

CIVIL ASPECTS

Sr.No	Description of Drawing/Documents		
1	Dam - Layout Plan and section detail		
2	Dam - Concrete outline detail of Non-Overflow and Over flow Bays		
3	Dam - Excavation & Support detail of Dam foundation		
4	Concreting Plan for remaining portion of the Dam		
5	Coffer Dam and Diversion Tunnel detail		
6	Intake Layout Plan and Section		
7	Trash rack detail & Gate detail		
8	Slope Protection U/S & D/S of Intake structure		
9	Layout Plan and L-Section of HRT		
10	Support system provided in the HRT along with Geological log		
11	Concrete lining detail		
12	Plug detail (Gated and Blind)		
13	Plan for filling & dewatering of HRT		
14	Layout Plan & Section of Surge Shaft		
15	Support detail provided in the Surge Shaft		
16	Drawing showing the concrete lining detail of Surge Shaft		
17	Layout Plan & Section of Chamber		
18	Layout Plan & L-Section from Surge Shaft to outfall		
19	Station Layout Plan (Floor wise)		
20	Layout Plan and Section of Tail Race Channel		
21	Switch Yard Layout Plan		

GEOLOGICAL ASPECTS

DRAWING/DOCUMENTS LIST

1. Component wise geological drawing of encountered geology.

A. Dam:

- Dam foundation drawing.
- Left & right abutment drawing
- Geological sections U/S & D/S
- Details of any additional drill holes/ completed drill holes
- Details of any treatment in foundation/discontinuity encountered

B. HRT and other underground structure

- L- sections along HRT alignment
- Identified low cover zone details
- Selected 3D logs of critical zones/ Details of HRT/ junction in Adit-IV
- Face log of all portals/ junctions

2. Instrumentation

- Dam proposed instruments drawings
- Cable root details drawing
- Proposal of post construction monitoring details
- Agency for instrumentation Procurement, installation & reading during construction
- Proposal doing instrumentation and monitoring in Post construction stage
- List of proposed Instruments
- List of procured instruments
- List of installed instruments
- List of Instruments in store
- List of balance instruments to be procured
- **3. List of seismological instruments** (micro seismic recorder / strong motion recorder etc.) and drawing for location. Any other proposal/ details regarding instruments
- **4.** Instrumentation in Surge shaft, Valve chamber and Erection chamber & Powerhouse
- **5.** Rock mass classification details.
- **6.** Component wise geological interpretation/ details for remaining works envisaged for completion.
- 7. Identified vulnerable slopes near civil structure/ Adit portals.

APPENDIX-C

ELECTRO-MECHANICAL ASPECTS

Sr. No	Description of Drawing/Documents			
1	Hydraulic Transient Study Report			
2	Grounding system Design Report and Drawings			
3	Short Circuit Study report			
4	Sectional Arrangement of Turbine			
5	Turbine Guide Apparatus			
6	DT Arrangement drawing including DT Cone			
7	Stay Vane and Spiral Case Drawings			
8	Spiral Casing Design Calculations (Thickness)			
9	Shaft Arrangement Drawings (Turbine & Generator)			
10	Generator Sectional arrangement drawings			
11	Bearing Arrangement Drawings (Turbine, Bottom Guide Bearing & Combine Thrust and Upper Guide Bearing)			
12	Stator & Rotor Arrangement Drawings			
13	Bus Duct (IPBD) Plan & Section			
14	GT OGA Drawing			
15	220 kV GIS, Gas SLD, Plan & Section Drawings			
16	Drainage & Dewatering Calculation and Drawings			
17	Model Test Report of Turbine			
18	GTP/PTS of Turbine, Generator, Mechanical & Electrical BOP			
19	Power House Layout, Station Layout Plan (Floor Wise)& Cross Section			
20	MIV Arrangement Drawings including Inlet and Outlet Pipe			
21	BFV Arrangement Drawings including Inlet and Outlet Pipe including OPU Drawing and Calculations			
22	Governor Hydraulics Drawings and Sizing Calculation of servomotor of Guide Vane and MIV			
23	Plant Main SLD			
24	LV & MV SLD			
25	DC SLD			
26	Calculation & Drawings for Cooling Water			
27	Fire Hydrant Drawings including Deluge of Transformers.			

PROFILE OF APPLICANT

(FOR SOLAR POWER PROJECTS)

Sr. No.	Parameters	Details to be furnished by the Applicant	List of Documents to be attached.
1.0	Name of applicant		
2.0	Address of applicant Telephone No. Mobile No. Fax No. Email Address		
3.0	Year of Incorporation of the company		Certificate of incorporation of company under Indian Companies Act, 1956 or 2013 to be enclosed.
4.0	Name & Sign of Authorized Representative		
5.0	Brief Description of the company including its main lines of business area in Solar Power domain in which the firm and / or its parent company / associates / joint venture / other significant collaborating arrangement etc. are operating.		
6.0	Financial Performance of the company in last 3 financial years ending 31st March, 2020		Audited Annual Report for last 3 Financial years to be submitted.
7.0	Cash Flow Projection for next 10 Years along with Yearly Cash Generated from the Operation of the Project since commissioning (in case of commissioned Project).		

ADDITIONAL INFORMATION FOR SOLAR POWER PROJECTS (PROJECT - WISE)

Format for Submission of Information

Developer/Owner:	
Name of Project	
Total Generation Capacity of Project	
Salient Features of Project	
Location, Longitude & Latitude of Project	

Sr. No.	Parameters	Details to be filled by	Remarks
		Applicant	
1.	Plant CUF		
a)	First Year		
b)	Subsequent Year		
2.	Power Purchase Agreeme	nt	
a)	PPA signed for the Project	Yes/No	
b)	Basis of PPA	CERC/SERC/Competitive	
		Bidding	
c)	Quantum of power for	%	
	which PPA has been		
	signed (Whether 100% or		
	70-99% or 50-70% or		
	<50%)		
d)	Quantum of power for	MW	
	which PPA is yet to be	(Long Term/Short Term)	
	entered		
e)	Agency with whom PPA		Submit Supporting
	is signed		document
f)	Period of PPA	(In years)	Copy of PPA to be
			furnished
g)	Status of PPA		
h)	First Year Tariff		
i)	Levelised Tariff		
j)	Whether Grid		
	connectivity agreement		
	signed / LTA Details		
k)	System Studies, if any		
1)	Proposal for sale of Power		
	for which PPA has not yet		
	been signed		

3.	Land		
a)	Total Land envisaged for	Acres/Ha	
	the project		
b)	Land acquired and	Acres/Ha	
	possessed, free from all		
	encumbrances		Submit Supporting
c)	Land acquired but to be	Acres/Ha	Documents, if any
	possessed, free from all		
	encumbrances		
d)	Land under forest area	Yes/No	
e)	Land proposed to be	Acres/ha	
	acquired		
f)	Location of land		
	(Location, state, District,		
	Latitude & longitude)		
g)	Govt. Land	Yes/no acres	
h)	Private land	Yes/no acres	
i)	Leasehold/ freehold	Yes/ noacres	
<u>j)</u>	Land Lease Contract		To be provided
4.	Access to the site	Yes/no	
5.	Site Photographs		
6.	Project General Layout		Detailed Drawings
			to be provided.
	G IF .		T. 1. D. 11.1
7.	General Equipment		To be Provided
	Layout Drawing for Substation		
8.	Statutory/Regulatory		
0.	Clearances		
a)	Implementation	Yes/No	
(u)	agreement/MOU	103/110	
b)	Free Power Details	Yes/No	
c)	NOC	Yes/No	
d)	Consent to establish form	Yes/No	
	SPCB		
e)	SIA	Yes/No	
f)	Labor License	Yes/No	
g)	CIEG (Chief electrical	Yes/No	
	inspector to Govt.)		
	Clearance		
h)	Factory act license	Yes/No	
i)	Borewell Approval		To be provided.
j)	PWD Clearance		•
k)	NCSDP clearance		
1)	Whether DPR/PFR is	Yes/no	If yes then submit
	prepared		copy of DPR/PFR
m)	Status of DPR/PFR	Approved/not approved.	
n)	Enlist /status clearances	. =	The list to be
		rapproved/not approved.	The list to be

	obtained/yet to be		attached
	obtained obtained		separately.
0)	Regulatory Clearance For		separatery.
0)	Fire		
p)	Regulatory Clearance For		
P)	Pollution Control Plant,		
	DG set, Lift etc.		
9.	Project Details		
a)	Planned Capacity	MW	
b)	Unit Size	MW	
c)	Project Implementation	In Operation/	
	Status	Fully Commissioned /	
	Status	Partly Commissioned /	
		Under Construction /	
		Under Planning	
d)	Capacity under Operation	MW	
e)	Capacity under Erection	MW	
	& Commissioning		
f)	Power evacuation: Details		
1)	of Power evacuation		
	system and its		
	readiness/stages		
	clearances/Grant of		
	convention/LTA/LTOA.		
g)	Name & Address of EPC		
	Contractor for the Project		
	I. Scope of EPC		Submit the detail
	Contractor.		of work.
	II. Status of component		
	wise work completed.		
	III. Status of component		
	wise Balance Work		
10.	Project Cost		
a)	Estimated cost for the	Rs Cr	
	project		
b)	Expected cost of	Rs Cr	
	completion		
c)	Capex incurred till date	Rs Cr	
11.	Project Financing		
a)	Debt/Equity Ratio		
<u>b)</u>	Source of equity		
<u>c)</u>	Details of Debt Funding		
<u>d)</u>	Details of Lenders		
e)	Quantum, tenure, interest		
	rate and other specific		
	conditions of loan		
1.5	agreement		
12.	Manpower status for the		
	project		

a)	Total Manpower on	Nos.	
	permanent employment		
b)	Total Manpower on	Nos.	
	Contract Basis		
13.	Legal /R&R / Law and		
	other Issues		
a)	Details of pending		
	litigations, if any		
b)	Law & Order Issues, if		
	any		
c)	R&R issues, if any		
14 (a)	Financial Performance of		Audited Annual
	the Project/Unit in last 3		Report for last 3
	financial years ending		Financial years to
	31st March, 2020		be submitted.
(b)	Cash Flow Projection for	Cash Flow Projections	
	next 10 Years along with		
	Yearly Cash Generated		
	from the Operation of the		
	Project since		
	commissioning (in case of		
	commissioned Project).		
15.	Details of Movable and		
	Non- Movable Enabling		
	Infrastructure available at		
	site.		

CHECK LIST FOR SOLAR POWER PROJECTS UNDER OPERATION & MAINTENANCE STAGE SOLAR

S.NO	CHECK POINTS	REMARKS
<u>I)</u>	ELECTRO-MECHANICAL ASPECTS	
A	Plant Maintenance Details	
1.	Activities taken during Annual Plant Maintenance (APM)	
2.	Frequency of Replacement of Major faulty parts	
3.	Repair/Reuse of faulty Parts	
4.	Status of Environment on PV Module	
5.	Details of Forced Outages during last One Year	
6.	How the APM is planned i.e. Timing, Manpower, Spares etc.	
7.	How Periodical/Preventive maintenance is undertaken i.e.	
	Manpower etc.	
8.	Types of various faults during last one year.	
9.	Manpower Details (Permanent, Contractual & Outsourced)	
10.	Any Major repair works of Project components carried out and	
	expenditure incurred on the same.	
11.	Any left out work which was essential as per the approved	
	DPR/Regulations.	
12.	Plant Performance Test	
В	Inventory/Spares Management	
1.	How Inventory is maintained for major parts like PV modules,	
	Inverters, LT/HT Switchgears, CMS, SCADA, Batteries and	
	cleaning module sytems.	
2.	Procurement source i.e. OEM or from Market.	
3.	List of OEM for all Main Equipments.	
4.	Level of Inventory for major components.	
5.	Total Value of Inventory.	
6.	Tools for Annual Maintenance:	
	c) Special Devices	
	d) General T&P	
7.	Tools for Testing and Commissioning i.e. Meggar, HV Test	
	Kit, DC Test Kit, Tachometer, Multimeter etc.	
8.	Consumable Details (<i>Type & Quantity</i>)	
C	Operation Details	
1.	Deployment of manpower for operations in shifts.	
2.	Scheduling details.	
3.	Interconnection details with SLDC.	
4.	Last 2 (two) years Generation details i.e. Total, Ex-bus against	
	Design Energy, Auxiliary consumption, voltage etc.	
5.	Type of CMS and its integration with SCADA system.	
6.	Fire Fighting arrangement details	
7.	AC Details.	

	T D 1 DENT/ (D 1 1 1 1) D 1 0 1 1	
8.	Log Books, PTW (Permit to Work) Book for last one year.	
9.	Insurance Coverage Details	
10.	Warranty Details of Major Equipment	
D	Major Equipment Details	
1.	SPV Module	
2.	Inverters	
3.	Module Mounting Structure (MMS)	
4.	String Combiner box	
5.	Inverter Transformer	
6.	Power Transformer	
7.	Auxiliary Transformer	
8.	LT Switchgear	
9.	HT Switchgear	
10.	DC Cables (Module to SCP to Inverter)	
11.	AC Cables (HT & LT)	
12.	Switchyard	
13.	PLCC, Voice & Data Communication with NRLDC/SLDC &	
	Other Communication system	
14.	Weather Monitoring System	
15.	CCTV	
16.	Earthing and Lighting Protection System	
17.	Energy Metering System	
18.	Module Cleaning System (Frequency, Water Requirement,	
	Provisions)	
	,	
E	Drawings and Documents	
1.	Drawings (Manufacturing, Installation, Arrangement,	
	Cabling, Piping & C&I Drawing)	
2.	Manuals: -	
	1) O&M	
	2) Safety	
	3) Storage	
	4) Preservation	
	5) Erection and Commissioning Manuals	
	6) Instruction Manuals	
3.	Quality System.	
4.	Contract Documents and subsequent Amendments.	
5.	Commissioning Test Details.	
F	Any Major Technical Issues	
G	Material Handling in Solar plant	
H	Roads & Bridges condition from Major City	
I	Other Documents	
1.	Copy of DPR.	
2.	Soil investigation Report.	

	D. C C	
3.	Performance Guarantees of Equipment.	
4.	GTP's of Major solar equipment.	
II) M	liscellaneous	
1.	HFL (Flood History)	
2.	Seismic Zone for which structure has been designed.	
3.	Construction Drawing/Deviation in Construction from	
	Approved DPR.	
4.	Quality Checks/ Test Results during Construction.	
5.	Monitoring / Instrumentation details.	
6.	Periodic Inspection reports during Operation.	
7.	General Conditions of the Solar Plant Structure.	
8.	Cracks in Civil Structures.	
9.	Rusting Conditions	
10.	Maintenance/Cleaning schedule for SPV Modules.	
11.	Condition of Approach Road to Solar Power Plant.	
12.	Claims and Litigations with Contractors.	
13.	Any additional information felt necessary for disclosure.	
14.	Watchtower Details	
15.	Pathways and Roads Details	
16.	Fencing Details	
17.	Drainage System Details	
18.	Water Supply System	
19.	Cable Trenches	

Note1: The above checklist (Annexure-11) is indicative and for reference purpose. However, any other point not considered above may also be provided.

Note2: Information already provided in Annexure-10 need not to be repeated in the Annexure-11.

CHECKLIST FOR SOLAR POWER PROJECTS UNDER CONTRUCTION STAGE

S.No	Check Points	Re	marks
<u>I)</u>	ELECTRO-MECHANICAL AS	PECTS	
A	General Details		
1.	All LOAs	To be provided	
2.	Contract Agreements	liability details Marine/Storage/Conmandatory spar Mechanical Wonfunctional guarante and Chemical Analy	mprehensive, es, Electrical & kshop items and es, Water petrographic
3.	Contract Value	To be provided	
4.	Payment Released as on date	To be provided	
5.	2	To be provided	
6.	Deviations Details	To be provided	
7.	Manpower employed by the contractor	To be provided	
В	Major Equipment Details	%age completed (Supply)	%age completed (Installation)
1.	SPV Module		
2.	Inverters		
3.	Module Mounting Structure (MMS)		
4.	String Combiner box		
5.	Inverter Transformer		
6.	Power Transformer		
7.	Auxiliary Transformer		
8.	LT Switchgear		
9.	HT Switchgear		
10.	DC Cables (Module to SCP to Inverter)		
11.	,		
12.	Switchyard		
13.	Voice & Data Communication & Other Communication system.		
14.			
15.	<u> </u>		
16.	Earthing and Lighting Protection System		
17.	Energy Metering System		
II)	Miscellaneous		
1.	Spares available	List to be provided	

2.	HFL (Flood History)	
3.	Seismic Zone for which structure	
	has been designed.	
4.	Construction Drawing/Deviation	
	in Construction from Approved	
	DPR.	
5.	Quality Checks/ Test Results	
	during Construction.	
6.	Monitoring / Instrumentation	
	details.	
7.	Periodic Inspection reports	
	during Operation.	
8.	General Conditions of the Solar	
	Plant Structure.	
9.	Cracks in Civil Structures.	
10.	Rusting Conditions	
11.	Maintenance/Cleaning schedule	
	for SPV Modules.	
12.	Approach Road to Solar Power	
	Plant.	
13.	Claims and Litigations with	
	Contractors.	
14.	Any additional information felt	
	necessary for disclosure.	
15.	Watchtower Details	
	Pathways and Roads Details	
17.	Fencing Details	
	Drainage System Details	
19.	Water Supply System	
	Cable Trenches	
	Pending payments/ liability	Payment against already executed works
	Overall quality of Construction.	Descriptive details to be provided
23.	Storage Arrangement	
	Labour License requirement	Copy of latest License
25.	Other Statutory Requirement	
26.	Insurance Premium status –	Copy of Latest Premium
	Marine/Storage/Comprehensive	
27.	Total Projected cost to	
	completion	

Note1: The above checklist (Annexure-12) is indicative and for reference purpose. However, any other point not considered above may also be provided.

Note2: Information already provided in Annexure-10 need not to be repeated in the Annexure-12.

PROFILE OF APPLICANT (FOR WIND POWER PROJECTS)

Sr. No.	Parameters	Details to be furnished by the Applicant	List of Documents to be attached.
1.0	Name of applicant	**	
2.0	Address of applicant Telephone No. Mobile No. Fax No. Email Address		
3.0	Year of Incorporation of the company		Certificate of incorporation of company under Indian Companies Act, 1956 or 2013 to be enclosed.
4.0	Name & Sign of Authorized Representative		
5.0	Brief Description of the company including its main lines of business area in Solar Power domain in which the firm and / or its parent company / associates / joint venture / other significant collaborating arrangement etc. are operating.		
6.0	Financial Performance of the company in last 3 financial years ending 31st March, 2020		Audited Annual Report for last 3 Financial years to be submitted.
7.0	Cash Flow Projection for next 10 Years along with Yearly Cash Generated from the Operation of the Project since commissioning (in case of commissioned Project).		

ADDITIONAL INFORMATION FOR WIND POWER PROJECTS (PROJECT - WISE)

Format for Submission of Information

Developer/Owner:	
Name of Project	
Total Generation Capacity of Project	
Salient Features of Project	
Location, Longitude & Latitude of Project	

Sr. No.	Parameters	Details to be filled by Applicant	Remarks
1.	Plant CUF – First Year		
	Plant CUF – Subsequent Y	ear	
2.	Power Purchase Agreeme		
a)	PPA signed for the Project	Yes/No	
b)	Basis of PPA	CERC/SERC/Competitive Bidding	
c)	Quantum of power for which PPA has been signed (Whether 100% or 70-99% or 50-70% or <50%)	%	
d)	Quantum of power for which PPA is yet to be entered	(Long Term/Short Term)	
e)	Agency with whom PPA is signed		Submit Supporting document
f)	Period of PPA	(In years)	Copy of PPA to be furnished
g)	Status of PPA		
h)	First Year Tariff		
i)	Levelised Tariff		
j)	Whether Grid		
	connectivity agreement signed / LTA Details		
m)	System Studies, if any		
3.	Land		
a)	Total Land envisaged for the project	Acres/Ha	
b)	Land acquired and	Acres/Ha	

	possessed, free from all encumbrances		Submit Supporting
c)	Land acquired but to be	Acres/Ha	Documents, if any
	possessed, free from all	Acres/11a	Documents, if any
	encumbrances		
d)	Land under forest area	Yes/No	
e)	Land proposed to be	Acres/ha	
,	acquired	Telesylla	
f)	Location of land		
	(Location, state, District,		
	Latitude & longitude)	V.	
g)	Govt. Land	Yes/no acres	
h)	Private land	Yes/no acres	
i)	Leasehold/ freehold	Yes/ noacres	
j)	Land Lease Contract		To be provided
4.	Access to the site	Yes/no	
5.	Site Photographs		
6.	Project General Layout		Detailed Drawings
			to be provided.
7.	General Equipment		To be Provided
	Layout Drawing for		
	Substation		
8.	Statutory/Regulatory		
	Clearances		
a)	Implementation	Yes/No	
	agreement/MOU		
b)	Free Power Details	Yes/No	
c)	NOC	Yes/No	
d)	Consent to establish form SPCB	Yes/No	
e)	SIA	Yes/No	
f)	Labor License	Yes/No	
g)	CIEG (Chief electrical	Yes/No	
	inspector to Govt.)		
	Clearance		
h)	Factory act license	Yes/No	
i)	Borewell Approval		To be provided.
j)	PWD Clearance		
k)	NCSDP clearance		
1)	Whether DPR/PFR is	Yes/no	If yes then submit
	prepared		copy of DPR/PFR
m)	Status of DPR/PFR	Approved/not approved.	
n)	Enlist /status clearances		The list to be
	obtained/yet to be		attached
	obtained		separately.
1	Regulatory Clearance For		
	Fire		

	Regulatory Clearance For		
	Pollution Control Plant,		
	DG set, Lift etc.		
9.	Project Details		
a)	Planned Capacity	MW	
b)	Project Implementation	In Operation	
	Status	in operation	
c)	Capacity under Operation	MW	
<u>d)</u>	Power evacuation: Details		
	of Power evacuation		
	system and its		
	readiness/stages		
	clearances/Grant of		
	convention/LTA/LTOA.		
e)	Name & Address of EPC		
	Contractor for the Project		
h)	I. Scope of EPC		Submit the detail
	Contractor.		of work.
	II. Status of component		
	wise work completed.		
	III. Status of component		
	wise Balance Work		
10.	Project Cost		
a)	Estimated cost for the	Rs Cr	
	project	-	
<u>b)</u>	Cost of completion	Rs Cr	
c)	Capex incurred till date	Rs Cr	
11.	Project Financing		
<u>a)</u>	Debt/Equity Ratio		
<u>b)</u>	Source of equity		
<u>c)</u>	Details of Debt Funding		
<u>d)</u>	Details of Lenders		
e)	Quantum, tenure, interest		
	rate and other specific		
	conditions of loan		
12.	agreement Cost of Generation		
a)	Levelized Tariff	Rs/Unit	
b)	First Year Tariff	Rs/Unit	
13.	Manpower status for the	KS/OIIIt	
15.	project		
a)	Total Manpower on	Nos.	
",	permanent employment	1100.	
b)	Total Manpower on	Nos.	
	Contract Basis	1(05.	
10.	Legal /R&R / Law and		
	other Issues		
a)	Details of pending		
",	litigations, if any		
	1 0 , ,	I .	1

b)	Law & Order Issues, if		
	any		
c)	R&R issues, if any		
14 (a)	Financial Performance of the Project/Unit in last 3 financial years ending 31st March, 2020		Audited Annual Report for last 3 Financial years to be submitted.
(b)	Cash Flow Projection for next 10 Years along with Yearly Cash Generated from the Operation of the Project since commissioning (in case of commissioned Project).	Cash Flow Projections	
15.	Details of Movable and Non- Movable Enabling Infrastructure available at site.		

CHECK LIST FOR WIND POWER PROJECTS UNDER OPERATION & MAINTENANCE STAGE

S.NO	CHECK POINTS	REMARKS		
Ш	III) ELECTRO-MECHANICAL ASPECTS			
A	Plant Maintenance Details			
1.	Activities taken during Annual Plant Maintenance (APM)			
2.	Frequency of Replacement of Major faulty parts			
3.	Repair/Reuse of faulty Parts			
4.	Status of Environment on Blades			
5.	Details of Forced Outages during last One Year			
6.	How the APM is planned i.e., Timing, Manpower, Spares etc.			
7.	How Periodical/Preventive maintenance is undertaken i.e.,			
	Manpower etc.			
8.	Types of various faults during last one year.			
9.	Manpower Details (Permanent, Contractual & Outsourced)			
10.	Any Major repair works of Project components carried out and			
	expenditure incurred on the same.			
11.	Any left-out work which was essential as per the approved			
	DPR/Regulations.			
12.	Plant Performance Test			
13.	LVRT Details			
В	Inventory/Spares Management			
1.	How Inventory is maintained for major parts like WTG,			
	LT/HT Switchgears, CMS, SCADA, Batteries and			
	Transformer.			
2.	Procurement source i.e., OEM or from Market.	_		
3.	List of OEM for all Main Equipments.			
4.	Level of Inventory for major components.			
5.	Total Value of Inventory.			
6.	Tools for Annual Maintenance:			

	a) Special Devices
	b) General T&P
7.	Tools for Testing and Commissioning i.e. Meggar, HV Test
	Kit, DC Test Kit, Tachometer, Multimeter etc.
8.	Consumable Details (Type & Quantity)
C	Operation Details
1.	Deployment of manpower for operations in shifts.
2.	Scheduling details.
3.	Interconnection details with SLDC.
4.	Last 2 (two) years Generation details i.e. Total, Ex-bus against
	Design Energy, Auxiliary consumption, voltage etc.
5.	Type of CMS and its integration with SCADA system.
6.	Fire Fighting arrangement details
7.	AC Details.
8.	Log Books, PTW (Permit to Work) Book for last one year.
9.	Insurance Coverage Details
10.	Warranty Details of Major Equipments
D	Major Equipment Details
1.	WTG
2.	Nacelle
3.	Blades
4.	Shaft
5.	Gearbox
6.	Generator
7.	Hub
8.	Power Transformer
9.	Auxiliary Transformer
10.	LT Switchgear
11.	HT Switchgear
12.	DC Cables (Module to SCP to Inverter)

13.	AC Cables (HT & LT)
14.	Switchyard
15.	PLCC, Voice & Data Communication with NRLDC/SLDC &
	Other Communication system
16.	Weather Monitoring System
17.	CCTV
18.	Earthing and Lighting Protection System
19.	Energy Metering System
20.	Blade Cleaning System (Frequency, Water Requirement,
	Provisions)
E	Drawings and Documents
1.	Drawings (Manufacturing, Installation, Arrangement,
	Cabling, Piping & C&I Drawing)
2.	Manuals: -
	7) O&M
	8) Safety
	9) Storage
	10) Preservation
	11) Erection and Comissioning Manuals
	12) Intruction Manuals
3.	Quality System.
4.	Contract Documents and subsequent Amendments.
5.	Commissioning Test Details.
F	Any Major Technical Issues
G	Material Handling in Wind plant
Н	Roads & Bridges condition from Major City
I	Miscellaneous
1.	Copy of DPR.

2.	Soil investigation Report.	
3.	Performance Guarantees of Equipments.	
4.	GTP's of Major Wind equipment.	
IV)M	Aiscellaneous	
1.	Seismic Zone for which structure has been designed.	
2.	Construction Drawing/Deviation in Construction from	
	Approved DPR.	
3.	Quality Checks/ Test Results during Construction.	
4.	Monitoring / Instrumentation details.	
5.	Periodic Inspection reports during Operation.	
6.	General Conditions of the Wind Plant Structure.	
7.	Rusting Conditions	
8.	Maintenance/Cleaning schedule for Blades	
9.	Condition of Approach Road to Power Plant.	
10.	Claims and Litigations with Contractors.	
11.	Any additional information felt necessary for disclosure.	
12.	Pathways and Roads Details	
13.	Fencing Details	
14.	Cable Trenches	

Note1: The above checklist (Annexure-15) is indicative and for reference purpose. However, any other point not considered above may also be provided.

Note2: Information already provided in Annexure-14 need not to be repeated in the Annexure-15.