

**SJVN Arun-3 Power Development Company Pvt. Ltd.
(SAPDC)**

*(A wholly owned subsidiary of SJVN Ltd. – a joint venture of
Government of India and Government of Himachal Pradesh)*

Invites

Expression of Interest (EoI)

From

**Discoms / Bulk Corporate Customers/ Trading Licensees from
India, Nepal and Bangladesh**

For

**Procurement of power from two hydropower projects in Nepal viz.
900 MW Arun-3 HEP and 669 MW Lower Arun HEP**

SJVN Arun-3 Power Development Company Pvt. Ltd. (SAPDC)

(A wholly owned subsidiary of SJVN Ltd. – a joint venture of Government of India and Government of Himachal Pradesh)

NOTICE INVITING EXPRESSION OF INTEREST (EoI)

SJVN Arun-3 Power Development Company Pvt. Ltd. (SAPDC), a wholly owned subsidiary of SJVN Ltd. – a joint venture of Government of India and Government of Himachal Pradesh – is inviting expression of interest from Discoms / Bulk corporate customers/ Trading licensees from India, Nepal and Bangladesh for procurement of power from its two hydropower projects in Nepal viz. 900 MW Arun-3 HEP and 669 MW Lower Arun HEP.

SAPDC is a private limited company incorporated under the Nepalese Company Act having registered address as Lokhantali, Madhyapur (Thimi), Bhaktapur, Nepal and project office at Tumlingtar, Sankhuwasabha Nepal. SAPDC is currently executing 900 MW Arun-3 Hydroelectric Project (a BOOT project with commercial generation period of 25 years), which is in advanced stage of construction and is scheduled to commence commercial operation in the year 2023-24.

Furthermore, Govt. of Nepal has also allotted Lower Arun Project (669 MW) to SJVN Ltd on BOOT basis for 25 years of commercial generation. MOU has been signed with Investment Board of Nepal, DPR of the project has also been approved by GoN, and other approvals from GoI/GoN are in process. This Project is scheduled to commence commercial operation in the year 2027-28 and shall operate in tandem with Arun-3 HEP.

Through these two projects i.e. Arun-3 HEP (900 MW) and Lower Arun HEP (669 MW), SAPDC plans to generate 3924 MU and 2921 MU respectively. It intends to enter into Long Term Power Purchaser agreements (15 years to 25 years) with interested Discoms/Trading Companies/Bulk Corporate Customers for procurement of power from these projects. Interested buyers may choose to buy this power at bus bar or at interconnection point at Sitamari, Bihar.

For overview of the projects, eligibility criteria, terms and conditions and application format, applicants may download the EoI document from our website <https://sapdc.com.np>. Interested parties who meet the eligibility criteria shall be required to furnish their Expression of Interest complete with supporting on or before 30th May 2022 at the email address: ppm.sapdc@gmail.com

SJVN Arun-3 Power Development Company Pvt. Ltd. (SAPDC)

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DETAILED NOTICE INVITING EXPRESSION OF INTEREST (EOI)

1. Background

SAPDC is a private limited company incorporated under the Nepalese Company Act having registered address as Lokhanthali, Madhyapur (Thimi), Bhaktapur, Nepal and project office at Tumlingtar, Sankhuwasabha Nepal. SAPDC is currently executing 900 MW Arun-3 Hydroelectric Project (a BOOT project with commercial generation period of 25 years), which is in advanced stage of development and is scheduled to commence the commercial operation in the year 2023-24. The foundation stone of Arun-3 HEP was laid in 2018 jointly by Indian Prime Minister Sh. Narendra Modi and Hon'ble Prime Minister of Nepal Sh. K.P.Sharma Oli.

Furthermore, Govt. of Nepal has also allotted Lower Arun Project (669 MW) to SJVN Ltd. MOU has been signed with Investment Board of Nepal for development of this project on BOOT basis for 25 years of commercial generation. The DPR of the project has been approved by GoN and other approvals from GoI/GoN are in process. This Project is scheduled to commence commercial operation in the year 2027-28 and shall operate in tandem with Arun-3 HEP.

SJVN Limited (Parent Company)

SJVN Ltd. is a Schedule –'A', category-I mini ratna CPSE under the administrative control of Ministry of Power, Govt. of India. It 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 with 59.92 % share holding with Govt. of India, 26.85% with Govt. of Himachal Pradesh and rest 13.23 % with public.

Beginning with a single project - India's largest 1500 MW Nathpa Jhakri Hydro Power Station in Himachal Pradesh - the company's portfolio today comprises of over 40 projects of over 16,000 MW capacity. SJVN has already commissioned seven projects totaling 2016.5 MW installed capacity and 86 km 400 KV Transmission Line. SJVN has presence across nine states of India besides neighboring countries of Nepal and Bhutan.

2. Objective of EOI

SAPDC intends to enter into Long Term Power Purchaser agreements (15 years to 25 years) with eligible Discoms/Trading Companies/Bulk Corporate Customers for procurement of power from these projects. SAPDC plans to generate 3924 MU and 2921 MU from Arun-3 HEP (900 MW) and Lower Arun HEP (669 MW) respectively. Interested buyers may choose to buy this power at bus bar or at interconnection point at Sitamari, Bihar.

3. Eligibility for participation in EoI

Expression of Interest is invited from eligible parties who meet the following qualifications:

3.1 Nationality

This invitation for Expression of Interest is open to applicants from India, Nepal and Bangladesh.

3.2 Financial Turnover

Applicants must have minimum annual turnover of **INR 60.00 crore** or equivalent amount in last three years.

3.3 Experience and other credentials

A. Discoms

- i. Should be having the license from appropriate Government for distribution of Power.
- ii. Have the experience of distribution of power twice the power purchase interest shown.

B Bulk Corporate Customer

- i. Should establish the requirement of power demanded or interest shown.
- ii. Should have the long-term requirement of electricity as per the corporate plan.

C Trading Licensee

- i. Should have the experience of trading in exchange or have license of trading of power from appropriate Government.

3.4 Power Requirement

Applicant must evince interest of procurement of atleast 100 MW power.

4. Submissions of EoI

Applicants may submit the complete application in the format given below, complete with supporting documents regarding eligibility through email to email address ppm.sapdc@gmail.com with subject as '*Expression of Interest for Procurement of Power from SAPDC*'.

Format for Expression of Interest for Procurement of Power from SAPDC		
Sl. no.	Description	Detail
1	Name of the Company	
2	Location where electricity is to be consumed (Place/District/State)	
3	Demand likely to be contracted (MW)	

4	Approximate energy requirement per day (MU)	
5	Connection to Grid-Voltage Level (KV)	
6	Point of transaction (Generator Bus Bar/Interconnection with Indian grid at Sitamarahi, Bihar, India)	
7	Supply Period	
8	Arun-3 Project (900 MW) 3924 MU Yearly	
9	Lower Arun (669 MW) 2921 MU Yearly	
10	Duration of contract (From date to date)	
11	Details of Contact Person	
12	Name & Designation	
13	Contact No.	
14	E-Mail	
15	Any other detail	

The last date of submission of applications is **30.05.2022**

Applicants are requested to keep themselves updated with the website <https://sapdc.com.np> on regular basis for any addition / deletion / modification / clarification or notification in respect of this EOI.

5. Information about the Projects

5.1 Salient features of the under-construction 900 MW Arun-3 HEP are as under:

1	Location	
	River	Arun, a tributary of Kosi River in Eastern Nepal
	Location	Sankhuwasabha District of Province-1
	Nearest Airport	Tumlingtar, Nepal at a distance of about 60 km from Project site
2	Dam	
	Type of Dam	Concrete Gravity Dam
	Height above deepest Foundation Level	80 m
3	Head Race Tunnel	
	Shape & Size	Horse-shoe, 9.5 m diameter
	Length of Tunnel	11837 m
	Design Discharge	344.68 cum / sec
4	Power House Complex	
	Type	Underground on left bank
	Design Head (net)	286.21 m
	Gross Head	307.67 m
	Turbine	4 Nos., Vertical Francis turbine, 225 MW each
	Transformer	Single phase, 12+1 (Spare), 92 MVA 15.75 kV/420/ $\sqrt{3}$ kV
5	Transformer Hall	
	Design Discharge per unit	86.17 cumec
	Design Energy in a 90 % dependable year	3924.03 MU
	Annual Load Factor	50.98 %
	Weighted average efficiency of TG Set	93 %

6	Levelized Tariff at present cost to completion	INR 4.6per unit at Sitamarhi, Bihar
7	Transmission Line	
	Total no of Tower	578 Nos
	Total stringing length	217 km
8	Project Cost	
	Generation Component	INR 5723.72 crore at May 2015 price level
	400 kV Transmission Line	INR 1236.13 crore at June2017 price level
	Total Cost	INR 6959.85 crore The major works of the Project were awarded at competitive rates and about 50% progress has been achieved. The project is expected to be completed within the approved cost.
9	Tariff	
	Levelized tariff	INR 4.6 to INR 4.80 per Unit at Sitamahari, Bihar. This tariff is based on CERC norms.
10	Financial Tie ups	The project is to be funded with 70:30 debt equity ratio. The equity of 30% has been inducted by promoter up front.
		The debt component of INR 6333.4 crore (including stand by line of credit of INR 1420.06 crore) has been arranged from consortium of 7 Banks. Lead bank is SBI with door-to-door tenure of 20 years.

5.2 Current progress of 900 MW Arun-3 HEP is as under:

Physical progress of works	
Diversion Tunnel	100 % work completed
Dam	Excavation completed
Intake Tunnels	100% work completed
Head Race Tunnel	65 % heading excavation completed. Benching excavation and concrete lining is in progress
Surge Shaft	29 % excavation completed
Butterfly Valve Chamber	Excavation completed
Pressure Shafts	Excavation of both pressure shafts completed
Powerhouse complex	Excavation completed and erection of E&M equipment is in progress
Transformer Hall	Heading and Benching excavation completed and erection of E&M equipment is in progress
Tail Race Tunnel	Excavation completed
Financial Progress	
	50 % Financial progress achieved

5.3 Salient features of the under development 669 MW Lower Arun HEP are as under:

1	Location	
	Country	Nepal
	District	Sankhuwasabha District in Province-1 of Nepal
		All components of project are on Left bank of River Arun. The Intake Works are at village Pukhwa and Power House at village Beteni about 10 Km upstream of Tumlingtar
2	Head Race tunnel	
	Type	Horse Shoe, concrete lined
	Size (finished diameter)	10.50 m
	Length	17.3 km
	Velocity	3.77 m/s
3	Power House Complex	
	Type	Surface
	Installed capacity	669 MW
	Size	150 m long x 24 m wide x 53 m high
	Type of Turbine	Francis, vertical axis
	Design Discharge	344.68 cumec
	Generators	4 x 167.25 MW, 0.9 pf, generation voltage 13.8 kV
	Step up unit Transformers	13 Nos. 3x71MVA single phase 13.8/420 kV/ $\sqrt{3}$ kv ODWF type
	Special Features	Lower Arun HEP will operate in Tandem with Arun-3 HEP
4	Switchyard	
	Type	Surface 400 kV Switch Gear GIS type with double bus bars arrangement.
		It is proposed to evacuate the power generated at Lower Arun Hydro Electric Project by LILO of 400 kV
5	Power Generation	
	Annual design energy generation in 90% Dependable year	2916.38 GWh
	Plant Load Factor	49.84%
6	Cost Estimate (Price Level Sept 2021)	
	Total Cost	INR 4796.78 crore
7	Sale Rate / Unit at Bus Bar	
	Year	Tariff (INR/KWh)
	Levelized tariff	INR 4.60 to INR 5.00 per Unit at Sitamahari, Bihar. This tariff is based on CERC norms.

5.4 Tentative power generation schedule of both the projects is as under:

Month	Generation in MU	
	Arun-3 (900 MW)	Lower Arun (669 MW)
Apr	192	143
May	251	186
Jun	556	414

Jul	636	473
Aug	633	471
Sep	575	428
Oct	353	262
Nov	219	163
Dec	140	104
Jan	116	86
Feb	110	81
Mar	143	106
Total	3924	2917

6. Terms and Conditions

- All indirect taxes payable in Nepal for Generation/sale of electricity shall be borne by the SAPDC.
- Applicants may express their preference to buy the power at bus bar or at interconnection point at Sitamari, Bihar.

7. Disclaimer

Applicants to this EOI acknowledge and agree that:

- SJVN Arun-3 Power Development Company Ltd has issued this Expression of Interest with the best intention to explore the market for eligible and interested consumer and has no compulsions to enter into definitive contractual agreements. This EOI does not guarantee conversion of this EOI into any definitive contractual agreement.
- It is also agreed that SAPDC in its sole discretion, may reject any and all proposals made by prospective buyers and also may change the conditions relating to the EOI or cancel this EOI at any time without assigning any reason.
- Prospective buyers (s) acknowledge and agree that response to the EOI is purely voluntary action on their part and for any expenditure on this account shall be borne by the applicant(s).
- SAPDC will have no obligation or liability to the applicant(s) in the event of cancellation of EOI.