

एनएचपीसी कार्यालय परिसर, सेक्टर-33, फरीदाबाद-121003

## निविदा आमंत्रण सूचना अंतरराष्ट्रीय प्रतिस्पर्धी बोली (ई-निविदा)

निविदा आईडी: 2025\_NHPC\_849236\_1

एनएचपीसी लिमिटेड द्वारा "व्यवहार्यता अंतर वित्तपोषण (वीजीएफ) सहायता के साथ टैरिफ आधारित प्रतिस्पर्धी बोली (टीबीसीबी) के अंतर्गत आंध्र प्रदेश राज्य में 500 मेगावाट / 1000 मेगावाट धंटे की इनएसटीएस से जुड़ी स्टैंडअलोन बैटरी ऊर्जा भंडारण प्रणाली (बीईएसएस) की स्थापना के लिए बैटरी ऊर्जा भंडारण प्रणाली (बीईएसएस) डेवलपर्स का चयन (एनएचपीसी-ट्रेंच-॥-बीईएसएस) (2024-25) हेतु पात्र बोलीदाताओं से ई-रिवर्स नीलामी (ई-आरए) सहित सिंगल स्टेज-टू पार्ट बिडिंग बेसिस (अर्थात् भाग-ा: तकनीकी – बोली और भाग-।। : वित्तीय बोली) में अंतरराष्ट्रीय प्रतिस्पर्धी बोली के माध्यम से ऑनलाइन बोलियां आंमत्रित की जाती है।

सम्पूर्ण बोली दस्तावेज / निविदा दस्तावेज को केन्द्रीय लोक प्रापण (सीपीपी) पोर्टल <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>. से देख एवं डाउनलोड कर सकते हैं । इस साइट को सीपीपी पोर्टल एवं एनएचपीसी की वेबसाइट www.nhpcindia.com के ई-प्रोक्योरमेंट कॉर्नर के माध्यम भी देखा जा सकता है । यद्दिप निविदादाता जो इस निविदा में भाग लेना चाहते हैं तो वे निविदादाता ई- टेण्डिरंग हेतु ऑन लाइन बोलीदाता पंजीकरण करने के पश्चात उक्त पोर्टल से बोली दस्तावेज डाउनलोड कर सकते हैं। यद्दिप, इस बोली को निविदा प्रस्तुत करने की अंतिम तारीख व समय तक केवल <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> पर ऑनलाइन प्रस्तुत किया जाना है । निविदा दस्तावेज की हार्ड कॉपी की बिक्री लागू नहीं है ।

ई-निविदा के बाद ई-रिवर्स नीलामी (ई-आरए) आयोजित की जाएगी। ई-आरए को अपनाने के संबंध में एनएचपीसी का निर्णय अंतिम होगा।

### निविदा का संक्षिप्त विवरण निम्नानुसार है:

क्र.सं.	मद	विवरण
i)	निविदा का माध्यम Mode of	ई-प्रोक्योरमैंट सिस्टम
	tendering	लिफ़ाफ़ा-। : ऑनलाइन तकनीकी - वाणिज्यिक बोली
		लिफ़ाफ़ा- ।। : मूल्य बोली
ii)	निविदा आई.डी. संख्या Tender	2025_NHPC_849236_1
	ID No.	
iii)	निविदा संदर्भ संख्या Tender	NH/CCW/CC-I/CO-365/PR16924/47
	reference No.	
iv)	प्रोसेसिंग फीस Processing Fee	पैरा ३.३, सेक्शन ३ए ऑफ आरएफ़एस के अनुसार
		प्रोसेसिंग शुल्क एनएचपीसी लिमिटेड के पक्ष में

	T	
		राष्ट्रीयकृत / अनुसूचित बैंक से डिमांड ड्राफ्ट के रूप में, जो फरीदाबाद में देय हो ।
v)	निविदा प्रतिभूति (ईएमडी) Bid	डीडी/बीजी/पीओआई/इन्शुरेंस सुरेटी बॉन्ड के रूप में
	Security (EMD)	पैरा ३.४, सेक्शन ३ए ऑफ आरएफ़एस के अनुसार तथा
		अधिकतम 10 करोड़ रुपये प्रति परियोजना के अधीन।
vi)	निविदा की वैद्यता अवधि Period	ऑनलाइन बोली प्रस्तुत करने की अंतिम तारीख से 180
	of Bid validity	दिन
vii)	कार्य पूरा करने की अवधि	"व्यवहार्यता अंतर वित्तपोषण (वीजीएफ) सहायता के
	Completion Period	साथ टैरिफ आधारित प्रतिस्पर्धी बोली (टीबीसीबी) के
		तहत आंध्र प्रदेश राज्य में 500 मेगावाट / 1000
		मेगावाट घंटे की इनएसटीएस कनेक्टेड स्टैंडअलोन
		बैटरी ऊर्जा भंडारण प्रणाली (बीईएसएस) की स्थापना
		के लिए बैटरी ऊर्जा भंडारण प्रणाली (बीईएसएस)
		डेवलपर्स का चयन (एनएचपीसी-ट्रेंच-॥-बीईएसएस)
		(२०२४-२५))" की पूर्णता अवधि अधोलिखित है:
		धारा २ - परिभाषाओं में परिभाषित " निर्धारित कमीशन
		तिथि (SCD)" के अनुसार
viii)	निविदा आमंत्रण करने वाले	महाप्रबंधक (सिविल संविदा- 1),
	प्राधिकारी Tender Inviting	कमरा सं. २१८, द्वितीय तल, ज्योति सदन,
	Authority	एनएचपीसी कार्यालय परिसर,
	,	सैक्टर-33,फरीदाबाद-(121003), हरियाणा, भारत
		टेली फैक्स नं०.:+91(129) 2270596
		ई-मेल : contcivil1-co@nhpc.nic.in

# निविदा की महत्वपूर्ण तिथियाँ इस प्रकार है:

क्र.सं.	विवरण	तारीख व समय
i)	निविदा प्रकाशन की तारीख एवं	14.02.2025 (17:00 Hrs)
	समय Publishing Date & Time	
ii)	दस्तावेज डाउनलोड प्रारम्भ करने की	14.02.2025 (17:30 Hrs)
	तारीख व समय Document Down	
	load Start Date & Time	
iii)	बोली पर प्रश्नों / स्पष्टीकरण की प्राप्ति	25.02.2025 (upto 17:30 Hrs)
	की अंतिम तिथि Last date of	
	Receipt of queries/clarification	
	on bid	
iv)	निविदा पूर्व बैठक की तारीख व समय	27.02.2025(15:00 Hrs)
	Pre bid meeting Date & Time	
v)	निविदा प्रस्तुत करने की प्रारंभ तारीख	05.03.2025 (11:00 Hrs)
	व समय Online Bid Submission	
	Start Date & Time	
vi)	ऑन लाइन निविदा प्रस्तुत करने की	17.03.2025 (17:30 Hrs)
	अंतिम तारीख व समय Online Bid	
	Submission Closing Date & Time	
vii)	ऑफ लाइन निविदा प्रस्तुत करने की	19.03.2025 (upto 17:00 Hrs)
	अंतिम (तारीख व समय एवं पता)	<u>पता</u> :

	Last date of Offline submission	महाप्रबंधक (सिविल संविदा- I) <b>,</b>
	(date, time and address)	कमरा सं. २१८, द्वितीय तल, ज्योति सदन,
	,	एनएचपीसी कार्यालय परिसर,
		सैक्टर-33,फरीदाबाद-(121003), हरियाणा, भारत
		देली फैक्स नं०.:+91(129) 2270596
	2.0.2	ई-मेल : <u>contcivil1-co@nhpc.nic.in</u>
viii)	बोली खोलना:	20.03.2025 ( 15:00 Hrs)
	ऑनलाइन निविदा (तकनीकी बोली)	<u>पता</u> :
	(भाग- I) की दिनांक, समय और	महाप्रबंधक (सिविल संविदा- I),
	स्थान	कमरा सं. 218, द्वितीय तल, ज्योति सदन,
	Opening:	एनएचपीसी कार्यालय परिसर,
	Date, Time & Venue of Online/	सैक्टर-33,फरीदाबाद-(121003), हरियाणा, भारत
	Offline Bid (Technical Bid (Part- I)	टेली फैक्स नं०.:+91(129) 2270596
		ई-मेल : contcivil1-co@nhpc.nic.in
ix)	मूल्य बोली निविदा खोलना (लिफाफा	तकनीकी-वाणिज्यिक रूप से सफल निविदा
	_II) वित्तीय बोली /Price Bid	दाताओं को स्थान, दिनांक व समय के बारे में बाद
	Opening (Part-II) – Financial Bid	में सूचित किया जाएगा ।
x)	ई-रिवर्स नीलामी की दिनांक और	एनएचपीसी द्वारा अलग से सूचित किया जाएगा
	समय/Date & Time of Start of e-	
	Reverse Auction	

'निविदा आमंत्रण सूचना' की अन्य सभी मानदंड, नियम व शर्तें अंग्रेजी भाषा में प्रकाशित "NOTICE INVITING TENDER" संस्करण के अनुरूप रहेंगी। 'निविदा आमंत्रण सूचना' के अंग्रेजी और हिंदी संस्करण के शब्दों के बीच कोई अंतर होने की स्थिति में, अंग्रेजी संस्करण मान्य होगा।

## कृते एनएचपीसी लिमिटेड की ओर से,

महाप्रबंधक (सिविल संविदा- 1), कमरा सं. 218, द्वितीय तल, ज्योति सदन, एनएचपीसी कार्यालय परिसर, सैक्टर-33,फरीदाबाद-(121003), हरियाणा, भारत टेली फैक्स नं 0.: +91(129) 2270596

ई-मेल : contcivil1-co@nhpc.nic.in

## **Section 1**

# NOTICE INVITING TENDER (NIT)

#### NOTICE INVITING TENDER

#### **INTRODUCTION**

- 1.0 NHPC LIMITED (hereinafter referred to as "NHPC"), has been nominated as a BESS Implementing Agency (BIA) by Ministry of Power, GoI under the Viability Gap Funding (VGF) scheme (CPSU Component) for Development of Battery Energy Storage Systems (BESS).
- 1.1 With various global developments in technology and manufacturing, Renewable Energy (RE) has become the most affordable and cheapest source for meeting energy requirements. In India, the government has set an ambitious target of reaching 500 GW of non-fossil fuel capacity by 2030. However, sources such as solar and wind energy are intermittent and cannot provide a continuous, 24/7 supply like conventional power plants. To address this variability, Energy Storage Systems (ESS) are essential. ESS store excess energy when production exceeds demand and discharge it during peak periods, ensuring a stable power supply. As India increases its reliance on renewable energy, grid stability becomes a challenge, particularly during peak periods when RE generation is insufficient. This requires additional power sources to balance the demand. ESS plays a critical role in managing these fluctuations, supporting grid operators in maintaining reliability and smooth integration of RE into the grid. Additionally, ESS connected to SPV plants can enhance the capacity utilization of RE transmission systems.
- 1.2 The above aspects rightly point out to the next course of direction of India's energy planning methodology-integrating Energy Storage Systems (ESS) with existing and upcoming RE capacity in order to optimize generation mix while also better utilizing the transmission infrastructure in the country. With respect to increasing the storage component in the energy mix, CEA's Report on identification of usage of storage as business case and for ancillary services, identifies Pumped Hydro Storage System (PSP) and Battery Energy Storage Systems (BESS) as the commercially deployed solutions for providing requisite storage capacity. The CEA Study has revealed that the planning model selects the battery energy storage system from the year 2027-28 onwards and a Battery Energy Storage capacity of 8680 MW/34720 Mwh (4-hour storage) is projected to be part of the installed capacity in 2022-27. This will be in addition to 7446 MW of Pumped Hydro Storage System envisaged to be a component of India's installed capacity in 2022-27.
- 1.3 Going forward, the planning process for transition to a greener energy mix in the country would entail integrating the planned Renewable capacity into India's energy grid while ensuring its safety and reliability. In addition to Pumped Hydro Storage Plants (PSP), Battery Energy Storage Systems (BESS) are expected to play a crucial role in supporting the grid as the share of renewable energy increases, aligning with the government's target of installing 500 GW of non-fossil fuel-based capacity by 2030. BESS assets will provide the necessary flexibility in power generation, ensuring resource adequacy and helping to balance supply and demand. Besides, Energy Storage Systems have the potential to

- optimize the utilization of India's transmission network, reducing congestion and minimizing the need for extensive infrastructure expansion
- 1.4 Bidder shall submit bids offering contracted Capacity of either one project or multiple projects in any combination out of total capacity of 500MW/1000MWh in the prescribed formats at specified locations. The minimum capacity against which the bids are to be submitted by the bidders in each location shall not be less than the capacity at each location as per Column (3) of table under Clause 3.1 of Section-3A of RfS. However, the total capacity to be allocated to a Bidder including its Parent, Affiliate or Ultimate Parent or any Group Company shall be up to 1000 MWh (i.e. Total contracted capacity under this RfS), in case a bidder chooses to apply for all the three project locations.
- 1.5 The bidders will be short-listed by the process of e-bidding (Single Stage Two Envelope Bidding Process. Envelope-I: Technical Bid and Envelope-II: Financial Bid) to be followed by reverse auction process for selection of bidders. E-bidding is a new methodology for conducting Public Procurement in a transparent and secured manner. For conducting electronic tendering, NHPC Ltd. is using the Central Public Procurement (CPP) Portal <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>. The site can also be viewed through e-procurement corner of NHPC website <a href="https://eprocure.gov.in/eprocure/app">www.nhpcindia.com</a> and CPP Portal.

#### **OVERVIEW OF RFS:**

1.6 Battery Energy Storage System Developers (hereinafter referred to as BESSDs) selected by NHPC based on this RfS, shall set up the BESS on Build Own Operate (BOO) basis in accordance with the provisions of this RfS document and standard BESPA.

#### SELECTION OF TECHNOLOGY & ELIGIBLE PROJECTS UNDER THIS RFS

- 1.7 Under this RfS, the BESSD shall set up the Project including the dedicated transmission network up to the Interconnection/Delivery Point, at its own cost and in accordance to the provisions of this RfS document. All approvals, permits and clearances required for setting up of the Project and/or dedicated transmission network upto the Delivery Point (along with connectivity), including those required from State Government and local bodies, shall be in the scope of the BESSD. The Projects to be selected under this scheme provide for deployment of Battery Energy Storage Technology. However, the selection of Projects would be technology agnostic within the above segment.
- 1.8 The Bidders will be free to avail fiscal incentives like Accelerated Depreciation, Concessional Customs and Excise Duties, Tax Holidays etc. available if any for such Projects. The same will not have any bearing on comparison of bids for selection. As equal opportunity is being provided to all Bidders at the time of tendering itself, it is up to the Bidders to avail various tax and other benefits. No claim shall arise on the BIA for any liability if Bidders are not able to avail fiscal incentives and this will not have any bearing on the applicable tariff. The BIA shall not bear responsibility for any availability or non-availability of fiscal incentive and submission of the bid by the Bidder shall be independent of such availability or non-availability as the case may be of the fiscal incentives.
- 1.9 <u>Viability Gap Funding (VGF)</u> Projects selected under this RfS shall be eligible for grant of Central Financial Assistance in the form of Viability Gap Funding (VGF), to be released as per the provisions contained in this RfS.

#### **GUIDELINES FOR IMPLEMETATION OF THE RFS**

- 1.10 This RfS document has been prepared based on the Guidelines for "Procurement and Utilization of Battery Energy Storage Systems as part of Generation, Transmission and Distribution assets, along with Ancillary Services", issued by Ministry of Power vide Gazette Notification dated 10.03.2022 and subsequent amendments and clarifications issued thereto until the bid submission deadline for this RfS and operational guidelines for CPSU Component under the Scheme for Viability Gap Funding for development of Battery Energy Storage Systems dated 17.10.2024. NHPC has issued this RfS in the capacity of "BESS Implementing Agency" as defined in the aforementioned Guidelines / MOP Letter F.No. 42-26/1/2022-NRE(Pt.II) dated 17.10.2024.
- NHPC Limited (hereinafter referred to as the BESS Implementing Agency, or the BIA or NHPC) seeks to utilize energy storage systems, on an "On-Demand" basis, during the peak hours of buying entity i.e. Andhra Pradesh Power Distribution Companies (hereinafter referred to as APDISCOMs / Buying Entity). In view of the above, the BIA hereby invites proposals for setting up of InSTS-connected Projects of Standalone Battery Energy Storage Systems (BESS), for an aggregate storage capacity of 1000 MWh (500 MW x 2 hrs) to meet morning and evening peak requirements with 2 cycle charging/discharging operation (2 hours per cycle) each day of BESS with project to be located in the State of Andhra Pradesh connected with the State Transmission Utility.

Being lowest bidder does not entail the bidders to be eligible for issuance of LOAs. LOAs shall be issued for a cumulative capacity of 1000MWh after getting confirmation from APDISCOMs for offtake of power from the BESS at the discovered tariff / fixed cost, arriving a mutual agreement between NHPC and APDISCOMs for setting up of such BESS capacity in the state of Andhra Pradesh and the decision of NHPC in this regard shall be final and binding on the bidders.

NHPC / BIA shall enter into a Battery Energy Storage Purchase Agreement (BESPA) with the successful Bidders selected based on this RfS, for availing the Energy Storage facility as per the terms, conditions and provisions of the RfS and BESPA. It is clarified that charging power shall be provided by the Buying entity.

1.12 Energy Storage facility to be procured by NHPC from the above BESS has been provisioned to be done on behalf of APDISCOMs. NHPC shall be an intermediary nodal agency for using the energy storage facility and charging/discharging the BESS in line with respective agreements with the BESSD and Buying Entity / APDISCOMs, based on due performance by the concerned parties. For this tranche, 100% of the awarded capacity shall be off taken by APDISCOMs / Buying Entity.

#### **GENERAL**

1.13 The complete RfS Documents are available at CPP portal <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>. The site can also be viewed through e-procurement corner of NHPC website www.nhpcindia.com and CPP Portal. Interested bidders shall

- download the RfS Documents from the CPP portal <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> as per the provisions available therein.
- 1.14 For proper uploading of the bids on the portal namely <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> (hereinafter referred to as the 'portal'), it shall be the sole responsibility of the bidders to apprise themselves adequately regarding all the relevant procedures and provisions as detailed in the portal. The NHPC in no case shall be responsible for any issues related to timely or properly uploading/ submission of the bid in accordance with the relevant provisions of ITB of the Bidding Documents.
- 1.15 A Single Stage Two Envelope Bidding Procedure will be adopted and will proceed as detailed in the RfS Documents. Bidding will be conducted through the global competitive bidding procedures as per the provisions of ITB and the contract shall be executed as per the provisions of this RfS. It shall be noted that the respective rights of the NHPC and the Bidder/ BESSD shall be governed by the RfS Documents/BESSA signed between the NHPC and the BESSD for the project.
- 1.16 Bidders should submit their bid proposal online complete in all aspect on or before last date and time of Bid Submission as mentioned on CPP portal (<a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>).
- 1.17 Bidder shall submit bid proposal along with Bid Processing Fees (non-refundable) and Earnest Money Deposit (EMD) complete in all respect as per the Bid Document. Techno-commercial bids will be opened in online presence of authorized representatives of bidders who wish to be present online. Bid proposals received without the prescribed Bid Processing Fees and Earnest Money Deposit (EMD) may be considered as non-responsive. In the event of any date indicated is a declared Holiday, the next working day shall become operative for the respective purpose mentioned herein.
- 1.18 RfS documents which include Eligibility Criteria, Technical Specifications, various Conditions of Contract, Formats etc. can be downloaded from CPP portal <a href="http://eprocure.gov.in/eprocure/app">(http://eprocure.gov.in/eprocure/app</a>). Any amendment(s) / corrigendum(s) / clarification(s) with respect to this RfS shall be uploaded on CPP portal. The Bidder should regularly check for any Amendment(s) / Corrigendum(s) / Clarification(s) on the above mentioned website.
- 1.19 For multiple Projects, separate Performance Bank Guarantees shall be furnished against each Project being executed under this RfS by the BESSD after issuance of Letter of Award (LOA) by NHPC.
- 1.20 The detailed Qualifying Requirements (QR) is given in Section 3A of the RfS.
- 1.21 NHPC shall conduct e-Reverse Auction (e-RA) as per provisions of RfS documents.
- 1.22 NHPC has issued this RfS in the capacity of BESS Implementing Agency (BIA) as defined in the aforementioned Guidelines. NHPC may develop a suitable monitoring mechanism, to analyze the performance of the Project and carry out random checks to verify compliance of quality standards.
- 1.23 NHPC reserves the right to cancel/withdraw this invitation for bids without assigning any reason and shall bear no liability whatsoever consequent upon such a decision.