Innovation in Solar Power and Hybrid Technologies (P160379)

Special General Procurement Notice for 160 MW Solar-Wind Hybrid Power Plant in State of Andhra Pradesh SI. No Queries Category Clarifications atitude and longitude details of the site should be made available The project is proposed at Ramagiri and Muthavakuntla villages, the coordinates of site locations are 1 Technical o the prospective bidders 4°20'42.42"N, 77°30'9.88"E and 14°22'21.41"N, 77°31'2.39"E Since the time is less, we are pursuing a partner / collaborator for aking up the installation of solar / wind project. Till now no consortium is finalized for our company In line of the above , we will apply as a Battery supplying and Since it is the participation for the EOI only, so you can participate for the said EOI.Regarding Consortium engineering organization on standalone basis and going further will 2 Contract partner, same shall be discussed in the meeting. decide upon the Solar and Wind company with which we will collaborate for this project. Please allow us to participate in this nvitation as a battery supplier kindly share the site information. So that we can make our proposal more accurate. We would like to do site survey, so kindly share the contact detail As starting point, as discussed we will consider 40MW wind, 3 Technical Kindly refer Sr No 1 for the query asked 120MW solar and 40MWHr storage. In addition, we will evaluate more option and best solution suitable to site We are interested in participating in the tender Innovation Solar Tender details and timelines will be published at later stage. Please be updated from the SECI website at 4 Power and Hybrid Technologies Project. Are you able to indicate Contract www.seci.co.in when the tender documents will be available on your web page Request SECI to provide minimum 3 weeks time to evaluate the proposal in totality and preparation of EoI, starting from the date of 5 Technical The timelines for the EOI will prevail. As of now there is no extension in the given timelines. eply of Queries asked by interested parties Tender details and timelines will be published at later stage. Please be updated from the SECI website at 6 Please provide the tentative Project Timeline for the project. Technical www.seci.co.in Technical Pre-Qualification Requirement: Request SECI to elaborate "Relevant Experience" which is required to participate and perform a contract of similar nature. 7 Contract Also requested SECI to include industrial project experience, both as Developer as well as EPC contractor. And eligibility shall be in terms with the project value only, similar to that of NTPC Ltd. This is the publication of Expression of Interest (EoI) for inviting the prospective interest of all the bidders for he said Project. Complete tender details, Technical specifications, Technical QR & eligibility criteria will be Request SECI to provide range of Functional Guarantees to be deliberated in detail in the tender document which will be available in due course of time. Please be updated net for the project. 8 Technical from the SECI website at www.seci.co.in. This is a EPC bid, the tender along with technical specification will Also requested to please spell out Liquidated Damages, if those be published after EOI meeting. unctional guarantees are not met Request SECI to disclose expected PPA price range SECI has inprincipally agreed upon with the potential off-takers so that project viability can also be assessed even at the time of submission and 9 Technical ater on finalization of scheme and individual capacity of Solar PV Wind and battery solution among each other in the Hybrid system Land specific: Quantum of land to be provided to the bidders for Kindly refer Sr No 1 for the guery. Land guantum will be shared during tendering stage.Sufficient land shall be 10 Technical development of the project rovided and specific: Preliminary Land contour profile and Topographical This is the publication of Expression of Interest (EoI) for inviting the prospective interest of all the bidders for 11 Survey Report to be provided to the bidders. This will also form an Technical the said Project. Complete tender details, Technical specifications, Technical QR & eligibility criteria will be ntegral input for optimal sizing of Wind and Solar mix. deliberated in detail in the tender document which will be available in due course of time. Please be updated rom the SECI website at www.seci.co.in. Land specific: Preliminary Soil Investigation and Geo-technical 12 Technical Report to be provided to the bidders Land specific: Proposed Layout and Plot boundaries to be 13 Technical Kindly refer Sr No 1 for the query. Land layout will be shared during tendering stage provided to the bidders Project Location: Exact locations of project boundary in UTM - to 14 Technical Kindly refer Sr No 1 for the query. Land layout will be shared during tendering stage inalise the micro sitting and size of wind project Wind Data: Please provide Wind data to arrive CUF Note:- As per the mesoscale maps, Ramagiri village is showing 15 igh potential. Wind Speed ranges between 6.8 m/s to 7.2 m/s Technical NIWE mast at different locations in ramagiri shows 5.88 m/s, 5.62 m/s and 5.42 m/s at 20m height Technical specific: Wind / solar resource assessment report 16 Technical undertaken in past years for the proposed region, if any. Fechnical specific: Power Evacuation and Evacuation substation 17 Technical detail including Voltage level, proposed transmission line distance 18 Fechnical specific: Metering Specifications and Arrangement Technical Technical specific: Expected CUF Requirement from the bidder Technical 19 The resource assessment data (Solar and Wind) of the proposed project site at Ramagiri district of Andhra Pradesh is required for evaluating the optimal mix of Solar and wind in the proposed site and corresponding size of ESS. Solar yield and its likely 20 Technical distribution over the year can be worked out from latitude of the site, however, it is essential to have Wind Resource data for this particular site for optimally estimating the Wind energy yield and working out the optimal mix. 21 Fechnical specific: Minimum proposed capacity of bidding block Technical

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Special General Procurement Notice for 160 MW Solar-Wind Hybrid Power Plant in State of Andhra Pradesh SI. No Clarifications Queries Category echnical specific: Standard drawings for Civil Works including Technical 22 Fence, Road, Foundations for switchyard etc. to be provided to the oid<u>ders</u> his is the publication of Expression of Interest (EoI) for inviting the prospective interest of all the bidders for Fechnical specific: Material specifications for MMS, wind turbine, 23 Technical he said Project. Complete tender details, Technical specifications, Technical QR & eligibility criteria will be biling, etc. to be provided to the bidders deliberated in detail in the tender document which will be available in due course of time. Please be updated Technical specific: Proposed building type (PEB or RCC) for Main from the SECI website at www.seci.co.in. 24 Technical Control Rooms, details of other infrastructural facilities to be provided to the bidders Technical specific: Energy Storage requirement and utility of 25 stored energy along with differential tariff for wind, solar and Technical battery storage Technical specific: Requirement of minimum storage Capacities as Technical 26 percentage of total wind and solar capacities Technical specific: Sizing criteria for wind, solar and storage 27 Technical solutions Fechnical specific: Suggested to allow Project Companies to 28 decide on any latest turbine and solar technologies available in the Technical market. Energy Storage: Following minimum data is required for sizing of optimal sizing of BESS for the said applications of generation smoothing and peak shiftina – Annual generation data of Solar (per min. at least) Annual generation data of wind (per min. at least) Ramp rate value required at grid connection point 29 Total reactive power compensation required at grid Technical connection point 5) Load curves of past one year at the interconnecting grid substation Energy storage systems being very expensive, this requires optimal sizing under most stringent operational parameters. Any ESS sizing based on general assumptions may lead to non-viability of the project. Requesting for Extension of Submission of Proposal The timelines for the EOI will prevail. As of now there is no extension in the given timelines. 30 Technical 31 Detail of Project Site Layout (Preferred in Auto Cad Technical Kindly refer Sr No 1 for the query. Auto CAD drawing will be provided during tendering stage Historical wind date details of the project site along with the mast 32 Technical specification This is the publication of Expression of Interest (EoI) for inviting the prospective interest of all the bidders for As SECI proposed to have 160 MW capacity for this project. Is the said Project. Complete tender details, wind data, Technical specifications, Technical QR & eligibility criteria there any % allocation fixed for the Wind and Solar capacity 33 Technical will be deliberated in detail in the tender document which will be available in due course of time. Please be separately? What should be minimum size of Battery storage (in updated from the SECI website at www.seci.co.in. WW) is required to be installed? Detail of proposed sub-station (Capacity of Sub-station, Voltage 34 Technical evel, No of feeders, Distance from Sub-station etc.) Approximately 1000 Acres has been demarcated for the said Project which can be considered tentatively for as a portion of land been allocated for the project? If so, what is 35 Technical he approximate size in m2 or km2 area? sessina vour workina If the answer to the above question is No, do we as a consortium 36 Technical Bidders are not required to procure the land for the said project also need to procure land for the project? What is the capacity of the MV transmission line in kV for the 37 Technical This is the publication of Expression of Interest (EoI) for inviting the prospective interest of all the bidders for evacuation of the power from the hybrid plant? the said Project. Complete tender details, Technical specifications, Technical QR & eligibility criteria will be deliberated in detail in the tender document which will be available in due course of time. Please be updated How reliable is the grid? Can we obtain some data regarding the from the SECI website at www.seci.co.in. 38 frequency and duration of grid failures in the region during the past Technical ear? As the ESS for the hybrid power plant will have a power rating wi nergy storage capacity, usually in MW / MWh, should the 160 Ess capacity is not included in 160MW.Ess requirements will be specified in the tender document. Bidder may 39 Technical MW in total include only the power rating of the ESS in MW or only provide the suggestions if any. ne MWh energy capacity?