

Subject: Request for Detailed Technical and Commercial Quotation

Section	Details						
Requirement	IRADe invites experienced vendors and developers to submit <u>Detailed Technical and Commercial Quotations</u> for the <u>design, supply, installation (both civil and electrical), commissioning and maintenance of an Integrated Solar Hybrid system with Battery Energy Storage System (BESS).</u>						
Location	Cuttack district, Odisha						
Approximate Load and backup system requirement	• Indicative base critical loads during disaster days						
	S.No.	Load description	Power Rating (Watt)	Qty	Total Load (kW)	Hrs of usages	Daily energy consumption (kWh)
	1	Lightings-Corridors - LED	20	10	0.2	12	2.4
	2	Lightings-Indoors-LED	20	10	0.2	12	2.4
	3	Lighting - Outdoors (LED flood lights)	150	2	0.3	8	2.4
	4	Ceiling Fan	50	10	0.5	24	12
	5	Drinking Water Purifier (RO + UV)	50	1	0.05	12	0.6
	6	Submersible water pump (1.5 HP)	1500	1	1.5	2	3
	7	Electronics gadget charging points	30	5	0.15	24	3.6
	8	Refrigerators (emergency medicines) (190 Ltr.)	230	1	0.23	12	2.76
		Total			3.13		29.16
	• Indicative total building load (including all critical and non-critical loads): 8 kW (+/-) 10%						
Key technical requirements to be considered:							
• System configuration: On-grid (the building is already connected to the grid; the system is intended to support operations during disaster days)							
• Indicative building peak critical load: 3.13 kWp							
• Daily energy consumption: 30 kWh							
• Days of autonomy: 1 day (24 hours)							

	<ul style="list-style-type: none"> • Inverter and auxiliary system rating: Should be capable of handling the starting load of a 1.5 HP submersible pump (as already specified in the RFQ) • Battery technology: Lithium-ion (Li-ion) <p><i>*All values are indicative and subject to site-specific refinements.</i></p>
Eligibility and Prior Experience Criteria	<p>Vendors are expected to demonstrate a minimum of 3 to 4 years of relevant project experience in the design, installation (civil and electrical works), and operation & maintenance (O&M) of Solar and Battery Energy Storage Systems (BESS).</p> <p>Prior experience in implementing projects related to public infrastructure, emergency power systems, or disaster-resilience applications shall be considered an added advantage.</p>
Vendor Submission Requirements	<p>Vendors shall submit detailed Techno-Commercial Quotations, including both Solar-only and Solar + Wind (if available) Hybrid configurations, covering:</p> <ul style="list-style-type: none"> • Accurate estimation of Solar PV hybrid capacity along with corresponding BESS sizing. • Comprehensive EPC implementation proposal detailing design, supply, installation, commissioning, and validation plans. • Itemized CAPEX and OPEX estimates encompassing all project stages, design, supply, installation, commissioning, and operation & maintenance, along with AMC and performance warranty terms.
Submission Address	<p>Interested vendors are requested to submit their Expression of Interest (Eoi) at the earliest possible (09/01/2026) to the address given below.</p> <p>Mr. B.K. Sarkar Chief Administrative Officer, IRADe C-80, Shivalik, Malviya Nagar, New Delhi – 110017, India; Phone: +91-11-2667 6180-81; Email: bk.sarkar@irade.org, nmehta@irade.org</p>