

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 for the 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	<ul style="list-style-type: none"> Indicative base critical loads during disaster days <table border="1"> <thead> <tr> <th>S.No.</th> <th>Load description</th> <th>Power Rating (Watt)</th> <th>Qty</th> <th>Total Load (kW)</th> <th>Hrs of usages</th> <th>Daily energy consumption (kWh)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Lightings-Corridors - LED</td> <td>20</td> <td>10</td> <td>0.2</td> <td>12</td> <td>2.4</td> </tr> <tr> <td>2</td> <td>Lightings-Indoors-LED</td> <td>20</td> <td>10</td> <td>0.2</td> <td>12</td> <td>2.4</td> </tr> <tr> <td>3</td> <td>Lighting - Outdoors (LED flood lights)</td> <td>150</td> <td>2</td> <td>0.3</td> <td>8</td> <td>2.4</td> </tr> <tr> <td>4</td> <td>Ceiling Fan</td> <td>50</td> <td>10</td> <td>0.5</td> <td>24</td> <td>12</td> </tr> <tr> <td>5</td> <td>Drinking Water Purifier (RO + UV)</td> <td>50</td> <td>1</td> <td>0.05</td> <td>12</td> <td>0.6</td> </tr> <tr> <td>6</td> <td>Submersible water pump (1.5 HP)</td> <td>1500</td> <td>1</td> <td>1.5</td> <td>2</td> <td>3</td> </tr> <tr> <td>7</td> <td>Electronics gadget charging points</td> <td>30</td> <td>5</td> <td>0.15</td> <td>24</td> <td>3.6</td> </tr> <tr> <td>8</td> <td>Refrigerators (emergency medicines) (190 Ltr.)</td> <td>230</td> <td>1</td> <td>0.23</td> <td>12</td> <td>2.76</td> </tr> <tr> <td colspan="2" style="text-align: right;">Total</td><td></td><td></td><td>3.13</td><td></td><td></td><td>29.16</td></tr> </tbody> </table> <ul style="list-style-type: none"> Indicative total building load (including all critical and non-critical loads): 8 kW (+/-) 10% <p>Key technical requirements to be considered:</p> <ul style="list-style-type: none"> 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) 							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
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	<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). 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>