**Query: Current status of the company and reason for Financial Stress, if any.**

**Annexure E to mail to SBI dated – 08.01.2024 – details submitted for valuation**

**CURRENT STATUS – REASON FOR FINANCIAL STRESS**

**5MW Solar Power Plant at Tuticorin:**

The PPA executed between the company and NVVN provides for maximum and minimum generation of 9.198 million kWh ( MU) and 5.256 million kWh ( MU) respectively with Tariff compensation @ Rs. 12.70 per unit. The company was generating, at an average, around 72 lakh units per annum till FY 2019-20. Since FY 2020-21, the plant faced multiple issues which led to steep fall in units generation, reason for which are detailed below

**Solar-Technical Related**

1. Generation was much below minimum required generation levels as laid down by NVVN, since FY 2020-21. The fall in generation was mainly due to harmonics issues in TNEB supply. The IEEE standards 519 for harmonic control in electric power systems lays down the harmonic voltage distortion limits to reduce potential adverse effect on user and system equipments. Due to adjoining steel mill operations, the harmonic distortion in our plant was much higher at 7.8 % against the laid down standards for 110 KV at 2.5 %. Yet TNEB standard is for average distortion and not spikes and we have represented to TNEB to change their policy to align with the said standards. After repeated representations to TNEB, they advised us to relocate our substations from Vagaikulam to Kombukaranatham, Tuticorin which we implemented during 2020 .
2. Yet our 6 Nos. invertors of 500 KV each, of total 10 Nos. were damaged and are to be replaced / repaired. Further, 5000 Panel modules of 150 Watts capacity each, of total 33360 panel modules, are to be replaced. Since 150 Watts are not available now in market, 330 Watts have to be considered and hence say around 3000 panel modules are to be purchased for replacement.
3. Existing 16 MVA TNEB Transformer, connected to Solar, is almost fully being fed. For any additional power feeding, we have to enhance the transformer capacity through TNEB. Further TNEB has confirmed that they do not have distribution requirement for generation beyond 16 MVA under their current connectivity. Hence, our enhanced generation has to be connected to a new TNEB substation which has power distribution requirements. Information from TNEB is that in a 15 KM radius, all TNEB Substations are running full and do not have power distribution requirements.
4. Due to current extensive flooding after rains, this month, many major components including outdoor breaker, one inverter, String Combiner box , underground (HT UG) cable, relays, etc.. are damaged and the extent of damage is being assessed. The plant has been shutdown and can be started only after draining of water and repair / replacement to damaged components. 8 News reports attached
5. Our company is already a NPA and we do not have funds to address above issues. Hence our solar plant quality and power units generation is continuously deteriorating.

**Solar-Land Related issues**

1. At entrance from main road, we have to pass through temple lands for which the lease arrangement have elapsed.
2. Internal roads are not fully formed and fencing damaged in many places.