

Newport Power Solar Annual Inspection

Location: IKEA Emeryville, CA #165

Modules:

Check all modules to make sure the electrical and mechanical connections are safe, tight, and free from corrosion. Inspect the modules glass surface for built dirt build-up and report to O & M provider if modules need to be cleaned.

Check Modules are clean and non broken Modules are moderately dirty; a cleaning in the near future is recommended.

Two modules showed signs of excessive heating, (discoloration of cells and backsheet).

✓ Check for any loose connections
Approximately 10% of the connections and USE-2 wire passed inspection
Voltage and Amp testing also yielded no adverse results

Inverters, DC Combiners, Utility Metering Cabinets and Circuit Breakers:

- ✓ Check appearance/cleanliness of the cabinets, ventilation system, and all exposed surfaces
 - GT500-480
 The cabinet exterior is moderately dirty
- ✓ Inspect air filter elements and inform O & M provider if cleaning or replacement is required
 - The inverter manufacturer has recently been to the site to perform the inverter PM no further action/ attention is needed at this time.
- ✓ Check for corrosion on all terminals, cables, and enclosure
 No significant corrosion on or in the enclosure
- ✓ Perform a complete visual inspection of inverter and DC Combiner boxes including all internally mounted equipment including subassemblies, wiring harnesses, contactors, power supplies and all major components The Bentek re-combiner box had a locking handle of non-standard configuration; the site facility manager did not have a key so the interior of the re-combiner is not inspected at this time.



- ✓ Record all operating voltage and current readings via the front display
 - See table below
- ✓ Review O & M provider records
- ✓ Inform O & M provider of any visual deficiencies identified and action required

Inverters

Model #	GT500-480	
Serial Number	L110600120	
DC input Voltage	411	
DC amps	393	
AC output line voltage	212	
KW total output power	161.6	
Total kWh	165356	

√ Cable Tray

Check appearance and cover intact
 Cable trays appear to be in good condition and in tact.



- ✓ PVC membrane under support members Membrane under the support members is in good condition, (pliable and in tact).
- ✓ Bonding cable intact at all connections Bonding cable is in good condition



✓ Racking

✓ Check racking and ballast installed per engineered plan
Racking and ballasts' are installed correctly and all hardware is tight and secure.



✓ Check PVC membrane installed under racking and ballast pans "Diamond Plate" style PVC membrane is well secured at all ballast pans cable tray, and conduit supports.



