## Information required for STP 50-40 / STP 50-41 warranty claims:

Failures involving no more than 2 inverters:

- Fault codes (excludes dead inverter and thermal damage situations)
  - 1. Download the events log.
  - 2. Fill out the Installer Site Checklist.
- Dead inverter (no LEDs and no communication)
  - 1. Inspect for thermal damage, if found, follow the 'Thermal damage' section below.
  - 2. Fill out the Installer Site Checklist.

## • Thermal damage

- 1. Fill out the Installer Site Checklist.
- 2. Check and note if AC circuit breaker has tripped.
- 3. Take photos of the AC/DC connection areas.
- 4. Take photos of the AC/DC power unit boards.
- 5. Record if any external AC or DC Surge Protective Devices (SPDs) are installed.
- 6. Record the size of the PE conductor.
- 7. Record length of the PEN cable run between the inverter and the Earth electrode.
- 8. Obtain AC and DC side SLDs.
- 9. Contact SMA for further assistance and provide the information above.

## Multiple inverter failures at the same installation (3 or more)

- Fault codes (excludes dead inverter and thermal damage situations)
  - 1. Download the events log from the affected units.
    - If the affected units display the same fault, download the events log from 30% of the affected units instead.
  - 2. Fill out the Installer Site Checklist.
  - 3. Obtain AC and DC side SLDs.
  - 4. Obtain additional failure details:
    - $\circ \quad {\sf Date \ and \ time \ of \ failure}$
    - Any known grid-related events (e.g., outages, surges)
    - Any known weather-related events (e.g., lightning strikes, hailstorms, etc.)
  - 5. Contact SMA for further assistance and provide the information above.
- Dead inverters (no LEDs and no communication)
  - 1. Inspect for thermal damage, if found, follow the 'Thermal damage' section below.
  - 2. Fill out the Installer Site Checklist.
  - 3. Obtain additional failure details:
    - Date and time of failure
    - Any known grid-related events (e.g., outages, surges)
    - Any known weather-related events (e.g., lightning strikes, hailstorms, etc.)
  - 4. Contact SMA for further assistance and provide the information above.
- Thermal damage
  - 1. Check and note if AC circuit breaker has tripped.
  - 2. Take photos of the AC/DC connection areas.
  - 3. Take photos of the AC/DC power unit boards.
  - 4. Record if any external AC or DC SPDs are installed.
  - 5. Record the size of the PE conductor.
  - 6. Record length of the PEN cable run between the inverter and the Earth electrode.
  - 7. Check for and record Earth faults with an insulation resistance tester at a voltage of 1000V.
  - 8. Obtain AC and DC side SLDs.
  - 9. Obtain additional failure details:
    - $\circ \quad \text{Date and time of failure} \\$
    - Any known grid-related events (e.g., outages, surges)
    - o Any known weather-related events (e.g., lightning strikes, hailstorms, etc.)
  - 10. Contact SMA for further assistance and provide the information above.