



## Best Practice Checklist for Record Control

Record control			
No.	Activity Type	Information Type	Input Record
1	Alarms / operation incidents	Alarms description	Date and time, affected power, equipment code / name, error messages / codes, severity classification, curtailment period, external visits / inspections from third parties
2	Contract management	Contract general description	Project name / code, client name, peak power (kWp)
3	Contract management	Asset description	Structure type, installation type
4	Contract management	Contract period	Contract start and end date
5	Contract management	Contractual clauses	Contract value, availability (%), PR (%), materials / spare parts, corrective work labor
6	Corrective maintenance	Activity description	Detailed failure typification, failure, fault status, problem resolution description, problem cause (*)
7	Corrective maintenance	Corrective maintenance event	Associated alarms (with date), event status (*)
8	Corrective maintenance	Corrective maintenance event log	Date and time of corrective maintenance creation (or work order), date and time status change (pending, open, recovered, close), end date and time of the intervention, start date and time of the intervention, technicians and responsible names and function (*)
9	Corrective maintenance	Intervention equipment / element name	Affected power and affected production, equipment code / name
10	Inventory management	Warehouse management	Inventory stock count and movement, equipment code / name
11	Monitoring and supervision	Equipment status	Date, status log (protection devices, inverters, monitoring systems, surveillance systems)
12	Monitoring and supervision	Meteo data	Irradiation, module temperature, other meteo variables (ambient temperature, air humidity, wind velocity and direction, ...) (**)
13	Monitoring and supervision	Production / consumption data	AC active and reactive power at PV plant injection point and other subsystems or equipment, consumption from auxiliary systems, other variables (DC/AC voltages and currents, frequency), power from DC field (**)
14	Monitoring and supervision	Performance data	PV plant energy production; PR; expected vs real
15	Preventative maintenance	Intervention equipment / element name	Affected power and affected production, equipment code / name, intervention start and end date
16	Preventative maintenance	Maintenance description	Measurements, preventative maintenance tasks performed, problems not solved during activity and its classification and typification, technicians and responsible names and function
17	PV plant documentation	Commissioning	Commissioning documentation and tests results (***)



18	PV plant documentation	Operation and maintenance	Equipment manuals, PV plant O&M manual (***)
19	PV plant documentation	System documentation	As built documentation (datasheets, wiring diagrams, system data) (***)
20	Warranty management	Claims registration	Affected equipment, claim description, occurrence date, communications between O&M, client and manufacturer/supplier
21	Security management	Alarm intervention	Alarms log, type of alarm, time of occurrence, counter measures

(\*) EN 13306 - Maintenance. Maintenance terminology

(\*\*) IEC 61724 - Photovoltaic system performance monitoring - Guidelines for measurement, data exchange and analysis

(\*\*\*) IEC 62446 - Photovoltaic (PV) systems - Requirements for testing, documentation and maintenance - Part 1: Grid connected systems - Documentation, commissioning tests and inspection