

Short-Course

Solar PV System Installation and Maintenance

NTQF Level III

Learning Guide -27

Unit of Competence	Monitor PV System Installation and Maintain
Module Title	Monitor PV System Installation and Maintain
LG Code	EIS PIM3 M16 LO3-LG 27
TTLM Code	EIS PIM3 TTLM 0120v1

LO3. Complete relevant work related documents-27

Instruction Sheet**Learning Guide:- 28**

This learning guide is developed to provide you the necessary information, knowledge, skills and attitude regarding the following content coverage and topics:

- Completing forms relating to the conduct of job monitoring
- Documenting and reporting reports to personnel and stakeholders

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to:-

- Complete forms relating to the conduct of job monitoring
- Document and reporting reports to personnel and stakeholders

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below:
3. Read the information written in the information Sheet 1 (page: 52), Sheet 2 (page: 54)
4. Accomplish the Self-Check 1 (page: 53), Self-Check 2 (page: 55)

LO3. Complete relevant work related documents-28

Information Sheet 1	Completing forms relating to the conduct of job monitoring
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1 Completing forms relating to the conduct of job monitoring

1.1 Introduction

For proper maintenance of the PV system, it is quite important to ensure that the maintenance schedule is followed and that the maintenance checklists are filled in properly.

1.2 Completing Forms

When completing the maintenance forms:

- Keep to the schedule agreed with the installer;
- Always note down date, time and weather conditions;
- Solar yield changes due to these factors so the conditions are needed to interpret the results;
- Take photos of any areas of concern;
- Report the physical condition of a PV plant.



Figure 4: Completing inspection form

Self-Check - 1	Written Test
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Instruction: Follow the below selected instruction

The following are true or false items, write true if the statement is true and write false if the statement is false.

N°	Questions and answers
1	It is not too important to follow a maintenance schedule
	True or false:
2	Always note down date, time and weather conditions when filling in forms on site;
	True or false:

Note: the satisfactory rating is as followed

Satisfactory	2 points
Unsatisfactory	Below 2 points

Answer Sheet

Score = _____
Rating: _____

Name _____

Date _____

Information Sheet 2	Documenting and reporting reports to personnel and stakeholders.
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2 Documenting and reporting reports to personnel and stakeholders.

2.1 Introduction

It is important to maintain proper document management of all the maintenance and monitoring activities. This will ensure that a full record of the system's performance is kept and deviations to be detected timeously.

2.2 Reporting results

As soon as a scheduled maintenance or monitoring activity was performed, the results should be sent to the system installer or maintenance company. Include with the reports also the following:

- The filled in forms including date and sunlight conditions;
- Photos of any potential problems;
- Descriptions of operational indicators, meters, and error messages;
- Any areas of concern relating to the system.

2.3 Document Management

The installation company should maintain proper document management of the O&M operation including:

- Send the system owner reminders to do scheduled maintenance;
- Receive the scheduled maintenance forms, photos and other information;
- Interpret the results to identify any potential issues;
- Notify the owner of any issues detected with possible remedies;
- File all documents together with system documentation for easy access when needed. This is also to uphold manufacturers' preventative-maintenance measures to preserve warranties and to optimize system energy delivery, and the schedule for each.

2.4 Analysing data

The received data can only be useful if it is regularly examined and interpreted by a qualified person. The installation company should establish procedures for responding to alerts from monitoring diagnostics, error messages, or complaints from the building owner. Provider should also compile a troubleshooting guide for common problems (NREL, 2016).

Self-Check - 1	Written Test
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Instruction: Follow the below selected instruction

Answer all the questions listed below

N°	Questions and answers
1	Name 4 things that should be reported back to the installer after scheduled maintenance checks.

Note: the satisfactory rating is as followed

Satisfactory	3 points
Unsatisfactory	Below 3 points

Answer Sheet

Score = _____
Rating: _____

Name

Date

Works Cited

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