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| Title | **Operation and maintenance of off-grid solar PV systems** |
| Level | **2** | **Credits** | **5** |

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| Purpose | This competency standard is intended for those who carry out Installation of off-grid solar PV system. People holding credit for this module are able to describe Commissioning procedures and Operation and maintenance of off-grid solar PV systems |

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| Classification ISCED | 0713 Electricity and energy |

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| Available grade | Competent / Not yet competent |

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| Modification history | N/A |

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| **Competency Unit** | **Performance Criteria** | **Knowledge and Understanding** |
| **C1:** **Commissioning procedures** | **P1-** Follow safety and other regulatory requirements for commissioning.**P2-** Interpret circuit diagram.**P3-** Plan and prepare electrical tools and equipment for commissioning.**P4-** Performs connections for commissioning.**P5-** Perform commissioning | **K1- S**afety requirements and hazards identification**K2-** Interpretation of drawing and specifications**K3-** Tools and equipment for commissioning procedures**K4-** Connection techniques, and requirements for commissioning**K5-** Dismantling, replacing and commissioning procedures |
| **C2:** **Monitor operation And maintainers of Off–Grid Solar PV System** | **P1-** Monitor electrical loads**P2-** Analyze system faults**P3-** Check out electrical parameters**P4-** Carryout preventive maintenance**P5-** Replace and repair faulty parts or components | **K1-** Methods of calculation of load ,measuring techniques of current and voltage**K2-** Identification of faults and measurement of electrical parameters**K3-** Methods of fault identification and troubleshooting**K4-** Inspection requirement, safety requirements and hazards identification**K5-** Dismantling and replacing procedures |
| **C4:****Complete work** | **P1-** Complete work related documents and procedures**P2-** Perform final quality inspection**P3-** Clean up and store tools, equipment and materials | **K1-** Importance of documentation; Customer care procedures and techniques**K2-** Importance of quality**K3-** Handing over procedure to client**K4-** Waste disposal procedures**K5-** Care of tools and equipment |