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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 |