|  |  |  |  |
| --- | --- | --- | --- |
| **SECTION 1 –GENERAL** | | | |
| Project: | Supernode BESS Stage 1 | | |
| Client: | NuEnergy Infrastructure | | |
|
|
|
| ITR  Description: | 10-CFA01 Metering Panel Installation ITR | | |
|
|
|
| Project No.: | 102524 | Work Pack No.: |  |
|
| ITR No.: | PFI-ITR-0101 | Discipline: | Electrical |
|
| Revision: | Rev A | Install Contractor: | PFi |
|
|
|
|
|
| Standards: | AS/NZS 3000:2018 Electrical Installations  AS NZS 3008.1.1-2017 Electrical installations  Qld Electrical Safety Act 2002 & Regulation 2013  Safety of Machinery Australian Standard 4024.1 | | |
|
|
|
|

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Specifications: |  | | | | | |
| Drawings: |  | | | | | |
| Prepared by: |  | | | | Date: |  |
| **SECTION 2 – SIGNATURES –APPROVAL** | | | | | | |
| PFI Approval | Name: |  | Signature: |  | Date: |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **General Data** | | | | | | | | | | | | | | | | | |
| Type of Electrical Equipment: | | | |  | | | | Serial No. (if applicable): | | | | | | |  | | |
| Model/Make (if applicable): | | | |  | | | | Manufacturer (if applicable): | | | | | | |  | | |
| **No.** | **Items to be Checked** | | | | | | | | | | | | | **Results** | | | **Remarks** |
| 1 | Check equipment and nameplate details are correct and in accordance with the data sheet and equipment schedule. | | | | | | | | | | | | |  | | |  |
| 2 | Check for mechanical damage. | | | | | | | | | | | | |  | | |  |
| 3 | Check item is suitably rated for area (E.g. IP rating, Ex rating) | | | | | | | | | | | | |  | | |  |
| 4 | Holding down arrangement and seat alignment correct. | | | | | | | | | | | | |  | | |  |
| 5 | Panels aligned correctly. | | | | | | | | | | | | |  | | |  |
| 6 | Earth alignment to vendor specification & connecting link bolts torqued to the manufacturers recommendations & marked. | | | | | | | | | | | | |  | | |  |
| 7 | External bonding correct | | | | | | | | | | | | |  | | |  |
| 8 | Bus bar alignment to vendor specifications & connecting link bolts  torqued to the manufacturers recommendations & marked. | | | | | | | | | | | **Nm.** | |  | | |  |
| 9 | Phase identification correct. | | | | | | | | | | | | |  | | |  |
| 10 | Instrument, indication lamps & interlocks correct. | | | | | | | | | | | | |  | | |  |
| 11 | Main switches, contactors, fuses etc. sized & identified correctly as per Single-  Line Drawings. | | | | | | | | | | | | |  | | |  |
| 12 | Check main isolator switch operation. | | | | | | | | | | | | |  | | |  |
| 13 | Check bypass isolator switch operation. | | | | | | | | | | | | |  | | |  |
| 14 | Check DC UPS battery isolator switch operation. | | | | | | | | | | | | |  | | |  |
| 15 | COM Interface & Mod Link. | | | | | | | | | | | | |  | | |  |
| 16 | Padlocking facilities correct. | | | | | | | | | | | | |  | | |  |
| 17 | Check internals for cleanliness. | | | | | | | | | | | | |  | | |  |
| 18 | Check manual operation of selector switch, MCB, push button, etc. | | | | | | | | | | | | |  | | |  |
| 19 | Incoming cable correctly installed, terminated & supported. | | | | | | | | | | | | |  | | |  |
| 20 | Unused cable entries sealed. | | | | | | | | | | | | |  | | |  |
| 21 | All internal cabling & wiring neat, correct & tight. | | | | | | | | | | | | |  | | |  |
| 22 | Heaters correctly installed. | | | | | | | | | | | | |  | | |  |
| 23 | Fans correctly installed. | | | | | | | | | | | | |  | | |  |
| 24 | Drawings marked up with relevant changes and As-builts complete. | | | | | | | | | | | | |  | | |  |
| Electrical Tests | | | | | | | | | | | | | | | | | |
| Verify continuity of earth bar to frame: Ω | | | | | | | | | | | | | | | | | |
| Check Busbar Insulation resistance between Phases & Phases & Earth  (690V-2500VDC, 400V -1000VDC) Temp: **℃** | | | | | | | | | | | | | | | | | |
| L1 – L2: | | MΩ | L1 – L3: | | | MΩ | L2 – L3: | | MΩ | | L1 – E: | | MΩ | L2 – E: | | | MΩ |
| L3 – E: | | MΩ | L1 – N: | | | MΩ | L2 – N: | | MΩ | | L3 – N: | | MΩ | N – E: | | | MΩ |
| Test Equipment | | | | | | | | | | | | | | | | | |
| Make | | | | | Model | | | | | Serial No | | | | | | Calibration Expiry Date | |
|  | | | | |  | | | | |  | | | | | |  | |
|  | | | | |  | | | | |  | | | | | |  | |
|  | | | | |  | | | | |  | | | | | |  | |

|  |  |
| --- | --- |
|  | TEST/ INSPECTION CARRIED OUT BY |
| **Signature** |  |
| **Print Name** |  |
| **Date** |  |