

CHAPTER 8 – PART-C
Auxiliary Network (Underground)

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1.1 Auxiliary Transformer

| INDICATIONS | TYPE of TEST | | | |
|---|--------------|---------|---------|----------|
| | Type | Routine | On site | Specials |
| Temperature rise* | X | | | |
| Lightning impulse withstand voltage test* | X | | | |
| Separate-source voltage withstand test | | X | | |
| Measurement of winding resistance | | X | | |
| Measurement of voltage ration and check of phase displacement | | X | | |
| Measurement of sound pressure test (Noise level) | | X | X | |
| Measurement of no load loss and current | | X | | |
| Visual inspection | | X | X | |

* For these type tests, the Contractor could provide a report on similar equipment

1.2 Battery Chargers

| INDICATIONS | TYPE of TEST | | | |
|--|--------------|---------|---------|----------|
| | Type | Routine | On site | Specials |
| Temperature rise | | X | | |
| Rated short duration power frequency withstand voltage | | X | | |
| Floating operation mode test | | X | | |
| Equalization operation mode test | | X | | |
| Direct operation mode test | | X | | |

| INDICATIONS | TYPE of TEST | | | |
|------------------------------|--------------|---------|---------|----------|
| | Type | Routine | On site | Specials |
| Protection devices operation | | X | | |
| Setting test | | X | | |
| Visual inspection | | X | X | |

1.3 110 V DC Battery

| INDICATIONS | TYPE of TEST | | | |
|--|--------------|---------|---------|----------|
| | Type | Routine | On site | Specials |
| Electrical specifications checking (on one cell) | X | | | |
| Visual inspection | | X | X | |
| Capacity measurement | | | X | |
| Endurance test | X | | | |

1.4 AC and DC Auxiliary Cabinets

| INDICATIONS | TYPE of TEST | | | |
|---|--------------|---------|---------|----------|
| | Type | Routine | On site | Specials |
| IP rating of equipment | X | | | |
| Rated short duration power frequency withstand voltage test | | X | | |
| Operation checking | | X | X | |
| Visual inspection | | X | X | |