

**Details of existing equipment**

Name of Circle- Transmission Circle, Muzaffarpur

Name of GSS- 132/33 KV GSS BETTIAH

| Sl. No. | Name of Bay                 | Equipment Name   | Quantity | Make                              | Date/ Year of Commissioning |
|---------|-----------------------------|--|----------|-----------------------------------|-----------------------------|
| 1.      | 132 KV Gopalganj ckt -01    | Line control & relay panel with distance protection & O/C & E/F protection | 01       | EASUN                             | 2005                        |
|         |                             | 3-phase Circuit Breaker  | 01       | Siemens                           | 2005                        |
|         |                             | 1-ph CVT   | 03       | Alstom                            | 2005                        |
|         |                             | LA   | 03       | Cgl ,LAMCO(B PHASE)               | 2005,,07/04/18(B)           |
|         |                             | 1-ph current transformer   | 03       | SCT                               | 19/03/2012                  |
|         |                             | 3-ph isolator with/without earth switch                                    | 03       | Switch gear and structure pvt ltd |                             |
| 2.      | 132 KV Bettiah-Narkatiyganj | Line control & relay panel with distance protection & O/C & E/F protection | 01       | SEL                               | 08/02/18                    |
|         |                             | 3-phase Circuit Breaker  | 01       | CGL                               | 15/09/2016                  |
|         |                             | 1-ph CVT   | N/A      |                                   |                             |
|         |                             | LA   | 03       | LAMCO                             | 16/10/2017                  |
|         |                             | 1-ph current transformer(CT)   | 03       | SCT                               | 15/09/2017                  |
|         |                             | 3-ph isolator with/without earth switch                                    | 03       | FARADAY -01<br>NA -02             | 16/10/2017<br>1988          |
| 3.      | 132 KV Bettiah- Motihari    | Line control & relay panel with distance protection & O/C & E/F protection | 01       | SEL                               | 06/02/18                    |
|         |                             | 3-phase Circuit Breaker  | 01       | ABB                               | 01/09/2016                  |
|         |                             | 1-ph CVT   | NA       | NA                                |                             |
|         |                             | LA   | 03       | LAMCO                             | 25/12/2016                  |
|         |                             | 1-ph current transformer   | 03       | SCT                               | 25/12/2016                  |
|         |                             | 3-ph isolator with/without earth switch                                    | 03       | NA -03                            | 1988                        |

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| Sl. No. | Name of Bay               | Equipment Name   | Quantity | Make                      | Date/ Year of Commissioning |
|---------|---------------------------|--|----------|---------------------------|-----------------------------|
| 4.      | 132 KV Bettiah-Areraj     | Line control & relay panel with distance protection & O/C & E/F protection | 01       | ESUN                      | 2012                        |
|         |                           | 3-phase Circuit Breaker  | 01       | CGL                       | 2012                        |
|         |                           | 1-ph CVT   | 03       | CGL                       | 2012                        |
|         |                           | LA   | 03       | CGL                       | 2012                        |
|         |                           | 1-ph current transformer   | 03       | MEHRU -02<br>TIKL -01     | 2012<br>21/05/2015          |
|         |                           | 3-ph isolator with/without earth switch                                    | 03       | SWICTH GEAR AND STRUCTURE | 2012                        |
| 5.      | 132 KV Bettiah Raxaul -01 | Line control & relay panel with distance protection & O/C & E/F protection | 01       | ABB                       | 2012                        |
|         |                           | 3-phase Circuit Breaker  | 01       | CGL                       | 06/06/2017                  |
|         |                           | 1-ph CVT   | 03       | CGL                       | 2012                        |
|         |                           | LA   | 03       | CGL                       | 2012                        |
|         |                           | 1-ph current transformer   | 03       | CGL                       | 2012                        |
|         |                           | 3-ph isolator with/without earth switch                                    | 03       | SIEMENS -02<br>FARADY -01 | 2012<br>23/12/2016          |
| 6.      | 132 KV Bettiah-Raxaul -02 | Line control & relay panel with distance protection & O/C & E/F protection | 01       | CGL                       | 2015                        |
|         |                           | 3-phase Circuit Breaker  | 01       | CGL                       | 2015                        |
|         |                           | 1-ph CVT   | 03       | CGL-02<br>CGL 01          | 2015<br>03/06/2017          |
|         |                           | LA   | 03       | CGL -02<br>LAMCO -01      | 2015<br>03/06/2017          |
|         |                           | 1-ph current transformer   | 03       | SCT                       | 2015                        |
|         |                           | 3-ph isolator with/without earth switch                                    | 03       | ELECTROLYTES              | 2015                        |

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| Sl. No. | Name of Bay                 | Equipment Name  | Quantity | Make                                  | Date/ Year of Commissioning |
|---------|-----------------------------|---|----------|---------------------------------------|-----------------------------|
| 7.      | 20 MVA TRANSFORMER – 03     | Transformer control & relay panel with distance protection & O/C & E/F protection | 01       | CNS                                   | 01/02/2015                  |
|         |                             | 3-phase Circuit Breaker   | 01       | AREVA                                 | 01/02/2015                  |
|         |                             | 1-ph CVT  | NA       |                                       |                             |
|         |                             | LA  | 03       | LAMCO -03                             | 01/02/2015                  |
|         |                             | 1-ph current transformer  | 03       | SCT                                   | 01/02/2015                  |
|         |                             | 3-ph isolator with/without earth switch   | 03       | ELECTROLYTES                          | 01/02/2015                  |
| 8.      | 132 KV Bettiah-Thakraha -01 | Line control & relay panel with distance protection & O/C & E/F protection        | 01       | ERL                                   | 2015                        |
|         |                             | 3-phase Circuit Breaker   | 01       | SIEMENS                               | 2015                        |
|         |                             | 1-ph CVT  | 03       | CGL                                   | 2015                        |
|         |                             | LA  | 03       | CGL                                   | 2015                        |
|         |                             | 1-ph current transformer  | 03       | MEHRU                                 | 2015                        |
|         |                             | 3-ph isolator with/without earth switch   | 03       | SIEMENS                               | 2015                        |
| 9.      | 132 KV Bettiah-Thakraha -02 | Line control & relay panel with distance protection & O/C & E/F protection        | 01       | System control and automation pvt ltd | 10/09/2017                  |
|         |                             | 3-phase Circuit Breaker   | 01       | siemens                               | 10/09/2017                  |
|         |                             | 1-ph CVT  | 03       | siemens                               | 10/09/2017                  |
|         |                             | LA  | 03       | CGL                                   | 10/09/2017                  |
|         |                             | 1-ph current transformer  | 03       | SCT                                   | 10/09/2017                  |
|         |                             | 3-ph isolator with/without earth switch   | 03       | ELECTROLYTES                          | 10/09/2017                  |

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| Sl. No. | Name of Bay                                | Equipment Name  | Quantity | Make                                  | Date/ Year of Commissioning |
|---------|--|---|----------|---------------------------------------|-----------------------------|
| 10.     | 132 KV Motihari(DMTCL)-<br>Bettiah new -01 | Line control & relay panel with distance protection & O/C & E/F protection        | 01       | System control and automation pvt ltd | 06/04/2017                  |
|         |  | 3-phase Circuit Breaker   | 01       | siemens                               | 06/04/2017                  |
|         |  | 1-ph CVT  | 03       | siemens                               | 06/04/2017                  |
|         |  | LA  | 03       | CGL                                   | 06/04/2017                  |
|         |  | 1-ph current transformer  | 03       | SCT                                   | 06/04/2017                  |
|         |  | 3-ph isolator with/without earth switch   | 03       | ELECTROLYTES                          | 06/04/2017                  |
| 11.     | 132 KV Motihari(DMTCL)-<br>Bettiah new -02 | Line control & relay panel with distance protection & O/C & E/F protection        | 01       | System control and automation pvt ltd | 06/04/2017                  |
|         |  | 3-phase Circuit Breaker   | 01       | siemens                               | 06/04/2017                  |
|         |  | 1-ph CVT  | 03       | siemens                               | 06/04/2017                  |
|         |  | LA  | 03       | CGL                                   | 06/04/2017                  |
|         |  | 1-ph current transformer  | 03       | SCT                                   | 06/04/2017                  |
|         |  | 3-ph isolator with/without earth switch   | 03       | ELECTROLYTES                          | 06/04/2017                  |
| 12.     | 50 MVA Transformer No-I                    | Transformer control & relay panel with distance protection & O/C & E/F protection | 01       | DANISH                                | 30/07/2014<br>2007          |
|         |  | 3-phase Circuit Breaker   | 01       | AREVA                                 |                             |
|         |  | 1-ph CVT  | NA       | NA                                    | NA                          |
|         |  | LA  | 03       | LAMCO                                 | 15/10/2017                  |
|         |  | 1-ph current transformer  | 03       | SCT                                   | 2017                        |
|         |  | 3-ph isolator with/without earth switch   | 03       | FARADY -02<br>NA -01                  | 16/10/2017<br>1988          |
|         |  |   |          |                                       |                             |

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| Sl. No. | Name of Bay              | Equipment Name  | Quantity | Make        | Date/ Year of Commissioning |
|---------|--------------------------|---|----------|-------------|-----------------------------|
| 13.     | 20 MVA Transformer No-II | Transformer control & relay panel with distance protection & O/C & E/F protection | 01       | ABB         | 2009                        |
|         |                          | 3-phase Circuit Breaker   | 01       | ABB         | 2009                        |
|         |                          | 1-ph CVT  | NA       | NA          |                             |
|         |                          | LA  | 03       | CGL         | 2009                        |
|         |                          | 1-ph current transformer  | 03       | CGL         | 2009                        |
|         |                          | 3-ph isolator with/without earth switch   | 03       | Siemens     | 2009                        |
| 14.     | 132 KV Bus Coupler       | Line control & relay panel with distance protection & O/C & E/F protection        | 01       | SEL         | 07/02/18                    |
|         |                          | 3-phase Circuit Breaker   | 01       | CGL         | 30/03/2017                  |
|         |                          | 1-ph CVT  | NA       | NA          |                             |
|         |                          | 1-ph PT   | 01       | SCT         | 10/04/2017                  |
|         |                          | LA  | NA       | NA          |                             |
|         |                          | 1-ph current transformer  | 03       | SCT         |                             |
| 15.     | 33 KV Chanpatiya         | Line control & relay panel with distance protection & O/C & E/F protection        | 01       | VENSON      | 2012                        |
|         |                          | 3-phase Circuit Breaker   | 01       | AREVA       | 2012                        |
|         |                          | LA  | 03       | NA          | 2012                        |
|         |                          | 1-ph current transformer  | 03       | KAPCO       | 2012                        |
|         |                          | 3-ph isolator with/without earth switch   | 03       | ELECTROLYTE | 2012                        |
|         |                          |   |          |             |                             |

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| Sl. No. | Name of Bay          | Equipment Name   | Quantity | Make                          | Date/ Year of Commissioning |
|---------|----------------------|--|----------|-------------------------------|-----------------------------|
| 16.     | 33KV Yogapatti       | Line control & relay panel with distance protection & O/C & E/F protection | 01       | VENSON                        | 2012                        |
|         |                      | 3-phase Circuit Breaker  | 01       | AREVA                         | 2012                        |
|         |                      | LA   | 03       | NA                            | 2012                        |
|         |                      | 1-ph current transformer   | 03       | KAPCO                         | 2012                        |
|         |                      | 3-ph isolator with/without e/s   | 03       | ELECTROLYTE-02<br>FARADAY -01 | 2012<br>06/07/2016          |
|         |                      | Line control & relay panel with distance protection & O/C & E/F protection | 01       | ABB                           | 2009                        |
| 17.     | 33 KV sail no -02    | 3-phase Circuit Breaker  | 01       | ABB                           | 2009                        |
|         |                      | LA   | 03       | NA                            | 2009                        |
|         |                      | 1-ph current transformer   | 03       | VISHAL                        | 2009                        |
|         |                      | 3-ph isolator with/without earth switch                                    | 03       | Siemens                       | 2009                        |
|         |                      | Line control & relay panel with distance protection & O/C & E/F protection | 01       | ABB                           | 2009                        |
|         |                      | 3-phase Circuit Breaker  | 01       | ABB                           | 2009                        |
| 18.     | 33KV ICT -02 (20MVA) | LA   | 03       | NA                            | 2009                        |
|         |                      | 1-ph current transformer   | 03       | VISHAL                        | 2009                        |
|         |                      | 3-ph isolator with/without earth switch                                    | 03       | Siemens                       | 2009                        |
|         |                      | Line control & relay panel with distance protection & O/C & E/F protection | 01       | ABB                           | 2009                        |
|         |                      | 3-phase Circuit Breaker  | 01       | ABB                           | 2009                        |
|         |                      | LA   | 03       | NA                            | 2009                        |
| 19.     | 33 KV Sail no -01    | 1-ph current transformer   | 03       | VISHAL                        | 2009                        |
|         |                      | 3-ph isolator with/without earth switch                                    | 02       | Siemens                       | 2009                        |
|         |                      | Line control & relay panel with distance protection & O/C & E/F protection | 01       | ABB                           | 2009                        |
|         |                      | 3-phase Circuit Breaker  | 01       | ABB                           | 2009                        |
|         |                      | 1-ph PT  | 03       |                               | 2009                        |
|         |                      | LA   |          | NA                            | 2009                        |

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| Sl. No. | Name of Bay  | Equipment Name   | Quantity | Make        | Date/ Year of Commissioning |
|---------|--------------|--|----------|-------------|-----------------------------|
| 20.     | 33 KV Nautan | Line control & relay panel with distance protection & O/C & E/F protection | 01       | VENSON      | 2012                        |
|         |              | 3-phase Circuit Breaker  | 01       | AREVA       | 2012                        |
|         |              | 1-ph CVT   |          |             | 2012                        |
|         |              | LA   | 03       | NA          | 2012                        |
|         |              | 1-ph current transformer   | 03       | KAPCO       | 2012                        |
|         |              | 3-ph isolator with/without earth switch                                    | 03       | ELECTROLYTE | 2012                        |

|     |               |  |    |                          |                    |
|-----|---------------|--|----|--------------------------|--------------------|
| 21. | 33 KV ICT -01 | Line control & relay panel with distance protection & O/C & E/F protection | 01 | DANISH                   | 30/07/2014         |
|     |               | 3-phase Circuit Breaker  | 01 | CGL                      | 09/07/2016         |
|     |               | 1-ph CVT   | NA | NA                       | NA                 |
|     |               | LA   | 03 | NA                       | NA                 |
|     |               | 1-ph current transformer   | 03 | SCT                      | 09/07/2016         |
|     |               | 3-ph isolator with/without earth switch                                    | 03 | ELECTROLYTE-02<br>NA -01 | 13/01/2013<br>1988 |
| 22. | 33 KV Bairiya | Line control & relay panel with distance protection & O/C & E/F protection | 01 | VENSON                   | 2012               |
|     |               | 3-phase Circuit Breaker  | 01 | AREVA                    | 2012               |
|     |               | 1-ph CVT   | 03 |                          | 2012               |
|     |               | LA   | 03 | NA                       | 2012               |
|     |               | 1-ph current transformer   | 03 | KAPCO                    | 2012               |
|     |               | 3-ph isolator with/without earth switch                                    | 03 | ELECTROLYTE              | 2012               |

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| Sl. No. | Name of Bay   | Equipment Name   | Quantity | Make        | Date/ Year of Commissioning |
|---------|---------------|--|----------|-------------|-----------------------------|
| 23.     | 33 KV Bettiah | Line control & relay panel with distance protection & O/C & E/F protection | 01       | SEL         | 09/02/18                    |
|         |               | 3-phase Circuit Breaker  | 01       | ALSTOM      | 2004                        |
|         |               | 1-ph CVT   | NA       | NA          | NA                          |
|         |               | LA   | 03       | NA          | NA                          |
|         |               | 1-ph current transformer   | 03       | SCT         | 02/06/2016                  |
|         |               | 3-ph isolator with/without earth switch                                    | 03       | ELECTROLYTE | 13/01/2013                  |

|     |                   |  |    |                    |                          |
|-----|-------------------|--|----|--------------------|--------------------------|
| 24. | 33 KV Naurangabad | Line control & relay panel with distance protection & O/C & E/F protection | 01 | SEL                | 08/02/18                 |
|     |                   | 3-phase Circuit Breaker  | 01 | ALINE              | 2006                     |
|     |                   | 1-ph CVT   |    | NA                 | NA                       |
|     |                   | LA   | 03 | CGL                | NA                       |
|     |                   | 1-ph current transformer   | 03 | SCT                | 03/06/2016               |
|     |                   | 3-ph isolator with/without earth switch                                    | 03 | FARADAY            | 14/07/2016               |
| 25. | 33KV Dhokraha     | Line control & relay panel with distance protection & O/C & E/F protection | 01 | <del>C&amp;S</del> | 01/02/2015               |
|     |                   | 3-phase Circuit Breaker  | 01 | SCHNIEDER          | 01/02/2015               |
|     |                   | 1-ph CVT   |    | NA                 |                          |
|     |                   | LA   | 03 | LAMCO              | 01/02/2015<br>01/02/2015 |
|     |                   | 1-ph current transformer   | 03 | SCT                | 01/02/2015               |
|     |                   | 3-ph isolator with/without earth switch                                    | 03 | FARADAY            | 01/02/2015               |

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| Sl.-No. | Name of Bay        | Equipment Name   | Quantity | Make      | Date/ Year of Commissioning |
|---------|--------------------|--|----------|-----------|-----------------------------|
| 26.     | 33 KV ICT -03      | Line control & relay panel with distance protection & O/C & E/F protection | 01       | CMS       | 01/02/2015                  |
|         |                    | 3-phase Circuit Breaker  | 01       | SCHNIEDER | 01/02/2015                  |
|         |                    | 1-ph CVT   | 03       | NA        |                             |
|         |                    | LA   | 03       | LAMCO     | 01/02/2015                  |
|         |                    | 1-ph current transformer   | 03       |           | 01/02/2015                  |
|         |                    | 3-ph isolator with/without earth switch                                    | 03       | SCT       | 01/02/2015                  |
| 27.     | 33KV spare bay -01 | Line control & relay panel with distance protection & O/C & E/F protection | 01       | CMS       | 01/02/2015                  |
|         |                    | 3-phase Circuit Breaker  | 01       | SCHNIEDER | 01/02/2015                  |
|         |                    | 1-ph CVT   |          | NA        | 01/02/2015                  |
|         |                    | LA   | 03       | LAMCO     | 01/02/2015                  |
|         |                    | 1-ph current transformer   | 03       |           | 01/02/2015                  |
|         |                    | 3-ph isolator with/without e/s   | 03       | SCT       | 01/02/2015                  |

*Dharamendra*  
11/11/18  
AEE

**Assistant Executive Engineer  
Transmission Sub-Division  
Bettiah**

| Other Substation Equipments - |   |   |     |   |                                  |
|-------------------------------|---|---|-----|---|----------------------------------|
| Battery Charger               | 1 | Battery charger 1                                 | 1   | Amar raja                                 | 11/01/16                         |
|                               | 2 | Battery charger 2                                 | 1   | chloride                                  | 06/02/18                         |
|                               | 3 | Battery charger 3                                 | 1   | chloride                                  | 07/02/18                         |
| ACDB                          |   | ACDB  | 4   | VIKASH                                    | 2009                             |
|                               |   |   |     | VIKASH                                    | 2017                             |
|                               |   |   |     | VIKASH                                    | 2017                             |
|                               |   |   |     | ASIAN S LTD                               | 07/02/18                         |
|                               |   | DCDB(250V)  | 4   | VIKASH<br>VIKASH<br>VIKASH<br>ASIAN S LTD | 2009<br>2017<br>2017<br>07/02/18 |
|                               |   | DCDB(48V)   | N/A |   |                                  |
| Battery bank                  | 1 | BATTERY BANK 1                                    | 1   | Excide(wet cell)                          | 11/01/16                         |
|                               | 2 | BATTERY BANK 2                                    | 1   | Excide(Dry cell)                          | 06/02/18                         |
|                               | 3 | BATTERY BANK 3                                    | 1   | Excide(wet cell)                          | 02/05/17                         |
|                               |   | DG set  | N/A |   |                                  |
|                               |   | 1.Isolator  | N/A |   |                                  |
| PLCC Equipment                |   | 2. Battery Charger                                | 2   | Electrotechnique,Eltek                    | N/A,2018                         |
|                               |   | 3. Panel  | 9   | ABB                                       |                                  |
|                               |   | 4.telephone                                       | 4   | ABB                                       |                                  |
|                               |   | Hydrant system with Pipe arrangement              | N/A |   |                                  |
|                               |   | Fire Fighting Equipment                           | 20  |   |                                  |
|                               |   | Earthing Rods                                     | 4   |   |                                  |
|                               |   | Tools & Tackles(Spanners,Wrench...etc.(Set/Piece) | 4   |   |                                  |
|                               |   | Testing Equipments                                | N/A |   |                                  |
|                               |   | Safety Gear(Helmet,Gloves,Boot, etc.)             | 10  |   |                                  |
|                               |   | SST   | 1   |   |                                  |
|                               |   | Spare Hardware Fitting.                           | 1   | TBEA                                      | 22/06/18                         |

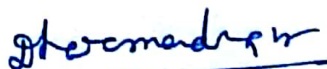
*Sharmadev*  
11/11/18

**Assistant Executive Engineer  
Transmission Sub-Division  
Bettiah**

## Sample format for GSS land assets

### GSS:- BETTIAH

| LOCATION     |  |  |
|--------------|--|--|
| 01           | Name of GSS  | BETTIAH  |
| 02           | Located at ( Name of locality)   | BARITOLA   |
| 03           | Block/Prakhand   | BETTIAH  |
| 04           | Police Station (Thana)   | MUFFASIL(BETTIAH)  |
| 05           | Sub-Division   | BETTIAH  |
| 06           | District   | WEST CHAMPARAN   |
| 07           | Transmission Division  | MOTIHARI   |
| 08           | Transmission Circle  | MUZAFFARPUR  |
| 09           | GPS Co-ordinates   | LAT-26.81552; LONG-84.54441  |
| LAND DETAILS |  |  |
| 10           | Initial Area (In Acre)   | 8.32   |
| 11           | Whether it was:  |  |
|              | (i) A Govt. Land (State type GM or )   |  |
|              | (ii) Private Land  | BETTIAH STATE  |
|              | If Private Land, Whether   |  |
|              | (i) Purchased  |  |
|              | (ii) Acquired  |  |
|              | (iii) Leased Land  |  |
| 12           | Year of Purchase/Acquisition   | 2.61acre(1989); 5.71 acre(1983)  |
| 13           | Whether mutation completed   | Yes  |
| 14           | Cost of the Land (At the time of procurement)  |  |
| 15           | Whether more land was purchased /acquired/ Leased in for GSS Extension work?<br>If yes, Give details | 2.27 acor(2011),Bettiah state and 1.00 acre(under acquisition process) |
| 16           | Area of the extra land for GSS   | 2.27acre and 01acre(under acquisition process)                         |
| 17           | Cost   | Rs;-3317492/- lakhs and 6552617/-lakhs                                 |
| 20           | Year of Purchase/lease of extra land   | 2011   |
| 21           | Total area at present  | 11.59 acre   |
|              | Details of Land (Khata/Khesara)  | 38/140,142 to 152,163,188  |
|              | Thana No.  | 191  |
|              | Name of Municipality/Nagar Parishad etc.   | Panchayat;-Ganauli   |
|              | Ward No./Circle No./ Holding No.   | Ward no-01   |
|              | Amount of Early Land related Taxes   | Rs;-25.00  |
|              | Taxes clear up to  | 2014-15  |
| 22           | Land Records available with  | Khata, khesara and map   |

  
11/11/18  
**Assistant Executive Engineer**  
**Transmission Sub-Division**  
**Bettiah**

FORMATE FOR ELECTRICITY CONSUMPTION

| <u>Name of gss</u> | <u>Whether metered connection taken to measure auxilliary consumption,if,so provide details with service connection number</u> | <u>Annual consumption and electricity charges towards auxillary consumption</u> | <u>Whether separate metered connection taken to measure colony consumption if so, provide details with service connection number</u> | <u>Annual consumption and electricity charges towards auxillary consumption</u> | <u>Remarks</u> |
|--------------------|--|---|--|---|----------------|
| <u>BETTIAH</u>     | <u>YES</u><br><u>S Connection no:-</u><br><u>401282112</u>   | <u>264000kwh</u>  | <u>no</u>  | <u>no</u>   |                |
|                    |  |   |  |   |                |

*Shamendra*  
11/11/18

**Assistant Executive Engineer  
Transmission Sub-Division  
Bettiah**



U.O.I. No. ...125  
Date 06/11/2018

Buff Sheet

*Dr. K. Ambekar  
15/11/18*

CE, Trans. (O&M)  
BSPTCL, Patna

Sub.: Status of compliance on the directives issued by the Hon'ble BERC in the Tariff Order - 2018-19.

*S. K. Mishra  
15/11/18*

- Ref.: 1. Letter No.- BERC-corr./Directive-09/18-850; Dated - 24/07/18
- 2. Letter No. - BERC-Corr./Directive-09/18-942; Dated-09/08/18
- 3. Letter No. - BERC-Corr./Directive-12/18-1258: Dated-29/10/18

In reference to above, the Hon'ble BERC issued directives in Tariff Order FY 2018-19 seeking compliance report at the earliest.  
The following directives are related to Trans. (O&M) wing of BSPTCL:

| S.No.                 | Directive   | Subject  | Status of compliance |
|-----------------------|---|--|----------------------|
| 1.                    | Directive 6: Maintenance of asset/property Register<br><br><i>GISIS<br/>Bettiah</i> | The Commission has observed that the petitioner has submitted the details of equipment available at various substations in the form of scan copy/excel sheet. No details for lines were furnished. The equipment details furnished do not depict the value i.e. cost of equipment and other details. The property register should contain all the details of equipment available at the location i.e. substation, etc showing the details of nature of equipments, year of installation, value, rate of depreciation, depreciation (year on year as well as the accumulated depreciation), residual value, whether the equipment is in working condition or not, etc. The Commission directs BSPTCL to submit the property register showing all the particulars by 30 <sup>th</sup> September, 2018. | <i>Yes</i>           |
| <b>New Directives</b> |   |  |                      |
| 1.                    |   | Regulation 73 (3) of the BERC (Terms and Conditions for Determination of Tariff) Regulations 2007 specifies:<br>Norms for operation and maintenance expenses per Ckt.-Km and per bay shall be as under:<br>(a) The commission shall, for the purpose of fixing   |                      |

*15/11/18*

*Dr. Anand Kumar*  
11/11/18  
**Assistant Executive Engineer**  
**Transmission Sub-Division**  
**Bettiah**



normative rates for operation & maintenance expenses, study the O&M expenses incurred over the last 4 to 5 years and fixed appropriate rates per Ckt-km of transmission line and per bay. The norms so fixed for 2008-09 shall be escalated at 4% per annum. (b) The total allowable O&M expenses for a transmission licensee shall be calculated by multiplying the number of bays and Ckt-km of line length with the application norms for O&M expenses per bay and per Ckt-km respectively. The Commission, directs the BSPTCL to ensure filing of the tariff petition for next MYT control period i.e. from FY 2019-20 to FY 2021-22 proposing the norms for O&M expenses in accordance with regulation 73 (3).

2. The transmission licensees are obligated under the Regulation to take separate electric connection from distribution licensees for use of electricity within the grid sub-station and the electricity charges of such connection shall be booked under Administrative & General expenses and shall be pass through in the tariff. Such expenses shall not contain any electricity charges towards colony consumption. Consumption and colony consumption in the format prescribed hereunder:

| Name of GSS | Whether metered connection taken to measure auxiliary consumption, if so, provide details with service connection number | Annual consumption and electricity charges towards auxiliary consumption | Whether separate metered connection taken to measure colony consumption, if so, provide details with service connection number | Annual consumption and electricity charges towards colony consumption. |
|-------------|--|--|--|--|
| BETTI AH    | Yes  | 264000 kWh   | No   | No   |

The compliance report of the directives needs to be submitted to Hon'ble BERC and hence, it is requested to provide the report at the earliest to the undersigned.

Shyamendra  
11/11/18

Assistant Executive Engineer  
Transmission Sub-Division  
Bettiah

Rakesh  
06.11.2018  
(Rakesh) 06.11.2018

Chief Engineer (Power Management Cell)

## 220/132 KV GSS Hajipur

### GSS land assets

| LOCATION     |  |  |
|--------------|--|--|
| 01           | Name of GSS  | 220/132 KV Grid, Sub-Station, Hajipur  |
| 02           | Located at(Name of locality)   | Dighi Kalan, Hajipur   |
| 03           | Block/ Prakhhand   | Hajipur  |
| 04           | Police Station(Thana)  | Hajipur, Sadar   |
| 05           | Sub-Division   | Hajipur  |
| 06           | District   | Vaishali   |
| 07           | Transmission Division  | Hajipur  |
| 08           | Transmission Circle  | Muzaffarpur  |
| 09           | GPS Co-ordinates   | Latitude- 25°43'6"<br>Longitude- 85° 14' 3"  |
| LAND DETAILS |  |  |
| 10           | Initial Area (In Acre)   | 11.70 Acres  |
| 11           | Whether it was:  |  |
|              | (i)A Govt. Land (State type GM or)   |  |
|              | (ii)Private Land   | Yes  |
|              | If Private Land , whether  |  |
|              | (i)Purchased   |  |
|              | (ii)Acquired   | Yes  |
|              | (iii)Leased land   |  |
| 12           | Year of Purchase/Acquisition   | 17-01-1987   |
| 13           | Whether mutation completed   | Yes  |
| 14           | Cost of land (at the time of procurement)  | NA   |
| 15           | Whether more land was purchased /<br>acquired/leased in for GSS extension work?<br>If yes, give details. | No   |
| 16           | Area of extra land for GSS   | NA   |
| 17           | Cost   | NA   |
| 18           | Year of Purchase/ Lease of extra land  | NA   |
| 19           | Total area at present  | 11.70  |
|              | Details of land (Khata/Khesra)   | 17/2854; 1175/2850; 502/2848;<br>502/2847; 502/2846; 502/2845;<br>54/2742; 1047/2743; 895/2787;<br>895/2788; 502/2844; 502/2843;<br>1175/2842; 421/2789; 421/2790;<br>140/2841; 334/2840; 33/2839;<br>1175/2836; 33/2838; 1116/2837;<br>1116/2830; 1014/2835; 313/2883;<br>1175/2849; 936/2851; 936/2852;<br>998/2853; 994/2881; 524/2889;<br>524/2891; 524/2890; 1116/2888;<br>489/2884; 33/2887; 334/2886; |

  
*Assistant Executive Engineer*  
Bihar State Power Transmission Co. Ltd.  
Region Sub-Division-2 Hajipur (Vaishali)

|    |   |   |
|----|---|---|
|    |   | 334/2885; 33/2834; 33/2833;<br>33/2832; 33/2831; 334/2829 |
|    | Thana no.                                 | 105   |
|    | Name of Municipality/ Nagar Parishad etc. |   |
|    | Ward no./ circle no./ holding no.         |   |
|    | Amount of early land related taxes        |   |
|    | Taxes clear up to                         |   |
| 20 | Land records available with               |   |

  
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## Details of Existing Equipment

Name of Circle: - Muzaffarpur

Name of GSS:-220/132 kV GSS, Hajipur

| Sl. No.                 | Name of Bay                       | Equipment Name   | Quantity | Make                             | Date of Commissioning |
|-------------------------|-----------------------------------|--|----------|----------------------------------|-----------------------|
| (1.)<br>220 KV Line Bay | Muzaffarpur(PG)-<br>Hajipur Ckt 1 | Line control & relay panel with distance protection & O/C E/F protection | 1        | ABB                              | 24-06-2013            |
|                         |                                   | 1-phase Circuit Breaker  | 3        | Areva                            | 24-06-2013            |
|                         |                                   | 1-Ph CVT   | 3        | Areva                            | 24-06-2013            |
|                         |                                   | LA   | 3        | LAMCO Industries Pvt. Ltd.       | 24-06-2013            |
|                         |                                   | 1-Ph Current Transformer   | 3        | SCT Limited                      | 24-06-2013            |
|                         |                                   | 3 Phase isolator with/without Earth switch                               | 4        | Faraday Electricals Private Ltd. | 24-06-2013            |
|                         |                                   | Wave Trap  | 2        | Areva                            | 24-06-2013            |
|                         | Muzaffarpur(PG)-<br>Hajipur Ckt 2 | Line control & relay panel with distance protection & O/C E/F protection | 1        | ABB                              | 24-06-2013            |
|                         |                                   | 1- phase Circuit Breaker   | 3        | Areva                            | 24-06-2013            |
|                         |                                   | 1-Ph CVT   | 3        | Areva                            | 24-06-2013            |
|                         |                                   | LA   | 3        | LAMCO Industries Pvt. Ltd.       | 24-06-2013            |
|                         |                                   | 1-Ph Current Transformer   | 3        | SCT Limited                      | 24-06-2013            |
|                         |                                   | 3 Phase isolator with/without Earth switch                               | 4        | Faraday Electricals Private Ltd. | 24-06-2013            |
|                         |                                   | Wave Trap  | 2        | Areva                            | 24-06-2013            |
|                         | BTPS –Hajipur Ckt-1               | Line control & relay panel with distance                                 | 1        | ABB                              | 24-06-2013            |

  
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|  |                                 |  |   |  |            |
|--|---------------------------------|--|---|--|------------|
|  |                                 | protection & O/C<br>E/F protection   |   |  |            |
|  |                                 | 1- phase Circuit<br>Breaker  | 3 | Areva                                  | 24-06-2013 |
|  |                                 | 1-Ph CVT   | 3 | Areva                                  | 24-06-2013 |
|  |                                 | LA   | 3 | LAMCO<br>Industries Pvt.<br>Ltd.       | 24-06-2013 |
|  |                                 | 1-Ph Current<br>Transformer  | 3 | SCT Limited                            | 24-06-2013 |
|  |                                 | 3 Phase isolator<br>with/without<br>Earth switch   | 4 | Faraday<br>Electricals<br>Private Ltd. | 24-06-2013 |
|  |                                 | Wave Trap  | 2 | Areva                                  | 24-06-2013 |
|  | BTPS -Hajipur<br>Ckt-2          | Line control &<br>relay panel with<br>distance<br>protection & O/C<br>E/F protection                 | 1 | ABB                                    | 24-06-2013 |
|  |                                 | 1- phase Circuit<br>Breaker  | 3 | Areva                                  | 24-06-2013 |
|  |                                 | 1-Ph CVT   | 3 | Areva                                  | 24-06-2013 |
|  |                                 | LA   | 3 | LAMCO<br>Industries Pvt.<br>Ltd.       | 24-06-2013 |
|  |                                 | 1-Ph Current<br>Transformer  | 3 | SCT Limited                            | 24-06-2013 |
|  |                                 | 3 Phase isolator<br>with/without<br>Earth switch   | 4 | Faraday<br>Electricals<br>Private Ltd. | 24-06-2013 |
|  |                                 | Wave Trap  | 2 | Areva                                  | 24-06-2013 |
|  | 100 MVA<br>Transformer No.<br>1 | Transformer<br>control and relay<br>Panel with<br>Differential<br>Protection & O/C<br>E/F protection | 1 | ABB                                    | 24-06-2013 |
|  |                                 | 1 phase Circuit<br>Breaker   | 3 | Areva                                  | 24-06-2013 |
|  |                                 | LA   | 3 | LAMCO<br>Industries Pvt.<br>Ltd.       | 24-06-2013 |
|  |                                 | 1-Ph Current<br>Transformer  | 3 | SCT Limited                            | 24-06-2013 |

  
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 Transmission Sub Division-2, Hajipur, Vaishali



|  |                                 |  |          |  |            |
|--|---------------------------------|--|----------|--|------------|
| (2.)<br>220/132 KV<br>Transformer<br>bay(HV) |                                 | 3 Phase isolator<br>with/without<br>Earth switch   | 4        | Faraday<br>Electricals<br>Private Ltd. | 24-06-2013 |
|  |                                 |  |          |  |            |
|  | 100 MVA<br>Transformer No.<br>2 | Transformer<br>control and relay<br>Panel with<br>Differential<br>Protection & O/C<br>E/F protection | 1        | ABB                                    | 24-06-2013 |
|  |                                 | 1-phase Circuit<br>Breaker   | 3        | Areva                                  | 24-06-2013 |
|  |                                 | LA   | 3        | LAMCO<br>Industries Pvt.<br>Ltd.       | 24-06-2013 |
|  |                                 | 1-Ph Current<br>Transformer  | 3        | SC Limited                             | 24-06-2013 |
|  |                                 | 3 Phase isolator<br>with/without<br>Earth switch   | 4        | Faraday<br>Electricals<br>Private Ltd. | 24-06-2013 |
|  |                                 |  |          |  |            |
|  | 100 MVA<br>Transformer No.<br>3 | Transformer<br>control and relay<br>Panel with<br>Differential<br>Protection & O/C<br>E/F protection | 1        | Siemens                                | 24-06-2013 |
|  |                                 | 3 phase Circuit<br>Breaker   | 1        | Siemens                                | 28-02-2017 |
|  |                                 | LA   | 3        | CGL                                    | 28-02-2017 |
|  |                                 | 1-Ph Current<br>Transformer  | 3        | Siemens                                | 28-02-2017 |
|  |                                 | 3 Phase isolator<br>with/without<br>Earth switch   | 4        | Siemens                                | 28-02-2017 |
|  |                                 |  |          |  |            |
|  | 100 MVA<br>Transformer No.<br>1 | Transformer<br>control and relay<br>Panel with<br>Differential<br>Protection & O/C<br>E/F protection | 1        | ABB                                    | 24-06-2013 |
| 3 phase Circuit<br>Breaker                   |                                 | 1  | Areva    | 24-06-2013                             |            |
| LA   |                                 | 3  | Lamco    | 24-06-2013                             |            |
| 1-Ph Current<br>Transformer                  |                                 | 3  | SCT Ltd. | 24-06-2013                             |            |

  
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|  |   |  |                                     |                                     |            |
|--|---|--|-------------------------------------|-------------------------------------|------------|
| (3.)<br>220/132 KV<br>Transformer<br>bay (LV)    |   | 3 Phase isolator<br>with/without<br>Earth switch   | 3                                   | Faraday<br>Electricals Pvt.<br>Ltd. | 24-06-2013 |
|  | 100 MVA<br>Transformer No.<br>2                 | Transformer<br>control and relay<br>Panel with<br>Differential<br>Protection & O/C<br>E/F protection | 1                                   | ABB                                 | 24-06-2013 |
|  |   | 3 phase Circuit<br>Breaker   | 1                                   | Areva                               | 24-06-2013 |
|  |   | LA   | 3                                   | Lamco                               | 24-06-2013 |
|  |   | 1-Ph Current<br>Transformer  | 3                                   | SCT Ltd.                            | 24-06-2013 |
|  |   | 3 Phase isolator<br>with/without<br>Earth switch   | 3                                   | Faraday<br>Electricals Pvt.<br>Ltd. | 24-06-2013 |
|  |   |  |                                     |                                     |            |
|  | 100 MVA<br>Transformer No.<br>3                 | Transformer<br>control and relay<br>Panel with<br>Differential<br>Protection & O/C<br>E/F protection | 1                                   | ABB                                 | 03-03-2017 |
|  |   | 3 phase Circuit<br>Breaker   | 1                                   | Areva                               | 03-03-2017 |
|  |   | LA   | 3                                   | CGL                                 | 03-03-2017 |
|  |   | 1-Ph Current<br>Transformer  | 3                                   | SCT Ltd.                            | 03-03-2017 |
|  |   | 3 Phase isolator<br>with/without<br>Earth switch   | 3                                   | Faraday<br>Electricals Pvt.<br>Ltd. | 03-03-2017 |
|  |   |  |                                     |                                     |            |
|  | (4.)<br>220 KV Bus<br>coupler bay               | Control & relay<br>panel with O/C<br>E/F protection  | 1                                   | ABB                                 | 24-06-2013 |
| 1- phase Circuit<br>Breaker                      |   | 3  | Areva                               | 24-06-2013                          |            |
| 1-Ph PT  |   | 6  | SCT Ltd.                            |                                     |            |
| 1-Ph Current<br>Transformer                      |   | 6  | SCT Ltd.                            | 24-06-2013                          |            |
| 3 Phase isolator<br>with/without<br>Earth switch |   | 4  | Faraday<br>Electricals Pvt.<br>Ltd. | 24-06-2013                          |            |
|  | Control & relay<br>panel with<br>Distance & O/C | 1  | ABB                                 | 24-06-2013                          |            |

  
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|   |   |  |   |                               |            |
|---|---|--|---|-------------------------------|------------|
| (5.)<br>220 KV<br>Transfer bus<br>coupler bay |   | E/F protection   |   |                               |            |
|   |   | 3 phase Circuit Breaker  | 3 | Areva                         | 24-06-2013 |
|   |   | 1-Ph Current Transformer   | 3 | SCT Ltd.                      | 24-06-2013 |
|   |   | 3 Phase isolator with/without Earth switch                               | 3 | Faraday Electricals Pvt. Ltd. | 24-06-2013 |
| (6.)<br>132 KV Line<br>bay                    | Hajipur(new)-<br>Hajipur (old)<br>Ckt 1 | Line control & relay panel with distance protection & O/C E/F protection | 1 | ABB                           | 24-06-2013 |
|   |   | 3 phase Circuit Breaker  | 1 | Areva                         | 24-06-2013 |
|   |   | 1-Ph CVT   | 3 | Areva                         | 24-06-2013 |
|   |   | LA   | 3 | Lamco                         | 24-06-2013 |
|   |   | 1-Ph Current Transformer   | 3 | SCT Ltd.                      | 24-06-2013 |
|   |   | 3 Phase isolator with/without Earth switch                               | 3 | Faraday Electricals Pvt. Ltd. | 24-06-2013 |
|   |   | Wave Trap  | 2 | Areva                         | 24-06-2013 |
|   | Hajipur(new)-<br>Hajipur (old)<br>Ckt 2 | Line control & relay panel with distance protection & O/C E/F protection | 1 | ABB                           | 24-06-2013 |
|   |   | 3 phase Circuit Breaker  | 1 | Areva                         | 24-06-2013 |
|   |   | 1-Ph CVT   | 3 | Areva                         | 24-06-2013 |
|   |   | LA   | 3 | Lamco                         | 24-06-2013 |
|   |   | 1-Ph Current Transformer   | 3 | SCT Ltd.                      | 24-06-2013 |
|   |   | 3 Phase isolator with/without Earth switch                               | 3 | Faraday Electricals Pvt. Ltd. |            |
|   |   | Wave trap  | 2 | Areva                         | 24-06-2013 |
|   |   |  |   |                               |            |
|   |   | Line control & relay panel with distance protection & O/C                | 1 | ABB                           | 24-06-2013 |

  
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 Transmission Sub Division-2 Hajipur (Vaishali)



|                                   |   |  |                               |                               |            |
|-----------------------------------|---|--|-------------------------------|-------------------------------|------------|
|                                   | Hajipur –<br>Samastipur   | E/F protection   |                               |                               |            |
|                                   |   | 3 phase Circuit Breaker  | 1                             | Areva                         | 24-06-2013 |
|                                   |   | 1-Ph CVT   | 3                             | Areva                         | 24-06-2013 |
|                                   |   | LA   | 3                             | Lamco                         | 24-06-2013 |
|                                   |   | 1-Ph Current Transformer   | 3                             | SCT Ltd.                      | 24-06-2013 |
|                                   |   | 3 Phase isolator with/without Earth switch                               | 3                             | Faraday Electricals Pvt. Ltd. | 24-06-2013 |
|                                   | Hajipur –<br>Jandaha  | Line control & relay panel with distance protection & O/C E/F protection | 1                             | ABB                           | 03-03-2017 |
|                                   |   | 3 phase Circuit Breaker  | 1                             | CGL                           | 03-03-2017 |
|                                   |   | 1-Ph CVT   | 3                             | Areva                         | 03-03-2017 |
|                                   |   | LA   | 3                             | Lamco                         | 03-03-2017 |
|                                   |   | 1-Ph Current Transformer   | 3                             | SCT Ltd.                      | 03-03-2017 |
|                                   |   | 3 Phase isolator with/without Earth switch                               | 3                             | JD Electricals                | 03-03-2017 |
| WaveTrap                          |   | 2  | Areva                         | 03-03-2017                    |            |
| (7.)<br>132 KV Bus<br>coupler bay | control & relay panel with distance protection & O/C E/F protection | 1  | ABB                           | 24-06-2013                    |            |
|                                   | 3 phase Circuit Breaker   | 1  | Areva                         | 24-06-2013                    |            |
|                                   | 1-Ph PT   | 3  | SCT Ltd.                      | 24-06-2013                    |            |
|                                   | 1-Ph Current Transformer  | 3  | SCT Ltd.                      | 24-06-2013                    |            |
|                                   | 3 Phase isolator with/without Earth switch                          | 3  | Faraday Electricals Pvt. Ltd. | 24-06-2013                    |            |

  
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### Other Substation Equipments-

| Sl. no | Equipment name                       | Quantity          | Make              | Date of commissioning       |            |
|--------|--------------------------------------|-------------------|-------------------|-----------------------------|------------|
| 1      | 100 MVA transformer no.1             | 1                 | IMP Power Ltd.    | 24-06-2013                  |            |
| 2      | 100 MVA transformer no.2             | 1                 | IMP Power Ltd.    | 24-06-2013                  |            |
| 3      | 100 MVA transformer no.3             | 1                 | Bharat Bijli      | 28-02-2017                  |            |
| 4      | Battery charger                      | 250 V             | 2                 | Caldyne automatics Ltd.     | 24-06-2013 |
|        |                                      | 48 V              | 2                 | Caldyne automatics Ltd.     | 24-06-2013 |
| 5      | ACDB                                 | 1                 | UNILEC            | 24-06-2013                  |            |
| 6      | DCDB                                 | 250 v             | 1                 | UNILEC                      | 24-06-2013 |
|        |                                      | 48 v              | 1                 | UNILEC                      | 24-06-2013 |
| 7      | Battery bank                         | 250 V             | 2                 | Exide Industries Ltd.       | 24-06-2013 |
|        |                                      | 48 V              | 2                 | Exide Industries Ltd.       | 24-06-2013 |
| 8      | DG set                               | 1                 | Jekson            | 24-06-2013                  |            |
| 9      | PLCC                                 | 1. Panel          | 9                 | BPL                         | 24-06-2013 |
|        |                                      | 2. Telephone      | 5                 | BPL                         | 24-06-2013 |
| 10     | Hydrant system with pipe arrangement | 1                 | Mehta & Associate | 24-06-2013                  |            |
| 11     | Fire fighting equipment              | 4.5 kg DCP        | 10                | Laxmi Fabricators           | 24-06-2013 |
|        |                                      | 4.5 kg CO2        | 10                | Nitin fire protection       | 24-06-2013 |
|        |                                      | 22.5 kg DCP       | 5                 | Kanadia Fyr Fyter Pvt. Ltd. | 24-06-2013 |
|        |                                      | 22.5 kg CO2       | 2                 | Kanadia Fyr Fyter Pvt. Ltd. | 24-06-2013 |
| 12     | Earthing rods                        | 18                | Beimco            | 24-06-2013                  |            |
| 13     | Testing equipments                   | As per Annexure 1 |                   |                             |            |

  
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 Transmission Sub Division-2 Hajipur, Nalanda



|    |               |                |   |                     |            |
|----|---------------|----------------|---|---------------------|------------|
| 14 | Safety gear   | Helmet         | 6 |                     |            |
|    |               | Boot           | 4 |                     |            |
|    |               | Hand<br>Gloves | 4 |                     |            |
| 15 | SST (630 KVA) |                | 2 | East India<br>Udyog | 24-06-2013 |

  
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**Annexure- 1 (List of Testing Equipments)**

| SL. NO. | DESCRIPTION OF EQUIPMENT   | MODEL           | MAKE       | SERIAL NUMBER    |
|---------|--|-----------------|------------|------------------|
| 1       | Oil Testing Machine(BDV Test Kit)<br>(2.5/4mm)-100KV Microprocessor based. | MOTS            | RE         | 9279135(P)112-13 |
| 2       | 5 KV Megger/Insulation Tester<br>Microprocessor                            | MD5060e         | Megabras   | MU 5206A         |
| 3       | 1000 V Megger/Insulation Tester<br>Microprocessor                          | RISHInsu 10     | Rishabh    | 121105           |
| 4       | 500 GPH oil filtration machine (complete set<br>with all accessories)      | 2000LPH         | CEE DEE    | CDVE/TOF/322     |
| 5       | Vacuum Pump  | SN-07531-65     | Air- Cadet | A12001896        |
| 6       | Circuit Breaker Test Kit   | HISAC Ultima    | SCOPE      | 3015.00 Z 153    |
| 7       | Karl Fisher Moisture test kit  | Matic III       | Veego      | 05/0612          |
| 8       | Digital Tong Tester 200 Ma 20A-200A  | KM 2008         | Kusam Meco | LDL1203035       |
| 9       | Digital Multimeter   | 5040            | Kusam Meco | 121010108        |
| 11      | SF <sub>6</sub> Gas Leakage Detector with all<br>accessories               | 3-001-3-R002    | Dilo       | 953              |
| 12      | SF <sub>6</sub> evacuating, filtering & drying                             | B-143-R01       | Dilo       | 0-15891.3        |
| 13      | Relay Operation Timer  | SCOT MUT        | SCOPE      | 2000.01 Z 158    |
| 14      | Selective Level Meter  | SLM620          | APLAB      | HO03TTE041102    |
| 15      | Selective Level Generator  | SLG620          | APLAB      | HO03TTE0312003   |
| 16      | Online DC Earth Fault Locator  | Digital DC 361P | TAURUS     | 7609             |
| 17      | Distance to Fault Locator Offline with<br>Signature Analysis               | MAX-3           | TAURUS     | 5758             |
| 18      | Protection Relay Test Set  | K68i            | KINGSINE   | 201001030        |

  
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Transmission Sub-Division-2 Hajipur, Vaishali.