

BIHAR STATE POWER TRANSMISSION COMPANY LIMITED

(Reg. Office: 4th Floor, Vidyut Bhawan, Bailey Road, Patna-800021) (CIN- U40102BR2012SGC018889) (Department of Power Management Cell)

BSPTCL has revised the Business Plan, the copy of the same is attached he rewith for ready reference also the revised para-wise in respect of earlier reply vide letter no.- 379 dated - 20/12/2018 regarding Business Plan (BP) for FY 2019-20 to FY 2021-22 submitted to Hon'ble BERC vide Letter No.- 330 dated - 02.11.2018

1. (a) The mentioned are indicated as below with units:

S. No. of 3.5.1 of BP	Units of Amount
11 to 13	In Crore
29 to 31	In Crore
32	In Rupees
39	In Crore
53 to 60	In Rupees
70 to 74	In Crore
75 to 77	In Rupees
78 to 80	In Crore

- **(b)** At Sl. No.- 7 & 22 of 3.6 of Business plan claimed twice which may treated as same and Sl. No.- 22 may be deleted.
- (c) Also at Sl. No.- 65 & 66 of 3.5.1 of Business plan : It is not a type of repetition, these are of two different transmission lines:

S.No.	Name of Element (Transmission line,	Commissioning	COST(Da)	Scheme
	Substation, Bay Extension, etc.)	Date/LDOC)	COST(Rs.)	
	Procurement and Construction of 33KV line			
65	bays in form of Indoor VCB panels at 14	30.11.2018	33.02 Crore	ADB
05	nos. of AIS Sub-station under	30.11.2018	33.02 CIOIE	
	Transmission Cirde Gaya			
	Procurement and Construction of 33KV line			
66	bays in form of Indoor VCB panels at 14	30.11.2018	40.25 Crore	ADB
	nos. of AIS Sub-station under	30.11.2018	40.23 CIOIE	ADB
	Transmission Cirde Dehri –On-Sone			

(d) Mode of Finance of all the projects are tabulated as below:

Sl. No.	Scheme	Mode of Finance
1	State Plan New Scheme	80% Loan & 20% Equity
2	State Plan Old Scheme	100% Equity
3	ADB	86% Loan & 14% Equity
4	BRGF	100% Grant and treated as equity
5	PSDF	90% Grant treated as equity and 10% IRF
6	IRF	100% Equity
7	O&M Expenditure	100% Equity

S.No. of 3.6 of	Scheme	Mode of Finance
Business Plan		
24	State Plan	80% Loan & 20% Equity
42	State Plan	80% Loan & 20% Equity
47	PSDF	90% Grant & 10% Equity
49	IRF	100% IRF (Equity)
51	State Plan/ Old Scheme	100% Equity

Details regarding S.No. - 3.5.1 of Business Plan

Sl. No.	Name of Element (Transmission line, Substation, Bay Extension, etc.)	Scheme	Mode of Finance
1	Construction of 220KV D/C transmission line from BTPS to Hajipur NIT No 95/BR/BSPTCL/2014	BRGF Phase- III(N-1)	100% Grant, treated as Equity
2	Construction of 132/33KV GSS Maharajganj NIT No93/PR/BSPTCL/2014	State Plan Old Scheme	100% Equity
3	Construction of 132/33KV GSS Narkatiyaganj NIT No 93/PR/BSPTCL/2014	State Plan Old Scheme	100% Equity
4	Construction of 132/33KV GSS Hathua NIT No93/PR/BSPTCL/2014	State Plan Old Scheme	100% Equity
5	Construction of 132/33KV GSS Areraj NIT No 93/PR/BSPTCL/2014	State Plan Old Scheme	100% Equity
6	Construction of 132/33KV GSS Chakiya NIT No62/PR/BSPTCL/2014 A	State Plan Old Scheme	100% Equity
7	Construction of 132/33KV GSS Jhanjharpur NIT No62/PR/BSPTCL/2014 A	State Plan Old Scheme	100% Equity
8	Construction of 132/33KV GSS Pakridayal NIT No62/PR/BSPTCL	State Plan Old Scheme	100% Equity
9	Construction of 132/33KV GSS Siwan-New NIT No85/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity
10	Construction of Loop In Loop Out arrangement of 132 KV Tx. line Madhepura- Sonebarsa 132 KV S/C Tx.line on D/C Tower at Saharsa Existing (CKM-40KM) under Special Plan of Phase-III against NIT 38/2014.	BRGF Phase- III(N-1)	100% Grant, treated as Equity
11	Construction of 132/33 KV, 2 x20MVA Nirmali, 2 x 20 MVA, 2 x 20 MVA Banmankhi, 2 x 20 MVA Manihari and 2 x 10 MVA Triveniganj against NIT 63/2014(Package B)	State Plan Old Scheme	100% Equity
12	Construction of 2 x20MVA, 132/33KV GSS Tarapur, Teghra and Simri Bakhtiyarpur against NIT 91/2014.	State Plan Old Scheme	100% Equity

13	Construction of 2 x50MVA, 132/33KV GSS Araria, Barsoi, Baisi and Dhamdaha AGAINST NIT 92/2014.	State Plan Old Scheme	100% Equity
14	R&M of 132/33KV GSS at Kishanganj, Jamalpur and Purnea against NIT no. 07/PR/BSPTCL/2016	State Plan Old Scheme	100% Equity
15	Construction of 3X50 MVA, 132/33kV Grid Sub- Station, Jagdishpur (Bhagalpur New) and Korha(Katihar)against NIT no. 10 /PR/BSPTCL/2016	State Plan Old Scheme	100% Equity
16	Strengthening of 132 KV & 33 KV main bus and transfer bus by double moose &quad moose respectively of different GSS of BSPTCL NIT No24/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity
17	Second circuit stringing of Existing 03 Nos. of 132 kV Double Circuit Single Strung Transmission Lines under Transmission Circle, Purnea on Turnkey Basis against NIT No. 76/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity
18	Construction of 132 KV D/C T/L from Motihari (400 KV) to Motihari (BSPTCL) NIT 403/PR/BSPTCL/2013 Pkg A	BRGF Phase- III(N-1)	100% Grant, treated as Equity
19	Construction of 132 KV D/C T/L from Motihari (400 KV) to Bettiah NIT 403/PR/BSPTCL/2013 Pkg B	BRGF Phase- III(N-1)	100% Grant, treated as Equity
20	Construction of 132 KV D/C T/L from Motihari (400 KV) to Raxaul NIT 403/PR/BSPTCL/2013 Pkg C	BRGF Phase- III(N-1)	100% Grant, treated as Equity
21	construction of two numbers of 132 KV Line bays each at Bettiah (132/33 KV) GSS and Raxaul (132/33 KV) GSS NIT 403/PR/BSPTCL/2013 Pkg D	BRGF Phase- III(N-1)	100% Grant, treated as Equity
22	(i) construction of 132 KV S/C transmission lines on D/C Tower from 132/33 KV Dhaka GSS to upcoming Pakridayal GSS (ii) Construction of New 132 KV S/C Transmission line on D/C Tower from 220/132 KV Motipur GSS to upcoming Chakiya GSS (iii) LILO of 132 KV S/C of Jainagar-Phulparas Transmission Line at upcoming Jhanjharpur GSS NIT No 82/PR/BSPTCL/2014	State Plan Old Scheme	100% Equity
23	Construction of 132KV D/C Udakishanganj-Sonebarsa T/L and 132KV D/C Kusheshwarsthan- Sonebarsa T/L against NIT No. 16/PR/BSPTCL/2014	BRGF Phase- III(N-1)	100% Grant, treated as Equity
24	Construction of 220KV D/C Transmission line Kishanganj (New) – Kishanganj (PGCIL) &132 KV D/C T.L. Kishanganj (New) – Kishanganj (existing GSS) against NIT No. 58/PR/BSPTCL/2014	BRGF (Kishanganj Project)	100% Grant, treated as Equity
25	Construction of 6 nos of 132/33KV Transformer Bay at Madhubani, Muzaffarpur, Dalsingsarai, Ramnagar, Hajipur and Jandaha NIT No 8/PR/BSPTCL/2014	BRGF (Kishanganj Project)	100% Grant, treated as Equity
26	Construction of 220 KV Kishanganj New- Madhepura D/C Tx. Line NIT No 02/PR/BSPTCL/2015	BRGF (Kishanganj Project)	100% Grant, treated as Equity

27	Construction of 220 KV (D/C) Line between Madhepura to Laukhi with AL-59 Conductor(75Km) NIT No 03/PR/BSPTCL/2015	BRGF (Kishanganj Project)	100% Grant, treated as Equity
28	Construction of 220 KV Purnea (PG) – Begusarai D/C Tx. Line NIT No 27/PR/BSPTCL/2015	RSVT & State Plan	100% Equity
29	132 KV LILO T/l on one of the CKT of 132 KV Betia-Dhanha to Ramanagar GSS against NIT No. 22/PR/BSPTCL/2015	BRGF (N-1)	100% Grant, treated as Equity
30	Construction of 3x50MVA, 132/33KV GSS Raghopur against NIT 30/PR/BSPTCL/2017.	State Plan Old Scheme	100% Equity
31	Construction of LILO of one circuit of 132KV Laukahi- Supaul Transmission Line at 132/33 KV GSS Raghopur against NIT No. 31/PR/BSPTCL/2017	State Plan Old Scheme	100% Equity
32	Construction of 132KV S/C Transmission line on D/C Tower between 132/33KV GSS Rosera and Hasanpur Sugar Mill along-with 01 no. 132KV line bay at 132/33KV GSS Rosera against NIT No15/PR/BSPTCL/2017	IRF	100% Equity
33	Construction of 8 Nos. 132KV line bays at Pandaul- 01Nos., Madhubani-02Nos, Jainagar-02, Phulparas- 01Nos, Ekma-01Nos and Kusheshwarsthan-01Nos under state plan against NIT No. 04/PR/BSPTCL/2016	State Plan Old Scheme	100% Equity
34	Construction of 02 nos. 132KV line bays each at 132/33KV GSS SKMCH & Sitamarhi under Special Plan/BRGF, Phase-III,Part-I against NIT No. 07/PR/BSPTCL/2016	BRGF Phase- III(N-1)	100% Grant, treated as Equity
35	Construction of New 132 KV S/C Transmission Line on D/C Tower from existing Kuseshwarsthan GSS to Benipur GSS (Line length-37 Km), construction of New 132 KV S/C Transmission Line on D/C Tower from 220/132 KV Samastipur GSS to Upcoming Shahpurpatori GSS (Line Length- 31 CKM), LILO of 132 KV S/C of Muzaffarpur –Sitamarhi at Belsand GSS under State Plan on turnkey basis against NIT No81/PR/BSPTCL/2014	State Plan Old Scheme	100% Equity
36	Construction of 132/33 KV Grid Sub-station, Belsand (2X10MVA), Shahpur Patori (2X20MVA) and Benipur (2X10MVA), NIT-62/BSPTCL/2014 Pkg-B under state plan on turnkey basis against NIT No62/PR/BSPTCL/2014 Pkg-B	State Plan Old Scheme	100% Equity
37	Construction of 2 x160+3x50 MVA GSS Musahari(New) NIT No 477/PR/BSPTCL/2013	BRGF Phase- III(N-1)	100% Grant, treated as Equity
38	Construction of 220 KV & 132 KV D/C Transmission line for evacuation of power from upcoming Motipur GSS NIT NO 01/PR/BSPTCL/2014-PKG-A	BRGF Phase- III(N-1)	100% Grant, treated as Equity

39	Construction of (i) 220KV D/C Line from Darbhanga 400/200 KV GSS to (i) 220KV D/C Line from Darbhanga 400/200 KV GSS to to Laukahi (new)GSS (ii) 220KV D/C Line from Laukahi(new) GSS to Supaul (existing) Pkg-'D' NIT No 15/PR/BSPTCL/2014 - PKG-D	BRGF Phase- III(N-1)	100% Grant, treated as Equity
40	Construction of 220 KV & 132 KV D/C Transmission line for evacuation of power from upcoming Musahari GSS NIT No 01/PR/BSPTCL/2014-PKG-D	BRGF Phase- III(N-1)	100% Grant, treated as Equity
41	Construction of 220 /132 /33 kV Motipur GSS NIT No24/PR/BSPTCL/2014	BRGF Phase- III(N-1)	100% Grant, treated as Equity
42	Construction of 2 x160+2x50 MVA ,220/132/33KV GSS Laukahi NIT No 33/PR/BSPTCL/2014	BRGF Phase- III(N-1)	100% Grand treated as Equity
43	Construction of 132/33kV GSS at Manjhaul, Ballia and Bakhari against NIT-63/PR/BSPTCL/2014, Package-(A)	State Plan Old Scheme	100% Equity
44	Construction of 132KV Transmission lines connecting the revenue GSS Bakhri, Ballia, Manjhaul, Nirmali, Triveniganj, Banmankhi, Manihari and Piro against NIT No. 35/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity
45	Construction of 220/132/33KV GSS Kishanganj (new) with bay extensions against NIT No. 03/PR/BSPTCL/2014	BRGF (Kishanganj Project)	100% Grant, treated as Equity
46	Capacity augmentation of 220/132/33 kV & 132/33 kV Grid Substation Madhepura, Naugachia, Vaishali, Gangwara, Jamui, Ara and Bihta NIT No 23/PKG C-1/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
47	Procurement and construction of 33 KV line bays in form of Indoor VCB panels at 10 nos. of AIS sub-station under transmission circle, Purnea NIT No 25/PKG E-1/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
48	Procurement and construction of 33 KV line bays in form of Indoor VCB panels at 21 nos. of AIS sub-station under transmission circle, MuzaffarpurNIT No 26/PKG F- 1/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
49	Procurement and construction of 33 KV line bays in form of Indoor VCB panels at 08 nos. of AIS sub-station under transmission circle, Biharsharif NIT No 29/PKG I- 1/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
50	Construction of 220 KV Bihta(new) -Sipara(Patna) D/C transmission line ,220 KV Bihta(new)-Bihta(existing) D/c Transmission line (charged at 132 KV) and 33 KV down linking lines from Bihta(new) 220/132/33 KV GSS on tunkey basis. NIT No 183/PR/BSPTCL/2013	State Plan Old Scheme	100% Equity
51	Renovation & Up gradation of Protection and Control Systems of 220/132KV Grid Substation at Biharsharif, Fatuha, Bodhgaya, Dehri On Sone, Khagaul and 132/33KV Grid Substation Kataiya on turnkey basis NIT No 61/PR/BSPTCL/2015	PSDF	90% Grant & 10% IRF

52	Second circuit stringing of existing 04 nos of 132KV Double circuit Single strung transmission line:- 1) 132KV Biharsharif-Ekangarsarai- Hulasganj(Except LILO point to Ekangarsasari)(48.14CKM) 2)132KV BIharsharif- Nawada(48.89CKM) 3)132KV BIharsharif- Sheikhpura(38.78CKM) 4)132KV Jamui- sheikhpura(51.9CKM) NIT NO 74/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity
53	Construction of 08 nos. 132 KV Line bays each at -Belaganj 01 no., Hulasganj-01 no., Jehanabad -01 no., Tekari-02 no., Ataula-01 no., Chandauti-01 no., Nawada-01 no. under Trans. Circle, Gaya for 2nd ckt. stringing of existing 132 KV DCSS trnamsission line against NIT No01/PR/BSPTCL/16	State Plan Old Scheme	100% Equity
54	Construction of 132KV S/C Transmission Line for Solar PV Project of M/s Alfa Infraprop Pvt. Ltd. at Bhagaura from 132KV GSS Rafiganj and Construction of 01 no. 132KV line bay at GSS Rafiganj against NIT No02/PR/BSPTCL/17	State Plan Old Scheme	100% Equity
55	Construction of 11 Nos. of line bays at Sherghati - 01,Imamganj -01, Sonenagar-02, Aurangaba-02, Ara-02, Jagdishpur-03 & 1 No. of T/F bay at Sherghati agaisnt NIT No68/PR/BSPTCL/14	BRGF Phase- III(N-1)	100% Grant treated as Equity
56	Second Circuit Stringing of Existing 03 Nos. of 132 KV Double Circuit Single Strung Transmission Line: i) GSS Belagunj to tapping point of L-32 & L-33 Trans. Line 2.5 CKM ii)132 KV Gaya-Tekari and 132 KV Tekari-Goh 51.8 CKM iii)132 KV Jehanabad-Ataula (Karpi) 22.57 CKM Under Transmission Circle Gaya on Turnkey Basis under State Plan on FIRM prices against NIT No72/PR/BSPTCL/15	State Plan Old Scheme	100% Equity
57	Construction of 3x50MVA, 132/33KV GSS Ramgarh (Kaimur dist.) and Warislaiganj (Nawada Dist.) on turnkey basis against NIT No84/PR/BSPTCl/15	State Plan Old Scheme	100% Equity
58	Procurement and Construction of 33KV line bays in form of Indoor VCB panels at 06 nos. of AIS Substation under Transmission Circle Bhagalpur against 24/Package D-1/BSPTCL/ADB/16	ADB	86% Loan & 14% Equity
59	Procurement and Construction for Re-conductoring of 06 nos.132KV Transmission lines against 31/Package K-1/BSPTCL/ADB/16	ADB	86% Loan & 14% Equity
60	Procurement and Construction for Re-conductoring of 06 nos.132KV Transmission lines against 33/Package M-1/BSPTCL/ADB/16	ADB	86% Loan & 14% Equity

61	i) LILO of one ckt. At north of muthani railway station from 132KV D/C Pusouli (New) – Mohania Trans. Line to proposed 3x50 MV Ramgarh GSS (BSPTCL of route length 20Km. ii) LILO of 132KV Line Biharsharif – Nawada D/C Trans. Line – Warsaliganj (New) GSS of Route length 40Kms.iii) LILO of one Ckt. Of 132KV Chhapra – Siwan Transmission Line – Siwan (New) GSS near Darauli of route length 45Kms. Turnkey basis under Under State Plan. NIT No 83/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity
62	3X50 MVA,132/33 KV GSS Kerpa NIT NO 8/PR/BSPTCL/2017	State Plan New Scheme	80% Loan & 20% Equity
63	Construction of 132KV Lines and 33KV Lines NIT No 7/PKG I/BSEB/ADB/2010	ADB	86% Loan & 14% Equity
64	Construction of 220KV Lines NIT No 8/PKG J/BSEB/ADB/2010	ADB	86% Loan & 14% Equity
65	Procurement and Construction of 33KV line bays in form of Indoor VCB panels at 14 nos. of AIS Substation under Transmission Circle DOS GAYA NIT NO 27/PKG G-I/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
66	Procurement and Construction of 33KV line bays in form of Indoor VCB panels at 14 nos. of AIS Substation under Transmission Circle DOS NIT No28/PKG H-I/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
67	Construction of 33 kV Line Bays in form of Indoor GIS Panel at 11 nos. of AIS Substation under Patna District of BSPTCL on Turnkey Basis. NIT No 30/PKG J- I/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
68	Re-conductoring of 05 nos. 220KV & 132KV Transmission lines 254.99 Ckm NIT No 32/PKG L- I/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
69	Supply, Installation, Implementation, Configuration and Integration of ERP system in the BSPTCL NIT No35/PKG O-I/BSPTCL/ADB/2016	ADB	86% Loan & 14% Equity
70	Construction of LILO line on both circuits of 220 KV Begusarai-Purnea (PG)Transmission line at Khagariya new 220/132/33 KV GSS against NIT 12/PR/BSPTCL/2016 Pkg-A under state plan.	State Plan Old Scheme	100% Equity
71	construction of LILO line on both circuits of 132 KV BTPS-Purnea D/C Transmission line at Khagariya new 220/132/33 KV GSS (CKM-10 KM) against NIT 12/PR/BSPTCL/2016 Pkg-B under state plan.	State Plan Old Scheme	100% Equity
72	Construction of (2x160 + 2x50) MVA, 220/132/33KV Grid Sub-Station in KHAGARIA (New) under State Plan in between 220KV D/C Purnea (PG) – Begusarai Transmission Line. NIT No41/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity
73	construction of 132/33 KV 3x50 MVA Jamui and Banka GSS against NIT 86/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity

74	Construction of 132 KV Transmission Lines required for the connectivity of power to upcoming new 132/33 KV Grid Sub Stations at Korha (Distt- Katihar),Nathnagar (DisttBhagalpur) and Jamui(new) on turnkey basis under State Plan (R.L.=190 CKM) against NIT No87/PR/BSPTCL/2015	State Plan Old Scheme	100% Equity
75	Construction of 132KV D/C Sonenagar (New)- Aurangabad Transmission Line. NIT No 59/PKG- B/PR/BSPTCL/2014	BRGF Phase- III(N-1)	100% Grant, treated as Equity
76	Construction of 132KV D/C Ara-Jagdishpur Transmission Line. NIT No 59/PKG- C/PR/BSPTCL/2014	BRGF Phase- III(N-1)	100% Grant, treated as Equity
77	Work of construction of 06 nos. of 132 KV D/C towers from Ara (PG) to tower loc. No. 1 with ACSR Panther Conductor for connectivity of 2nd circuit of 132 KV D/C Ara (PG)- Jagdishpur Transmission line on turnkey basis. NIT No 19/PR/BSPTCL/2017	BRGF Phase- III(N-1)	100% Grant, treated as Equity
78	Replacement of 23 nos. 50 MVA and 01 no 20 MVA transformer by 24 nos. 132/33 KV, 80 MVA transformer along with associated bay work in existing GSS of Patna NIT No 34/PR/BSPTCL/2016	State Plan Old Scheme	100% Equity
79	Construction of (2X160 MVA+2X50 MVA),220/132/33 KV GSS at Bihta(Patna) & associated 220,132 & 33 kv bays extension at remote end on turnkey basis NIT No62/PR/BSPTCL/2013	State Plan Old Scheme	100% Equity
80	Construction of 132 KV D/C Transmission Line between 220/132/33 KV Bihta (New) GSS and 132/33KV Upcoming Paliganj GSS NIT No24/PR/BSPTCl/2016	State Plan Old Scheme	100% Equity

Details regarding S.No. - 3.6 of Business Plan

SI. No	Name of Element (Transmission line, Substation, Bay Extension, etc.)	Mode of Finance
1	Construction of (2x160MVA+3x50MVA) 220/132/33 KV GSS, Tajpur(with SAS)(District-Samastipur) and Residential Quarters (Additional scope) under State Plan on turnkey basis against NIT No34/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
2	Augmentation of existing 132/33 KV GSS Ekma (1x20MVA + 1x50MVA) by 3x50MVA capacity against NIT No36/PR/BSPTCL/2018	State Plan 80% from Ioan + 20% equity from GoB.
3	Construction of 132/33KV (2X50 MVA) GSSat Palasi (Dist. Araria) on tumkey basis. NIT No37/PR/BSPTCL/18	State Plan 80% from loan + 20% equity from GoB.
4	Construction of 220/132/33 KV (2X160+3x50MVA) GSS at Garaul (Dist. Vaishali) on turnkey basis NIT No 39/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
5	Construction of (2x200 MVA+3x50 MVA) 220/132/33 KV GSS, Raxaul (District-East Champaran) complete with SAS and Residential Quarters under State Plan on turnkey basiSagainst NIT No. 40/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.

6	Capacity augmentation of GSS Hajipur, Gopalganj & Darbhanga by replacement of power transformer against NIT No46/PR/BSPTCL/2018	State Plan 80% from Ioan + 20% equity from GoB.
7	Re-conductoring of following transmission lines with HTLS (equivalent to Panther) except GAP conductor on Turnkey Basis as detailed below: - 1. 132 KV S/C Kahalgaon (BSPTCL)- Kahalgaon (NTPC) trans. Line of route length 7 Km. 2. 132 KV S/C Kahalgaon (BSPTCL)- Sabour trans. Line of route length 27 Km. NIT	State Plan 80% from loan + 20% equity from GoB.
8	No113/PR/BSPTCI/2018 Re-conductoring of Barauni TPS-Begusarai 132 KV D/c Transmission lines with HTLS Conductor (Capacity -240 MVA, 1050A) (12 RKM).NIT No 112/PR/BSPTCI/2018	State Plan 80% from loan + 20% equity from GoB.
9	Construction of 132 KV transmission line with HTLS (equivalent to Panther) conductor on turnkey basis from 132 KV GSS Phulparas to 220/132 KV GSS Laukahi (CKM-25 KM). NIT No. 111/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
10	Construction of following associated 220KV & 132KV D/C Transmission Lines of 220/132/33KV GSS Asthawan (Dist. Nalanda) on Turnkey Basis:- 1. Construction of 220 KV D/C Transmission line from Sheikhopursarai(BGCL) to 220/132/33 KV GSS Asthawan (Line Length- 20)RKM 2. Construction of 220 KV D/C Transmission line from 220/132/33 KV GSS Biharsharif to 220/132/33 KV GSS Asthawan (Line Length - 20 RKM). 3. Construction of 132 KV D/C Transmission line from 220/132/33 KV GSS Asthawan to 132/33 KV GSS Barh (Line Length - 40 RKM). 4. Construction of 132 KV D/C Transmission line from 220/132/33 KV GSS Asthawan to 132/33 KV GSS Rajgir (Line Length - 40 RKM). 5. Construction of 132 KV D/C Transmission line from 220/132/33 KV GSS Asthawan to 132/33 KV GSS Rajgir (Line Length - 40 RKM). 5. Construction of 132 KV D/C Transmission line from 220/132/33 KV GSS Asthawan to 132/33 KV GSS Nalanda (Line Length - 30 RKM).NIT No58/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
11	Construction of line bays at various Grid substations on Turnkey Basis under state plan:- i. 02 Nos. 132KV line bays at GSS Hamaut, ii. 02 Nos. 132KV line bays at GSS Baripahari NIT No83/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
12	Construction of 132 KV D/C Bakhtiyarpur (New) to Harnaut (BSPTCL) Transmission Line with ACSR Panther Conductor (Line Length - 15 RKM) and Construction of 132 KV D/C Bakhtiyarpur (New) to Baripahari (BSPTCL) Transmission Line with ACSR Panther Conductor (Line Length - 38 RKM) understate plan [80:20] NIT No78/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
13	Construction of 220kV D/c Pusauli (PG)- Sahpuri LILO Karmnasha (new) Transmission line with single moose (Line length-12 Ckm) on turnkey basis. Construction of 220kV D/c Pusauli (BSPTCL)- Karmnasha (New) Transmission Line with twin moose (Line length - 80 Ckm) on turnkey basis NIT No56/PR/BSPTCL/2018	State Plan 80% from loan +20% equity from GoB.
14	Construction of 220 KV D/C Saharsa (New)- Khagaria (New) Transmission line with ACSR Zebra Conductor (Approx Route Length-80KM) under State Plan against NIT No. 57/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
15	Re-conductoring of 132 KV Chandauti-Sonenagar S/C Trans. Line (L-30) and 132 KV Chandauti-Rafiganj-Sonenagar Trans. Line (L-31) with HTLS conductor (equivalent to Panther) on turnkey basis. (Route length- 78.21 KM) against NIT No109/PR/BSPTCL/18	State Plan 80% from Ioan + 20% equity from GoB.
16	Construction of 132 KV D/C Transmission Line for LILO of Chandauti-Sonenagar (L-30) 132 KV S/C Transmission Line and Chandauti-Rafiganj-Sonenagar (L-31) 132 KV S/C Transmission Line at GSS Chandauti (New) with HTLS Conductor (equivalent to Panther) conductor on turnkey basis. (Route length –46 KM).against NIT No110/PR/BSPTCL/18	State Plan 80% from loan + 20% equity from GoB.
17	1. Construction of 13 2KV LILO line on 132 KV S/C Dehri-Banjari Tr line to new GSS Kerpa (CKM-02 KM approx.) 2. Re-conductoring of existing 132 KV S/c Tr Line from Dehri to Banjari with HTLS (Equivalent to Panther conductor) 40 KM approx 3. Re-conductoring of existing 132 KV D/C Tr line from dehri to Sonenagar	State Plan 80% from loan + 20% equity from GoB.

	with HTLS (Equivalent to Panther conductor)29KMapprox. NIT No 108/PR/BSPTCL/2018	
18	Construction of LILO of one Ckt of 132 KV D/C Kishanganj (Old)-Forbisganj Transmission line at Palasi GSS with ACSR Panther Conductor (Line Length – 20 RKM)against NIT No69/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
19	Construction of 132Kv D/C Karmnasa (new)-Ramgarh Tr Line on single mooze. Construction of 132KV D/c Karmnasa (new)-Karmnasa Tr line on single mooze. NIT No55/PR/BSPTCI/2018	State Plan 80% from loan + 20% equity from GoB.
20	Construction of 220 KV D/C Sitamarhi (New)- Raxaul(New) Transmission Line with twin moose Conductor (Line Length - 120 RKM) on turnkey basis against NIT No60/PR/BSPTCL/2018.	State Plan 80% from loan +20% equity from GoB.
21	(i) Construction of 220 KV D/C Transmission Line from 220/132/33 KV Samastipur (New) to proposed 220/132/33 KV GSS Tajpur (Line Length -30 KM). (ii) Construction of 132KV D/C Shahpurpatori - Tajpur Transmission line with ACSR Panther Conductor (Line Length-40 KM). & (iii) Construction of 220 KV D/C Transmisin Line from proposed 220/132/33KV GSS Tajpur to proposed GSS Goraul (Line Length- 45 KM) against NIT No66/PR/BSPTCL/2018.	State Plan 80% from loan +20% equity from GoB.
22 (Repeat 7)	Re-conductoring of following transmission lines with HTLS (equivalent to Panther) except GAP conductor on Turnkey Basis as detailed below: - 1. 132 KV S/C Kahalgaon (BSPTCL)- Kahalgaon (NTPC) trans. Line of route length 7 Km. 2. 132 KV S/C Kahalgaon (BSPTCL)- Sabour trans. Line of route length 27 Km. NIT No 113/PR/BSPTCI/2018	State Plan 80% from loan + 20% equity from GoB.
23	Construction of following Transmission lines on Tumkey basis: i) 220 KV D/C Muzaffarpur(PG)-Garaul Transmission Line with ACSR Zebra Conductor (Line Length-20 RKM) ii) 132 KV D/C Garaul-MahnarTransmission Line with ACSR Panther Conductor (Line Length- 45 RKM) iii) LILO of both circuit of 132 KV D/C Muzaffarpur-vaishali Transmission Line at Garaul GSS with ACSR Panther Conductor (Line Length- 2x15 RKM) iv) 132 KV D/C Transmission line from GSS Chhapra(New)-Ekma with ACSR Panther Conductor (Line Length - 45 RKM) NIT No-50/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
24	Supply, installation, testing & commissioning of DLMS compliant 0.2s class ABT type energy meter with implementation of 100% metering, data acquisition and online ABT monitoring for the transmission & sub transmission substations up to 33 KV level, monthly energy accounting and service maintenance for a period of 5 years against NIT No. 37/PR/BSPTCL/2017.	State Plan
25	Construction of 220 KV D/c transmission line from 220/132/33 KV GSS Chapra (New), Amnour to 400/220 KV GSS Muzaffarpur (PG) with Zebra conductor (line length –Approx. 65 KM) & 132 KV D/c transmission line from 220/132/33 KV GSS Chapra (New), Amnour to 132/33 KV GSS Vaishali with Panther conductor (line length- Approx 40 KM on turnkey basis against NIT No51/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
26	Construction (i)132 KV D/C by making LILO arrangement of 132 KV DCSS Saharsa(OLD)- Banmankhi Transmission Line at Saharsa (New) GSS (line length approx. 20 RKM) (ii) 132 KV D/C by making LILO arrangement of 132 KV DCSS Saharsa(OLD)- Udakishanganj Transmission Line at Saharsa (New) GSS (line length approx. 15 RKM) and (iii) 132 KV D/C by making LILO arrangement of one circuit of Madhepura- Sonebarsa 132 KV D/C transmission line at Saharsa (New) GSS (line length approx. 35 RKM) against NIT No. 53/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
27	Construction of 220 KV D/C Saharsa(New)- Begusarai Transmission line with ACSR Zebra Conductor (Approx Route Length-100KM) under State Plan against NIT No. 54/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
28	Construction of 220 KV D/C Transmission Line from GSS Sitamarhi (New) to 220/132/33 KV GSS Motipur with Twin ACSR Moose Conductor (Approx Line	State Plan 80% from loan + 20% equity

	Length – 54RKM) and construction of 132 KV D/C Transmission Line from GSS Sitamarhi (New) to 132/33 KV GSS Runnisaidpur with single ACSR Moose Conductor (Approx Line Length – 17RKM) on turnkey basis against NIT No61/PR/BSPTCL/2018.	from GoB.
29	Construction of 220 KV D/C Transmission Line from 220/132/33 KV GSS Raxaul (New) to 220/132/33 KV GSS Gopalganj with Twin ACSR Moose Conductor (Approx Line Length – 80RKM) on Tumkey Basis against NIT No62/PR/BSPTCL/2018.	State Plan 80% from loan +20% equity from GoB.
30	Construction of 132 KV Line bays at various grid substation on turn key basis i)Construction of 132 KV line bays 02 nos. at GSS Laukahi. li)Construction of 132 KV line bays 02 nos. at GSS Phulparas. NIT No63/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
31	Construction of 02 Nos. 132 KV line bays each at GSS Muzaffarpur & Vaishali against NIT No65/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
32	Construction of (i) 02 Nos. of 220 KV Line bay at 220/132/33 KV GSS Kishanganj (New) with SAS (ii) 02 Nos. of 132 KV Line bay at 132/33 KV GSS Araria on turnkey basis against NIT No. 67/PR/BSPTCL/2018.	State Plan 80% from Ioan + 20% equity from GoB.
33	Construction of 220 KV D/C by making IILOarrangement of both circuits of 220 KV D/C Pumea(PG)-Begusarai Transmission line to 220/132/33 KV Korha GSS ON Turnkey basis against NIT No. 70/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
34	Construction of LILO of 132 KV DCSS Benipatti - Pupari Transmission line at Sitamarhi (new) and LILO of both ckt. of 132 KV Raxaul - Bettiah D/C Transmission line at Raxaul (new) with ACSR Panther Conductor. NIT No71/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
35	Second circuit stringing of 220 KV DCSS Darbhanga (400/220 KV) – Samastipur (New) Transmission Line (Line Length-47 KM) with ACSR Zebra Conductor on turnkey basis against NIT No.72/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
36	Construction of 02 Nos. 132 KV line bay at GSS Runnisaidpur & 02 Nos. 220 KV line bays at GSS Motipur against NIT No76/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
37	Supply, erection, testing and commissioning of Reliable communication and Data Acquisition for implementation of Integrated Communication system upto 132 KV in Bihar with AMC for 6 years under State Plan (20% Equity: 80%: Loan) against NIT No. 79/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
38	Construction of 4 Nos of 220 KV GIS bays and 4 Nos of 132 KV GIS Bays at 220/132/33 KV GSS Chhapra(new), Amnaur on turnkey basis. NIT No. 80/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
39	Construction of 2 Nos of 220 KV GIS Bays at 220/132/33 KV GSS Gopalganj on turnkey basis NIT No 82/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
40	Construction of 02 nos. 132KV Line bays each at 132/33KV Grid-Substation Mahnar & Shahpurpatori and Construction of 02nos. 220KV Line bays at 220/132/33KV GSS Samastipur(New) on Turnkey basis under State Plan against NIT No. 85/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
41	i) Construction of 220/132KV (2x100 MVA) GSS at Korha with SAS and Residential Quarters (ii) Addition/augmentation of 160MVA 220/132 Transformer at 220/132/33KV GSS Kishanganj (New) on turnkey basis under State Plan against NIT No. 86/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
42	Supply, erection, testing and commissioning of 28 Nos. of 132/33 KV 50 MVA Transformer including Transformer Foundations under State Plan against NIT No. 105/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB
43	Capacity augmentation by addition of 3rd 160 MVA, 220/132KV ICT along with associated transformer bays at Sonenagar (New) GSS on tumkey basis NIT No95/PR/BSPTCI/2018	State Plan 80% from loan + 20% equity from GoB.
44	Construction of 02 Nos. of 220KV Line bays at Begusarai GSS & 2 Nos. 220KV Line bays at Khagaria (New) GSS with SAS against NIT No. 68/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.

45	Re-conductoring of following transmission lines with HTLS (equivalent to Panther) conductor on turnkey basis:- (1) Circuit 1 & Circuit 2 of 132 KV Biharsharif – Baripahari D/C Transmission line. (CKM – 14 KM approx) (2) 132 KV S/C Sipara – Mithapur – Karbigahiya Transmission line (CKM – 7 KM approx) NIT No107/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
46	Reconductering of (i) 132 KV Muzaffarpur - SKMCH S/C Transmission line with HTLS conductor (line length 20.5 RKM) along with invovment 01 no. of Pile foundation. (ii) 132 KV Kanti (MTPS)- SKMCH D/C transmission line with HTLS conductor (line length 14,28 RKM). NIT No.114/PR/BSPTCL/2018	State Plan 80% from Ioan + 20% equity from GoB.
47	Installation of capacitor bank at 35 location for Bihar under PSDF Scheme against NIT No06/PR/BSPTCL/2017.	PSDF 90% Loan & 10% Equity
48	Capacity augmentation of different GSS by Addition /Replacement by 200 MVA Power Transformer alongwith associated bays on Tumkey Basis at GSS Khagaul & Sipara NIT No49/PR/BSPTCL2018	State Plan 80% from Ioan + 20% equity from GoB.
49	Procurement of 04 nos . 20 MVA, 132/33 KV Power Transformers against NIT No. 22/PR/BSPTCL/2018.	IRF & 100% Equity
50	Construction of 12 Nos of 132/33 KV Transformer Bays on tumkey basis under State Plan against NIT No. 106/PR/BSPTCL/2018.	State Plan 80% from Ioan + 20% equity from GoB.
51	Construction of (2x50) MVA, 132/33 KV GSS Paliganj (Dist Patna) and 02 Nos. 132 KV Line Bay Extension at remote end on tumkey basis NIT No 03/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
52	Construction of 220/132/33 KV, (2x160 + 3x50) MVA, GSS Asthawan (DistNalanda) including Residential Quarters with Construction of 02 Nos. 220 KV Line Bays & 06 Nos. 132 KV Line Bays at remote end on Turnkey Basis. NIT No41/PR/BSPTCI/2018	State Plan 80% from loan + 20% equity from GoB.
53	Construction of 220/132/33 KV (2x200 MVA + 3x50MVA) GSS Karmnasha (new) NIT No38/PR/BSPTCL/2018	State Plan 80% from Ioan + 20% equity from GoB.
54	Construction of (2x200 + 2x80) MVA, 220/132/33 KV Gas Insulated Sub-station at Digha (New) and 02 nos. 220 KV GIS line bays extension at GSS Sheikhopursarai (BGCL) on turnkey basis NIT No75/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
55	Construction of (2x160 MVA+3x50MVA) 220/132/33 KV GSS, Thakurganj (with SAS) (District-Kishanganj) and Residential Quarters under State Plan on turnkey basiS against NIT No. 35/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.
56	Construction of 02 nos 220KV GIS line bays each at 220/132/33KV GIS Sheikhpura(BGCL), Hatidah (GIS, BGCL) and 220KV Fatuha GSS(BSPTCL). NIT No84/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
57	Construction of (i) LILO of Barh-Patna 400 KV D/C (QUAD) Transmission line at Bakhtiyarpur (New) (10RKM) (ii) Bakhtiyarpur (New) - Sheikhpura (New) 220 KV D/C Transmission Line (51 RKM) (iii) Bakhtiyarpur (New) — Hathidah(New) 220 KV D/C Transmission Line (52 RKM) and (iv) Bakhtiyarpur (New) — Fathua (BSPTCL) 220 KV D/C Transmission Line (28 RKM) under state plan[80:20] against NIT No77/PR/BSPTC/18	State Plan 80% from loan + 20% equity from GoB.
58	Construction of 2x80 MVA, 132/33 KV Gas Insulated Sub-station at Board Colony Patna along with construction of 132 KV D/C transmission line with cable from 220/132/33 KV Gas Insulated Sub-station at Digha (new) to 132/33 KV Gas Insulated Sub-station at Board colony on cable(CKM – 14 KM) and construction of 132 KV S/C transmission line with cable from 220/132/33 KV Gas Insulated Sub-station at Digha (new) to Digha (Old) on cable (CKM – 1 KM) NIT No74/PR/BSPTCL/2018	State Plan 80% from loan + 20% equity from GoB.
59	Construction of 132 KV D/C Thakurganj- Araria Transmission Line with ACSR Panther Conductor (Line Length - 86 RKM) and Construction of 220 KV D/C Kishanganj (New)- Thakurganj Transmission Line with ACSR Zebra Conductor (Line Length - 52 RKM) under state plan[80:20]against NIT No. 52/PR/BSPTCL/2018.	State Plan 80% from loan + 20% equity from GoB.

	Construction o f	(2x500-	+2x160)	MVA 4	400/220/132	KV	GIS Grid	Sub-	Station	State Plan
60	Bakhtiyarpur	· v	vith	SAS	under		tumkey		basis.	80% from loan + 20% equity
	NIT No. 73/PR/BSPTCL/2018.			from GoB.						
	Costruction of	220KV	D/C	Amnou	r (BGCL)	–Digł	na (GIS)	NIT	No	State Plan
61	64/PR/BSPT		D/C	AIIIIOU	(BGCL)	-Digi	ia (GI3)	INII	NO	80% from loan + 20% equity
	04/PK/B3P10	CI/2U18								from GoB.

(e) At Sl. No. 9 and 47 of Para 3.6 amounting to Rs. 42.69 Crore and 21.13 Crore respectively are tabulated as follows:

SI.	Name of Element	Commissi-	COST	Cost	Total project	Tent	ative Expe	nditures (Rs.	In Cr)
	(Transmission line, Substation, Bay Extension, etc.)	oning Date/LDOC)	(Rs. In Cr)	of the Land	cost including cost of the land	FY 2018- 19	FY 2019- 20	FY 2020- 21	FY 2021- 22
9	Construction of 132 KV transmission line with HTLS (equivalent to Panther) conductor on tumkey basis from 132 KV GSS Phulparas to 220/132 KV GSS Laukahi (CKM-25 KM).	FY-2020-21	42.69		42.69	4.269	25.614	12.807	-
47	Installation of capacitor bank at 35 location for Bihar under PSDF Scheme against NIT No 06/PR/BSPTCL/2017.	FY 2019-20	21.13		21.13	12.13	9.00	-	-

- (f) This is to submit that details of the upcoming projects amounting to Rs. 4667.67 Crore stated in the Para 3.6 and Rs. 4656.91 Crore stated in the Para 3.7 regarding addition to the gross fixed assets during the control period of the Business Plan has been again checked, and it has been found that there was a totaling mistake of Rs. 10.76 Crore (Sl. No. 32). After considering the same, the total amount comes to Rs. 4667.67 Crore (Annexure "X") for consideration by Hon'ble BERC
- (g) As pointed out by the Hon'ble Commission, it has been found on examination that a sum of Rs. 199.12 Crore needs to be considered for capitalization during the control period from the running projects which has been left by mistake. Accordingly, the same has been revised and shown in **Annexure** "X" for consideration by Hon'ble BERC.
- 2. BSPTCL is adding the capacity day by day to fulfill the requirement of Bihar to ensure 24x7 hrs of power supply and (N-1) Contingency for reliable power supply.
- (1) All the sanctioned estimate and Notification from Government of Bihar are enclosed as **Annexure I** (submitted vide letter No.- 379, dated 20/12/2018) and Performa for upcoming & ongoing projects are **Annexed as Annexure A and Annexure B for reference** (**Revised Annexure** A & B enclosed for reference).

- (2) Land position for all the sub-stations under upcoming projects of para 3.6 of Business Plan are under perpetual lease method under process.
- 3. (i) The projects with NIT No. of para 3.5.1 of business plan are tabulated as follows:

Sl. No.	Name of Element (Transmission line, Substation, Bay Extension, etc.)	NIT No.
1	Construction of 220KV D/C transmission line from BTPS to Hajipur	95/PR/BSPTCL/2014
2	Construction of 132/33KV GSS Maharajganj	93/PR/BSPTCL/2014
3	Construction of 132/33KV GSS Narkatiyaganj	93/PR/BSPTCL/2014
4	Construction of 132/33KV GSS Hathua	93/PR/BSPTCL/2014
5	Construction of 132/33KV GSS Areraj	93/PR/BSPTCL/2014
6	Construction of 132/33KV GSS Chakiya	62/PR/BSPTCL/2014 A
7	Construction of 132/33KV GSS Jhanjharpur	62/PR/BSPTCL/2014 A
8	Construction of 132/33KV GSS Pakridayal	62/PR/BSPTCL/2014 A
9	Construction of 132/33KV GSS Siwan-New	85/PR/BSPTCL/2015
16	Strengthening of 132 KV & 33 KV main bus and transfer bus by double moose &quad moose respectively of different GSS of BSPTCL	24/PR/BSPTCL/2015
25	Construction of 6 nos of 132/33KV Transformer Bay at Madhubani, Muzaffarpur, Dalsingsarai, Ramnagar, Hajipur and Jandaha	8/PR/BSPTCL/2014
26	Construction of 220 KV Kishanganj New- Madhepura D/C Tx. Line	02/PR/BSPTCL/2015
27	Construction of 220 KV (D/C) Line between Madhepura to Laukhi with AL-59 Conductor(75Km)	03/PR/BSPTCL/2015
28	Construction of 220 KV Purnea (PG) – Begusarai D/C Tx. Line	27/PR/BSPTCL/2015
37	Construction of 2 x160+3x50 MVA GSS Musahari(New)	477/PR/BSPTCL/2013
38	Construction of 220 KV & 132 KV D/C Transmission line for	01/PR/BSPTCL/2014-
	evacuation of power from upcoming Motipur GSS	PKG-A
39	Construction of (i) 220KV D/C Line from Darbhanga 400/200 KV GSS to (i) 220KV D/C Line from Darbhanga 400/200 KV GSS to to Laukahi (new)GSS (ii) 220KV D/C Line from Laukahi(new) GSS to Supaul (existing) Pkg-'D' GSS	15/PR/BSPTCL/2014- PKG-D
40	Construction of 220 KV & 132 KV D/C Transmission line for evacuation of power from upcoming Musahari GSS	01/PR/BSPTCL/2014- PKG-B
41	Construction of 220 /132 /33 kV Motipur GSS	24/PR/BSPTCL/2014
42	Construction of 2 x160+2x50 MVA ,220/132/33KV GSS Laukahi	33/PR/BSPTCL/2014
46	Capacity augmentation of 220/132/33 kV & 132/33 kV Grid Substation Madhepura, Naugachia, Vaishali, Gangwara, Jamui, Ara and Bihta	23/PKG C- 1/BSPTCL/ADB/2016
47	Procurement and construction of 33 KV line bays in form of Indoor VCB panels at 10 nos. of AIS sub-station under transmission circle, Purnea	25/PKG E- 1/BSPTCL/ADB/2016
48	Procurement and construction of 33 KV line bays in form of Indoor VCB panels at 21 nos. of AIS sub-station under transmission circle, Muzaffarpur	26/PKG F- 1/BSPTCL/ADB/2016
49	Procurement and construction of 33 KV line bays in form of Indoor VCB panels at 08 nos. of AIS sub-station under	29/PKG I- 1/BSPTCL/ADB/2016

	transmission circle, Biharsharif	
50	Construction of 220 KV Bihta(new) -Sipara(Patna) D/C transmission line ,220 KV Bihta(new)-Bihta(existing) D/c Transmission line (charged at 132 KV) and 33 Kv down linking lines from Bihta(new) 220/132/33 KV GSS on tunkey basis.	183/PR/BSPTCL/2013
51	Renovation & Up gradation of Protection and Control Systems of 220/132KV Grid Substation at Biharsharif, Fatuha, Bodhgaya, Dehri On Sone, Khagaul and 132/33KV Grid Substation Kataiya on turnkey basis	61/PR/BSPTCL/2015
52	Second circuit stringing of existing 04 nos of 132KV Double circuit Single strung transmission line:- 1) 132KV Biharsharif-Ekangarsarai- Hulasganj(Except LILO point to Ekangarsasari) (48.14CKM) 2)132KV BIharsharif- Nawada(48.89CKM) 3)132KV BIharsharif- Sheikhpura(38.78CKM) 4)132KV Jamui- sheikhpura(51.9CKM	74/PR/BSPTCL/2015
61	i) LILO of one ckt. At north of muthani railway station from 132KV D/C Pusouli (New) – Mohania Trans. Line to proposed 3x50 MV Ramgarh GSS (BSPTCL of route length 20Km. ii) LILO of 132KV Line Biharsharif – Nawada D/C Trans. Line – Warsaliganj (New) GSS of Route length 40Kms.iii) LILO of one Ckt. Of 132KV Chhapra – Siwan Transmission Line – Siwan (New) GSS near Darauli of route length 45Kms. Turnkey basis under Under State Plan.	83/PR/BSPTCL/2015
62	3X50 MVA,132/33 KV GSS Kerpa	8/PR/BSPTCL/2017
63	Construction of 132KV Lines and 33KV Lines	7/PKG 1/BSEB/ADB/2010
64	Construction of 220KV Lines	8/PKG J/BSEB/ADB/2010
65	Procurement and Construction of 33KV line bays in form of Indoor VCB panels at 13 nos. of AIS Sub-station under Transmission Circle DOS, GAYA	27/PKG G- I/BSPTCL/ADB/2016
66	Procurement and Construction of 33KV line bays in form of Indoor VCB panels at 14 nos. of AIS Sub-station under Transmission Circle DOS	28/PKG H- I/BSPTCL/ADB/2016
67	Construction of 33 kV Line Bays in form of Indoor GIS Panel at 11 nos. of AIS Substation under Patna District of BSPTCL on Turnkey Basis.	30/PKG J- I/BSPTCL/ADB/2016
68	Re-conductoring of 05 nos. 220KV & 132KV Transmission lines 254.99 Ckm	32/PKG L- I/BSPTCL/ADB/2016
69	Supply, Installation, Implementation, Configuration and Integration of ERP system in the BSPTCL	35/PKG O- I/BSPTCL/ADB/2016
72	Construction of (2x160 + 2x50) MVA, 220/132/33KV Grid Sub-Station in KHAGARIA (New) under State Plan in between 220KV D/C Purnea (PG) – Begusarai Transmission Line.	41/PR/BSPTCL/2015
75	Construction of 132KV D/C Sonenagar (New)-Aurangabad Transmission Line.	59/PKG- B/PR/BSPTCL/2014
76	Construction of 132KV D/C Ara-Jagdishpur Transmission Line.	59/PKG- C/PR/BSPTCL/2014

77	Work of construction of 06 nos. of 132 KV D/C towers from Ara (PG) to tower loc. No. 1 with ACSR Panther Conductor for connectivity of 2nd circuit of 132 KV D/C Ara (PG)- Jagdishpur Transmission line on turnkey basis.	19/PR/BSPTCL/2017
78	Replacement of 23 nos. 50 MVA and 01 no 20 MVA transformer by 24 nos. 132/33 KV, 80 MVA transformer along with associated bay work in existing GSS of Patna	34/PR/BSPTCL/2016
79	Construction of (2X160 MVA+2X50 MVA),220/132/33 KV GSS at Bihta (Patna) & associated 220,132 & 33 kv bays extension at remote end on turnkey basis	62/PR/BSPTCL/2013

(ii) The project cost where it is written that with Entry Tax (ET) are with Entry Tax (ET) and the project cost where Entry Tax (ET) is not mentioned are without Entry Tax (ET).

4. For para 3.6 of the petition:

(i) The of the elements as described at S.No. 6, 42 and 49 is elaborated as follows:

S.No.	Name of Elements	Details of the e	lements	
6	Capacity augmentation of	Name of GSS	Existing	New Replacement
	GSS Hajipur, Gopalganj &	Hajipur	3x100 MVA	3x200 MVA
	Darbhanga by replacement of power transformer against	Gopalganj	3x100 MVA	3x200 MVA
	NIT No 46/PR/BSPTCL/2018	Darbhanga	2x160 MVA	2x200 MVA
42	Supply, erection, testing and commissioning of 28 Nos. of 132/33 kV 50 MVA Transformer including Transformer Foundations under state plan against NIT No. 105/PR/BSPTCL/2018	of 50 MVA Tr 20 MVA at Kochas. Dhal Bettia, Jandal Supaul, Chhap Raxaul, Lak Sonebarsa, Vaishali, Teht Jehanabad, Be are 34 No. Tran (b) Out of to mentioned in will be availab Transformers a	ansformer for add different GSS (a), Phoolparas, (a), Barh, Pupri, (a), Aurangabad, (b), Chisarai, Sasara (a), Banmanki, Malaganj, Benipatti, (a), 6 No. of 50 (b) of from the replact Patna.	nsaudhi, Shekhpura, Jamalpur in which o. of transformers MVA Transformers cement of 80 MVA
49	Procurement of 04 Nos. 20 MVA, 132/33 kV Power Transformers against NIT No 22/PR/BSPTCL/2018	of which 02 I Pakridayal GS	Nos. at Banipur	s to be installed out GSS & 02 Nos. at under construction

(ii) The details of CAPEX at Sl. No. 24 and 37: (a) Sl. No. 24 is related to Supply, installation, testing & commissioning of LDMS compliant 0.2s class ABT type energy meters with implementation of 100% metering, data acquisition and online ABT monitoring for the transmission & sub transmission substations up to 33 KV level, monthly energy accounting and service maintenance for a period of 5 years against NIT No. 37/PR/BSPTCL/2017.

- (b) **Sl. No. 37** is Supply, erection, testing and commissioning of Reliable communication and Data Acquisition for implementation of Integrated Communication system upto 132 KV in Bihar with AMC for 6 years under State Plan against NIT No. 79/PR/BSPTCL/2018 respectively are related to BSPTCL and has to be implemented by BSPTCL and not covered under SAMAST but, online metering after implementation of the these projects will be look after by SLDC for energy accounting purpose only
- 5. The hard copy of the study conducted for projecting infrastructure requirement is again annexed as **Annexure C.**
- 6. Copy of the cost estimates of each upcoming from GoB are Annexed as Annexure D (Submitted vide letter No.- 379, dated 20/12/2018).
- 7. Copy of the Annual Account is Annexed as **Annexure** E (Submitted vide letter No.- 379, dated -20/12/2018).
- 8. Month-wise details of State transmission Loss from April'18 to Oct'18, as per the Energy Accounting Book of SBPDCL

Month	Total Energy Available	Total Power Consumption	ST Loss	% ST Loss
April'18	23896,37,917	23026,06,089	870,31,828	3.64%
May'18	2621237911	2517157366	104080544.5	3.97%
June'18	2695818088	2574348614	121469474.1	4.50%
July'18	2743189172	2599930438	143258734.6	5.22%
Aug'18	2845413732	2695737865	149675867	5.26%
Sept'18	2797442378	2641287753	156154624.8	5.55%
Oct'18	160927,39,198	153310,68,125	7616,71,073	4.69%

- 9. The Supporting documents regarding Rate of Interest on Loan from State Government is Annexed as Annexure F (Submitted vide letter No.- 379, dated 20/12/2018).
- 10. In details of upcoming projects for capitalization given in the Para 3.6, Capital expenditure of Rs. 672.59 Crore for the F.Y. 2018-19 has been proposed separately. As such, this could not be shown in the control period as the control period has been considered from the F.Y. 2019-20 onward. Due to this, the aforesaid difference is reflected.

As regards, the ratio of debt equity i.e. 80:20 is concerned, this is to submit that this is the decision of the State Government regarding mode of funding.

11. BSPTCL has calculated the O&M expenditure on the basis of past years approved O&M expenditure and actual amount will be claimed at the time of the truing-up of the tariff foe each financial year.

The O&M expenses for the previous four 4 years approved by the Hon'ble Commission is tabulated as follows:

Financial Year	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
O&M Expenses	141.52	158.59	182.13	209.81

Bihar State Power Transmission Company Limited

Annexure "X"

Statement of Capital Expenditure for Upcoming Projects with Capitalisation

S. No	Particulars	F.Y-2019-20	F.Y-2020-21	F.Y-2021-22
	Addition to FA as per Business			
1	Plan	1,052.96	2,007.58	1,596.37
2	Less: Double Entry at Si No-7 against NIT 113/PR/BSPTC/2018		19.43	
3	Add: Entry Not Considered earlier Si No-32,	10.77		
4	Summation Mistake, Si No-9 , NIT No- 111/PR/BSPTCL/2018		2.30	
5	Capitalisation from Running Projects	199.12		
	Revised Capitalisation	1,262.85	1,990.45	1,596.37