Annexure-9

11KV NETWORK INFRASTRUCTURE DETAILS

Sl. No.	*Circle*	*Division*	*Name of 11kV Feeder*	*Proposal Details*	*Costing in Cr*	*Annexure No.*
1	BBSR-1	BCDD-1	OUAT Feeder	Bifurcation of 11kV OUAT Feeder for mitigation of Overload	0.73	Annexure-9.1
2	BBSR-1	BED	Atala Feeder	Bifurcation of 11kV Atala Feeder for mitigation of Overload	2.26	Annexure-9.2
3	BBSR-1	BED	Trinath Bazar	Bifurcation of 11kV Trinath Bazar Feeder for mitigation of Overload	3.03	Annexure-9.3
4	BBSR-1	BED	Rasulgarh	Bifurcation of 11kV Rasulgarh Feeder for mitigation of Overload	2.28	Annexure-9.4
5	BBSR-1	BED	Mancheswar Feeder-3	Bifurcation of 11kV Mancheswar Feeder-3 for mitigation of Overload	0.96	Annexure-9.5
6	BBSR-1	BED	Rajarani Feeder	Bifurcation of 11kV Rajarani Feeder for mitigation of Overload	1.9	Annexure-9.6
7	BBSR-1	BED	Bhimtangi Lingaraj	Bifurcation of 11kV Bhimtangi Lingaraj Feeder for mitigation of Overload	1.17	Annexure-9.7
8	BBSR-1	BED	Goutam Nagar	Bifurcation of 11kV Goutam Nagar Feeder for mitigation of Overload	1.53	Annexure-9.8
9	BBSR-1	BED	Kalpana-1	Bifurcation of 11kV Kalpana-1 Feeder for mitigation of Overload	0.44	Annexure-9.9
10	BBSR-1	BCDD-2	Gajapati Nagar	Proposal for Bifurcation of 11kV Gajapati Nagar Feeder for mitigation of Overload	1.71	Annexure-9.10
11	BBSR-1	BCDD-2	Jaydev Vihar	Proposal for Bifurcation of 11kV Jaydev Vihar Feeder for mitigation of Overload	1.55	Annexure-9.11
12	BBSR-1	BCDD-2	IRC-1 Feeder	Proposal for Bifurcation of 11kV IRC-1 Feeder for mitigation of Overload	1.19	Annexure-9.12
13	BBSR-1	BCDD-2	IRC-II Feeder	Proposal for Bifurcation of 11kV IRC-II Feeder for mitigation of Overload	1.56	Annexure-9.13
14	BBSR-1	BCDD-2	PAL Heights	Proposal for Augmentaion of 11kV PAL Heights Feeder for mitigation of Overload	0.63	Annexure-9.14
15	BBSR-1	BCDD-2	Rental-1	Proposal for Bifurcation of 11kV Rental-1 Feeder for mitigation of Overload	1.19	Annexure-9.15
16	BBSR-1	BCDD-2	Baranga-1	Augmentation of existing 11kV Baranga-1 Feeder for mitigation of Overload	1.61	Annexure-9.16
17	BBSR-1	BCDD-2	Baranga-2	Proposal for Construction of 11KV new Feeder for bifurcation of load for mitigation of Overload	3.27	Annexure-9.17
18	BBSR-1	BCDD-2	Baramunda Housing Board	Proposal for Bifurcation of existing 11 KV Baramunda HB Feeder for mitigation of Overload	1.56	Annexure-9.18
19	BBSR-1	BCDD-2	Bharatpur	Proposal for Construction of 11KV new Feeder for bifurcation of load for mitigation of Overload	2.86	Annexure-9.19
20	BBSR-1	BCDD-2	DIST centre	Proposal for Construction of 11KV new Feeder for bifurcation of load for mitigation of Overload	1.19	Annexure-9.20
21	BBSR-1	BCDD-2	Gandamunda	Proposal for Bifurcation of existing 11 KV Gandamunda Feeder for mitigation of Overload	3.02	Annexure-9.21
22	BBSR-1	BCDD-2	HB-3 Feeder	Proposal for Bifurcation of existing 11 KV HB-3 Feeder for mitigation of Overload	2.37	Annexure-9.22
23	BBSR-1	BCDD-2	Housing Board	Augmentation of existing 11kV Housing Board Feeder for mitigation of Overload	0.29	Annexure-9.23
24	BBSR-1	BCDD-2	Jagamohan Nagar	Proposal for Bifurcation of existing 11 KV Jagamohan Nagar Feeder for mitigation of Overload	2.66	Annexure-9.24
25	BBSR-1	BCDD-2	Kujimahal	Proposal for Bifurcation of existing 11 KV Kujimahal Feeder for mitigation of Overload	5	Annexure-9.25
26	BBSR-1	BCDD-2	patharagadia	Augmentation of existing 11kV patharagadia Feeder for mitigation of Overload	2.2	Annexure-9.26
27	BBSR-1	BCDD-2	Sainik School	Proposal for Bifurcation of existing 11 KV Sainik School Feeder for mitigation of Overload	0.8	Annexure-9.27
28	BBSR-1	BCDD-2	satelite	Augmentation of existing 11kV satelite Feeder for mitigation of Overload	2.05	Annexure-9.28
29	BBSR-1	BCDD-2	Godibari	Augmentation of existing 11kV Godibari Feeder for mitigation of N-A1 issue	1.29	Annexure-9.29

30	BBSR-1	BCDD-2	Industry	Bifurcation of existing 11kV Industry Feeder for mitigation of overload	1.62	Annexure-9.30
31	BBSR-1	NED	Mangalapur-1	Proposal for Augmentation of 11kV Mangalapur-1 feeder for mitigation of Overload	0.68	Annexure-9.31
32	BBSR-1	NED	11kV Satyabhamapur	Proposal for Augmentation of 11kV Satyabhamapur feeder for mitigation of Overload	0.69	Annexure-9.32
33	BBSR-1	NED	OMFED	Proposal for Augmentation of 11kV OMFED feeder for mitigation of Overload	0.13	Annexure-9.33
34	BBSR-1	NED	Kakatpur-2	Proposal for Augmentation of 11kV Kakatpur-2 feeder and also construction of 1.5 CKM interlinking line with 11kv Kakatpur-1 feederfor mitigation of Overload	1.95	Annexure-9.34
35	BBSR-1	NED	Charichhaka	Mitigation of Feeder Overloading issue of 11kv Charichhaka Feeder	1.8	Annexure-9.35
36	BBSR-2	PED	Swargadwar-II	Proposal for Bifurcation of existing 11 KV Swargadwar-II Feeder load emanating from 33/11 KV Kacheri PSS by constructing 1 No. of new feeder from 33/11 KV Kacheri PSS for mitigation of Overload	1.81	Annexure-9.36
37	BBSR-2	PED	Swargadwar-I	Proposal for Construction of New interlinking line in between 11kV Swargadwar-I feeder & 11kV Seabeach U/G feeder to Mitigate N-1 issue of Swargadwar-I feeder.	0.83	Annexure-9.37
38	BBSR-2	BAED	Banpur-II	Proposal for Bifurcation of existing 11 KV Banpur-II Feeder load emanating from 33/11 KV Balugaon PSS by constructing 1 No. of new feeder from 33/11 KV Balugaon PSS and 5.5 KM 11KV new line from Balugaon PSS for mitigation of Overload.	1.53	Annexure-9.38
39	BBSR-2	PED	Balanga	Proposal for Augmentation of 11KV Balanga feeder, for mitigation of Overload	0.27	Annexure-9.39
40	BBSR-2	KHD	Rajabajar	Proposal for Augmentation of 11kV Rajabajar feeder for mitigation of Overload	0.24	Annexure-9.40
41	BBSR-2	KHD	Town feeder	Proposal for Augmentation of 11kV Town feeder for mitigation of Overload	0.34	Annexure-9.41
42	BBSR-2	KHD	Kudiary	Proposal for Augmentation of 11kV Kudiary feeder for mitigation of Overload	0.42	Annexure-9.42
43	BBSR-2	PED	Mangala Ghat	Proposal for Augmentation of 11kV Mangala Ghat feeder for mitigation of Overload	0.18	Annexure-9.43
44	BBSR-2	PED	Prachi OH	Proposal for Bifurcation of existing 11 KV Prachi OH Feeder load emanating from 33/11 KV Baliapanda PSS by constructing 1 No. of new feeder from 33/11 KV Samanga PSS and 6 KM 11KV new U/G line from Samanga PSS for mitigation of Overload	5.18	Annexure-9.44
45	BBSR-2	PED	Lokanath	Proposal for Augmentation of 11kV Lokanath feeder for mitigation of Overload	0.18	Annexure-9.45
46	BBSR-2	PED	Khandiabandha	Proposal for Augmentation of 11kV Khandiabandha feeder for mitigation of Overload	0.98	Annexure-9.46
47	BBSR-2	NYED	Daspalla	Proposal for Augmentation of 11kV Daspalla feeder for mitigation of Overload	0.16	Annexure-9.47
48	BBSR-2	KHD	Banki Town	Proposal for Bifurcation of existing 11 KV Banki Town Feeder for mitigation of Overload	0.41	Annexure-9.48
49	Cuttack	SED	Padmapur	Proposal for construction of 11 KV linking line of 3 CKM to mitigate overloading issue of 11 KV Padmapur feeder	0.72	Annexure-9.49
50	Cuttack	CDD-II	Paramahansa	Proposal for augmentation of 11 KV Paramahansa feeder to mitigate overloading issue of 11 kV Paramahansa feeder.	0.66	Annexure-9.50
51	Cuttack	CDD-II	Mahanadivihar-1	Proposal for construction of new 11 KV line by laying of 11KV 3CX400 Sq.mm. XLPE U/G Cable for 1 KM from Mahanadivihar PSS to Koila field for load bifurcation of existing 11 KV Mahanadivihar-1 feeder to mitigate overloading issue of 11 kV Mahanadivihar-1 feeder.	1.01	Annexure-9.51
52	Cuttack	AED	Town	Proposal for augmentation of 2 CKM line of 11 KV Ankula feeder to mitigate overloading issue of 11 kV Town feeder.	0.31	Annexure-9.52

53	Cuttack	CDD-I	Purighat	Proposal for augmentation of 11 KV Purighat Feeder to mitigate overloading issue of 11 kV Purighat feeder.	0.47	Annexure-9.53
54	Cuttack	CDD-II	Mahanadi	Proposal for augmentation of 11 KV Mahanadi feeder to mitigate overloading issue of 11 kV Mahanadi feeder.	2.08	Annexure-9.54
55	Cuttack	CDD-II	New Industry	Proposal for augmentation of 11 KV New Industry feeder to mitigate overloading issue of 11 kV New Industry feeder.	1.81	Annexure-9.55
56	Cuttack	CDD-II	Kajibazar	Sishubhawan to kajibazar interlinking Line to mitigate Overload	1.2	Annexure-9.56
57	Paradeep	KED-1	Rajnagar feeder	Proposal for Augmentation of 11KV Rajnagar feeder for mitigation of Overload	0.64	Annexure-9.57
58	Paradeep	KED-1	Tinimuhani	Proposal for Augmentation of 11KV Tinimuhani feeder for mitigation of Overload	0.34	Annexure-9.58
59	Paradeep	PDP	Chatua	Proposal for Augmentation of 11KV Chatua feeder for mitigation of Overload	1.36	Annexure-9.59
60	Paradeep	KED-1	Keredagada	Proposal for Augmentation of 11KV Keredagada feeder for mitigation of Overload	1.04	Annexure-9.60
61	Dhenkanal	ANED	Jarasingha	Proposal for construction of Construction of 5.8KM of New Linking line from Badkera feeder emanating from Badkera PSS to Benagadia of Jarasingha feeder emanating from Hemsarpada PSS for mitigation of Overload	1.71	Annexure-9.61
62	Dhenkanal	ANED	Kurudol	Proposal for Augmentation of 11KV Kurudol feeder for mitigation of Overload	0.41	Annexure-9.62
63	Dhenkanal	ANED	PTC	Proposal for Augmentation of 11KV PTC feeder for mitigation of Overload	0.5	Annexure-9.63
64	Dhenkanal	TED	Kulad	Proposal for Bifurcation of existing 11 KV Kulad Feeder for mitigation of Overload	0.12	Annexure-9.64
65	Dhenkanal	TED	RE-2	Proposal for Augmentation of 11KV RE-2 feeder for mitigation of Overload	1.02	Annexure-9.65
66	Dhenkanal	DED	Siminai	Proposal for Augmentation of 11KV Siminai feeder for mitigation of Overload	0.6	Annexure-9.66
67	Dhenkanal	DED	kanheipal	Proposal for Construction of New interlinking line in between Kanheipal feeder, Barun feeder and Guda Feeder to Mitigate N-1 issue.	1.5	Annexure-9.67
TOTAL					**89.2**	

1. **Mitigation of Feeder Overloading issue of 11kV OUAT Feeder:**

Proposal: Proposal for Construction of 0.35KM New Linking line using 3Cx400sqmm U/G cable from UNIT-6 feeder emanating from Unit-6 PSS to Kalimandir Line AB switch of OUAT feeder eminating from UNIT-8 PSS.

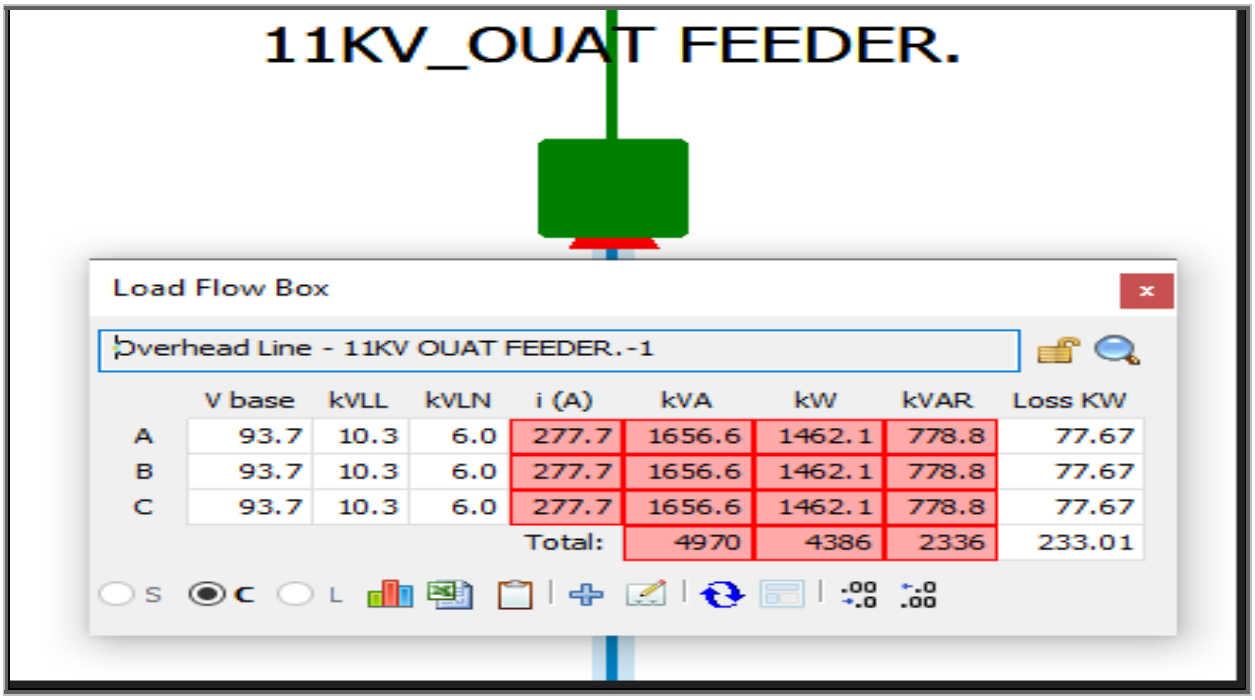
Objective: To mitigate the overloading issue of 11kV OUAT feeder.

Existing Scenario:

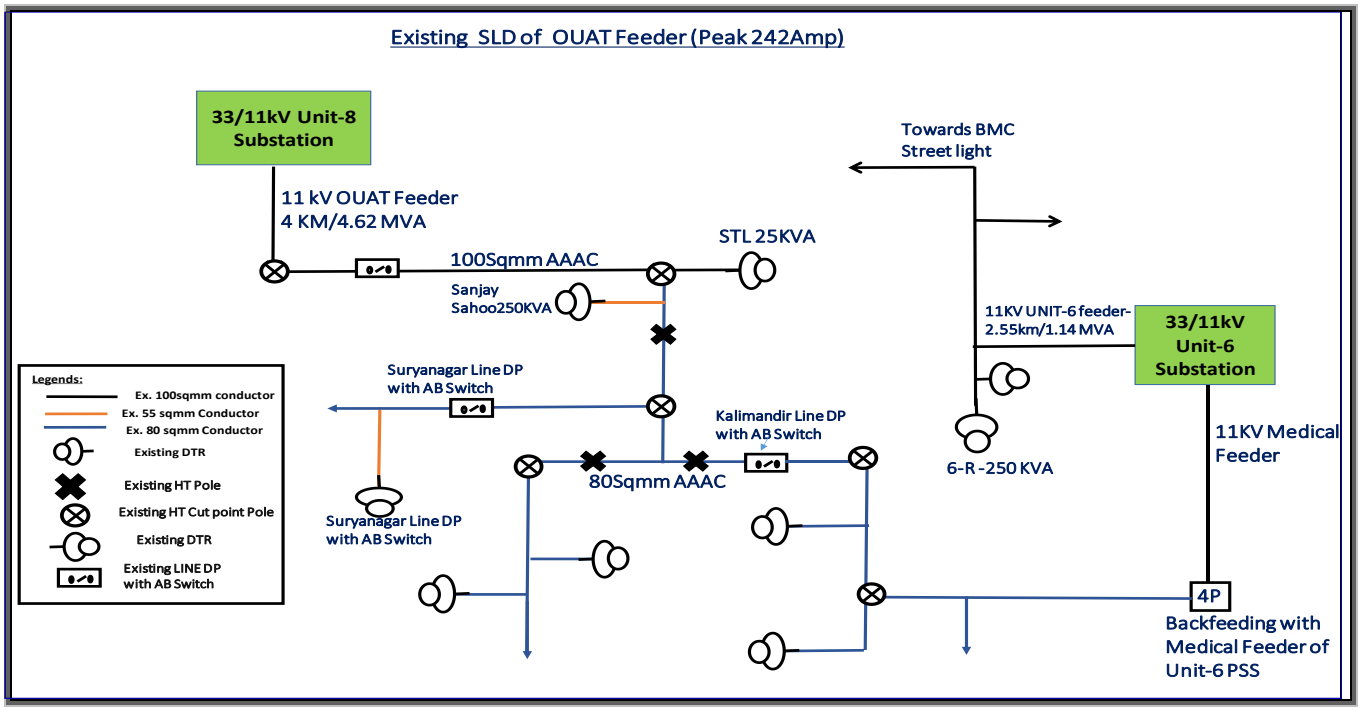
- At present, 11kV OUAT feeder is emanating from 33/11kV UNIT-8 PSS.Total length of this feeder is 4 km and the peak load is 4.6 MVA.
- In the existing scenario, conductor size of 11kV OUAT feeder is 100/80sqmm & the feeder is 102% loaded w.r.t the current carrying capacity of the conductor and 147% loaded considering 20% load growth for Urban feeders.
- This feeder is completely feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
UNIT-8	OUAT	4.52	4.62	102%	6.65	147%	Overload
UNIT-6	UNIT-6	5.18	1.14	22%	1.6	31%	Underload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'24):

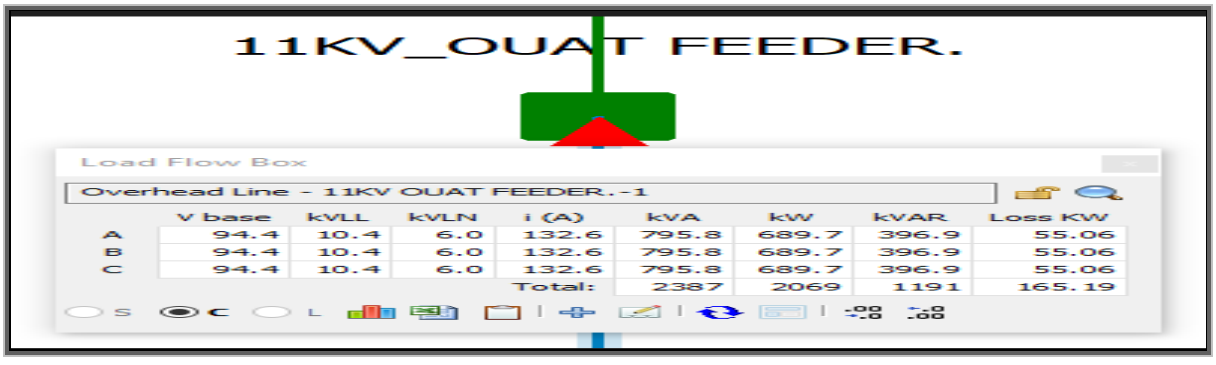


Proposed Scenario:

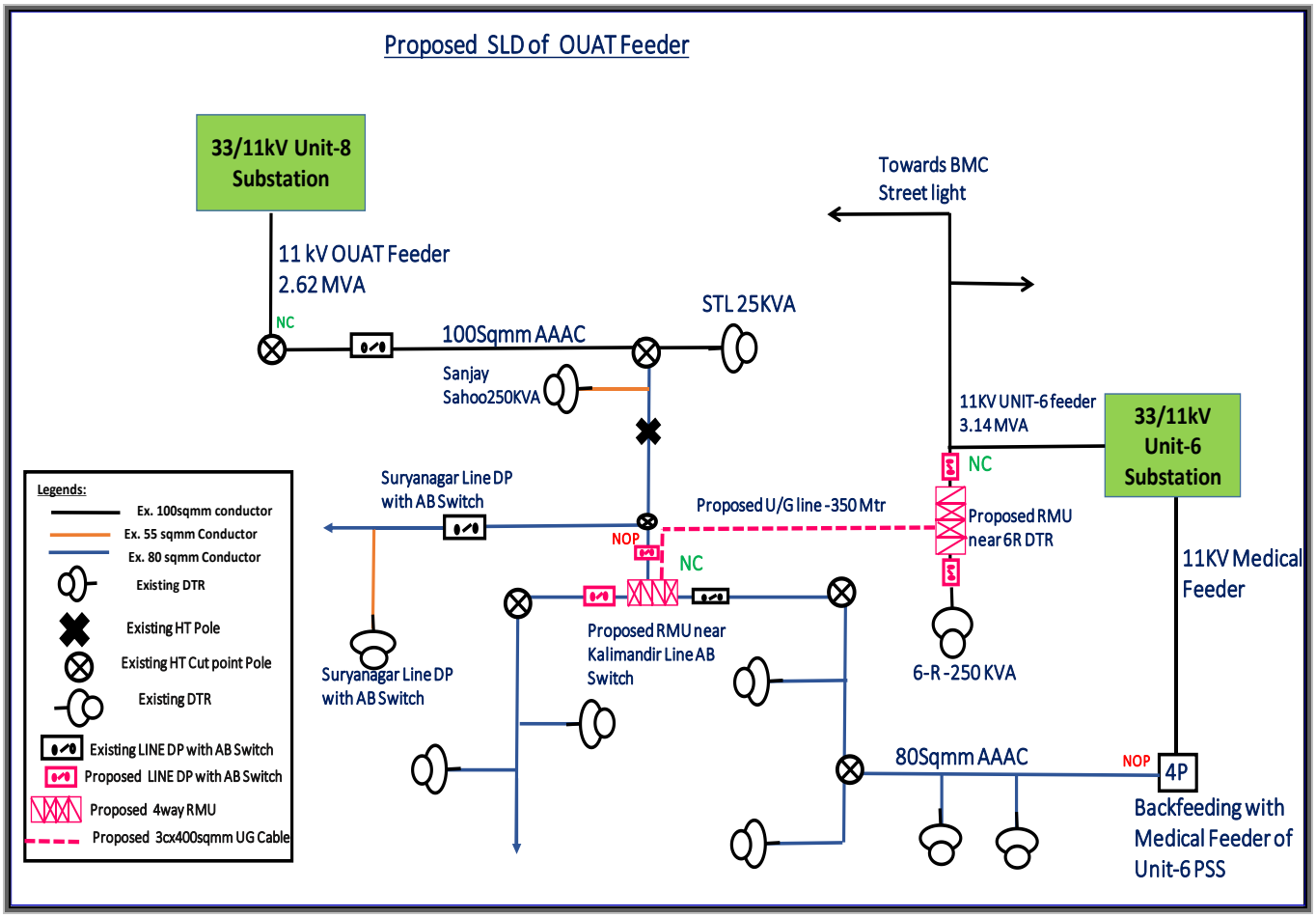
It is proposed to construct 0.35KM New Linking line using 3Cx400sqmm U/G cable from 6R DTR of UNIT-6 feeder emanating from Unit-6 PSS to Kalimandir Line AB switch of OUAT feeder eminating from UNIT-8 PSS

Proposed Loading							
Name of the PSS	11 kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Proposed Loading of feeder	Summer 25 Loading in MVA	% Loading in Summer-25	Feeder Status
UNIT-8	OUAT	4.52	2.62	58%	3.77	83%	Underload
UNIT-6	UNIT-6	5.18	3.14	61%	4.53	87%	Underload

Proposed CYM LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-1
Name of the Sub-Division : -	SDO-1
Name of the Section : -	PH-2
Name of Feeder:-	11kV OUAT
Name of the Work :-	Proposal for Construction of 0.35KM of 3CX400SQMM UG Cable New line from Unit-6 Feeder to Kalimandir Line AB switch using 11kV 3C, 400sqmm UG Cable along with 11kV RMU-2 nos.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 0.35KM of 3CX400SQMM UG Cable New line from Unit-6 Feeder to Kalimandir Line AB switch using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	26,13,309.67
2	PART-B: Installation of 2No of 11kV RMU for linking of line from Unit-6 Feeder to Kalimandir Line AB switch	38,06,587.43

3	PART C: 11kV Line DP with AB Switch for 11kV line linking from Unit-6 Feeder to Kalimandir Line AB switch-4 nos	9,28,322.20
4	**Total Gross**	**73,48,219.31**
Total Estimated cost is Rs. 0.73Cr.		

Cost Estimate: 0.73 cr. (For detailed BoQ refer Annexure 9.1)

Benefit:

- To maintain reliable Power Supply to urban consumers by strengthening the line & mitigation of overloading issue of 11kV OUAT feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved due to conductor snapping as overloading is adressed through above proposal.

2. **Mitigation of Feeder Overloading issue of 11kV ATALA Feeder:**

Proposal: Proposal for Construction of 2.5 KM New Linking line using 3Cx400sqmm U/G cable from Naharkanta PSS to Shiv Shakti Nagar Line AB switch of Atala feeder eminating from Naharkanta PSS.

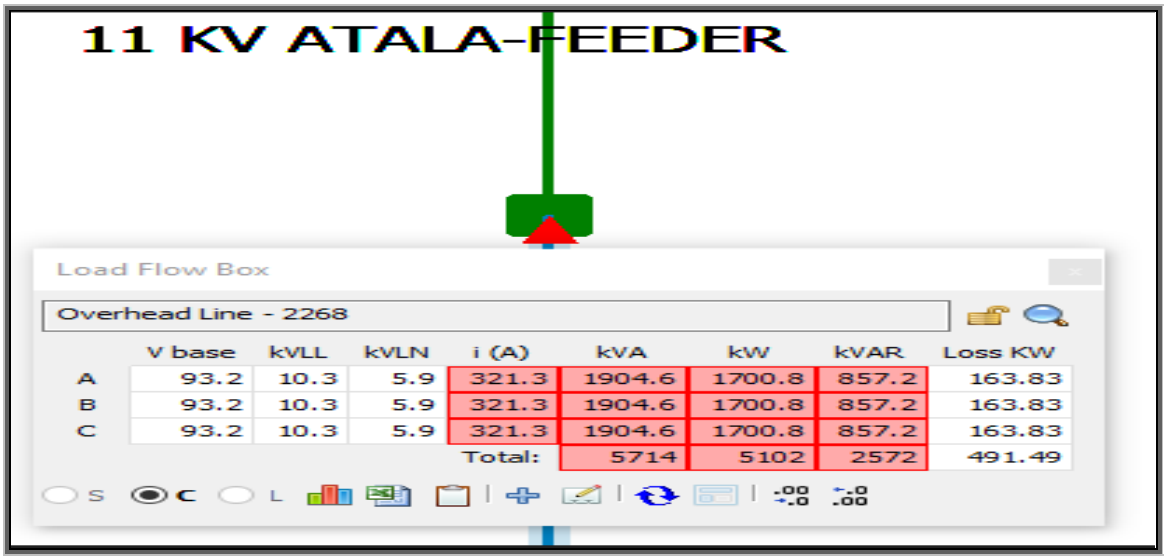
Objective: To mitigate the overloading issue of 11kV Atala feeder.

Existing Scenario:

- At present, 11kV Atala feeder is emanating from 33/11kV NAHARKANTA PSS.Total length of this feeder is 9 km and the peak load is 4 MVA.
- In the existing scenario, conductor size of 11kV Atala feeder is 100/80/55sqmm & the feeder is 113% loaded w.r.t the current carrying capacity of the conductor and 163% loaded considering 20% load growth for City Rural feeders.
- This feeder is mostly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability

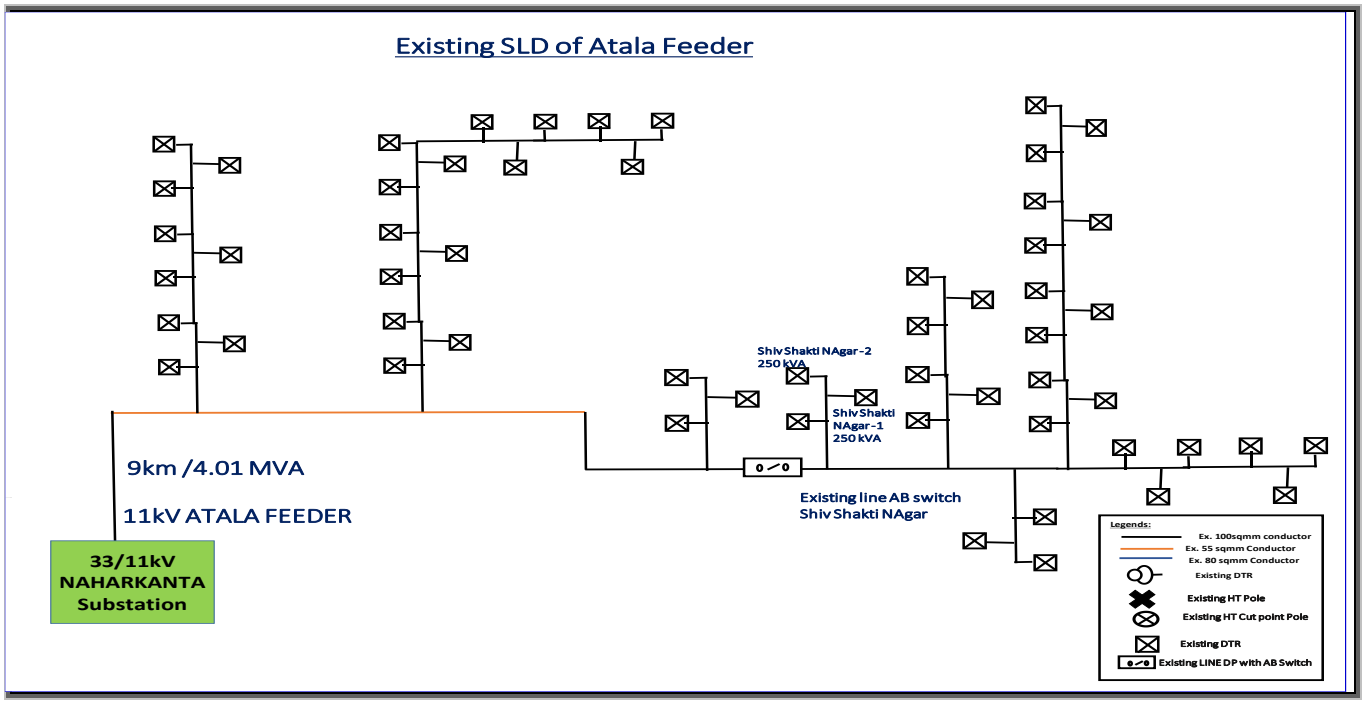
Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA (20% load growth)**	**% Loading in Summer-25**	**Feeder Status**
NAHARKANTA	ATALA	3.55	4.01	113%	5.77	163%	Overload

AS-IS CYME LOAD FLOW:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	93.2	10.3	5.9	321.3	1904.6	1700.8	857.2	163.83
B	93.2	10.3	5.9	321.3	1904.6	1700.8	857.2	163.83
C	93.2	10.3	5.9	321.3	1904.6	1700.8	857.2	163.83
				Total:	5714	5102	2572	491.49

Existing SLD (summer'24):

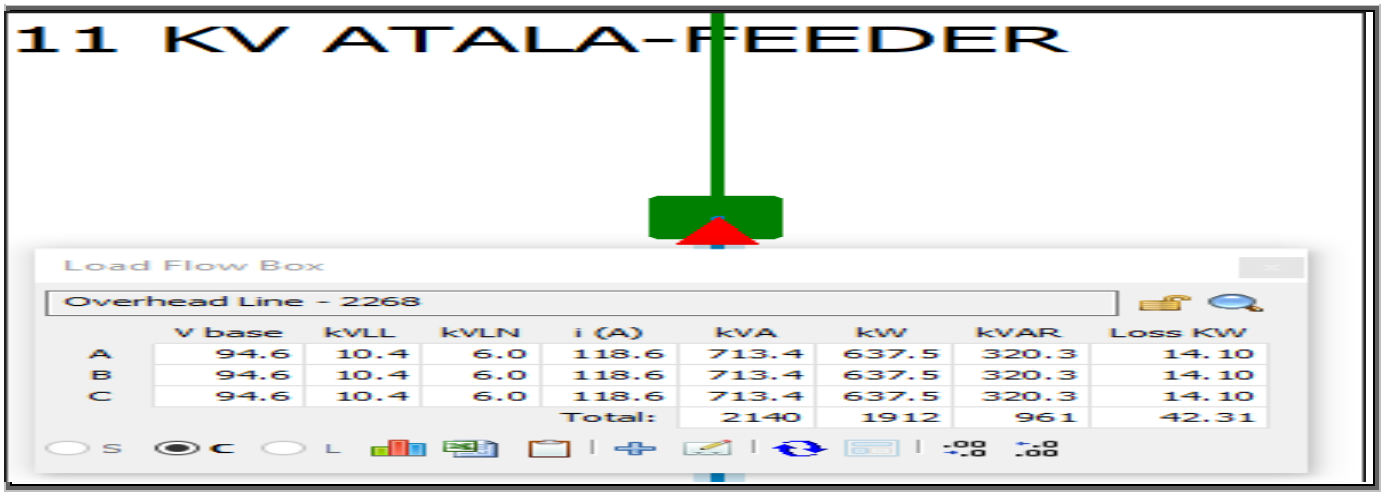


Proposed Scenario:

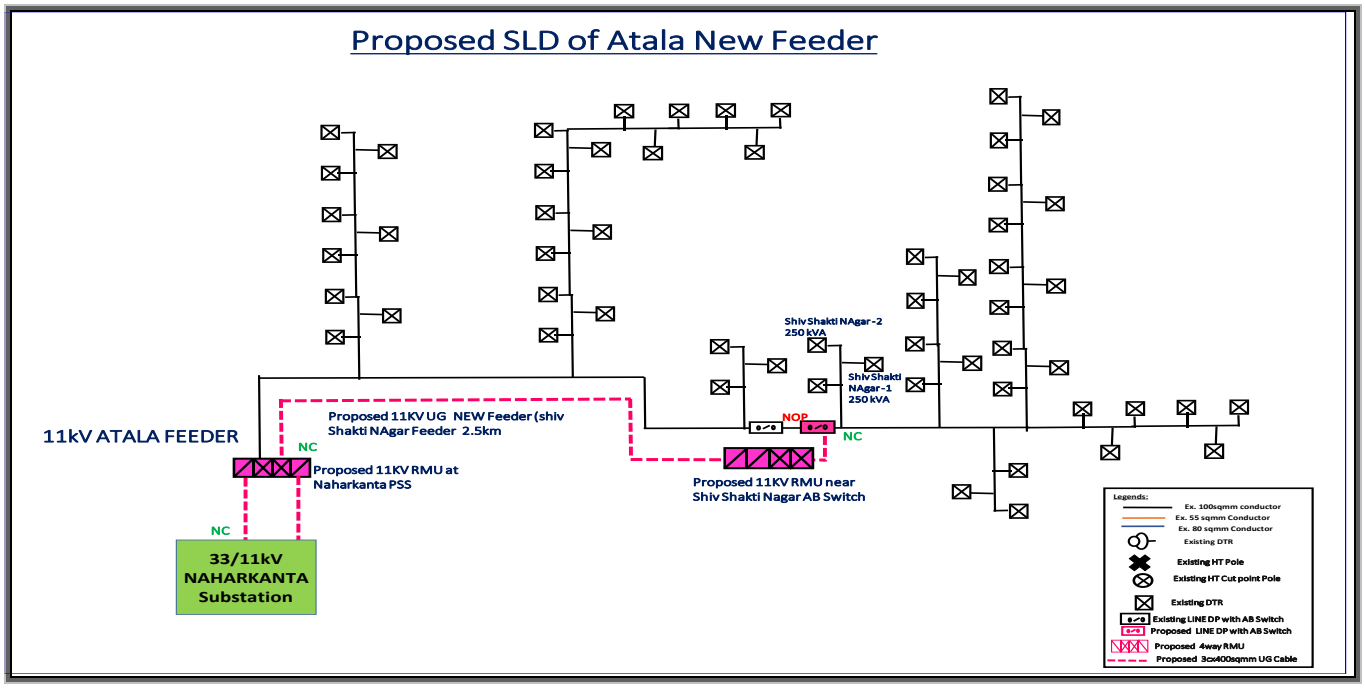
Proposal for Construction of 2.5KM New line using 3Cx400sqmm U/G cable from Naharkanta PSS to Shiv Shakti Nagar Line AB switch of Atala feeder .

Proposed Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Proposed Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Naharkanta	ATALA	3.55	1.51	42%	2.17	61%	Underload
Naharkanta	New Atala UG feeder (Shiv Shakti Nagar feeder)	5.75	2.50	43%	3.60	63%	Underload

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BED
Name of the Sub-Division : -	RASULGARH
Name of the Section : -	PHULNAKHARA
11kV Feeder Name:-	11KV ATALA
Name of the Work :-	Proposal for Construction of 2.5KM of 3CX400SQMM UG Cable New line from Naharkanta PSS to Shiva Shakti Line AB switch using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 2.5KM of 3CX400SQMM UG Cable New line from Naharkanta PSS to Shiva Shakti Line AB switch using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	1,85,63,532.01
2	PART-B: Installation of 2No of 11kV RMU for new line from Naharkanta PSS to Shiva Shakti Line AB switch	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Naharkanta PSS to Shiva Shakti Line AB switch	2,32,080.55
4	**Total Gross**	**2,26,02,199.99**
Total estimated cost is Rs. 2.26Cr.		

Cost Estimate: 2.26 cr. (For detailed BoQ refer Annexure 9.2)

Benefit:

- To maintain reliable Power Supply to urban & rural consumers by strengthening the line & mitigation of overloading issue of 11kV Atala feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because overloading is adressed through above proposal.

3. **Mitigation of Feeder Overloading issue of 11kV TRINATH BAZAR Feeder:**

Proposal: Proposal for Construction of 3.5 KM New Linking line using 3Cx400sqmm U/G cable from Phulnakhara PSS to Jagananth Nagar Line AB switch of Trinath Bazar feeder emanating from Phulnakhara PSS.

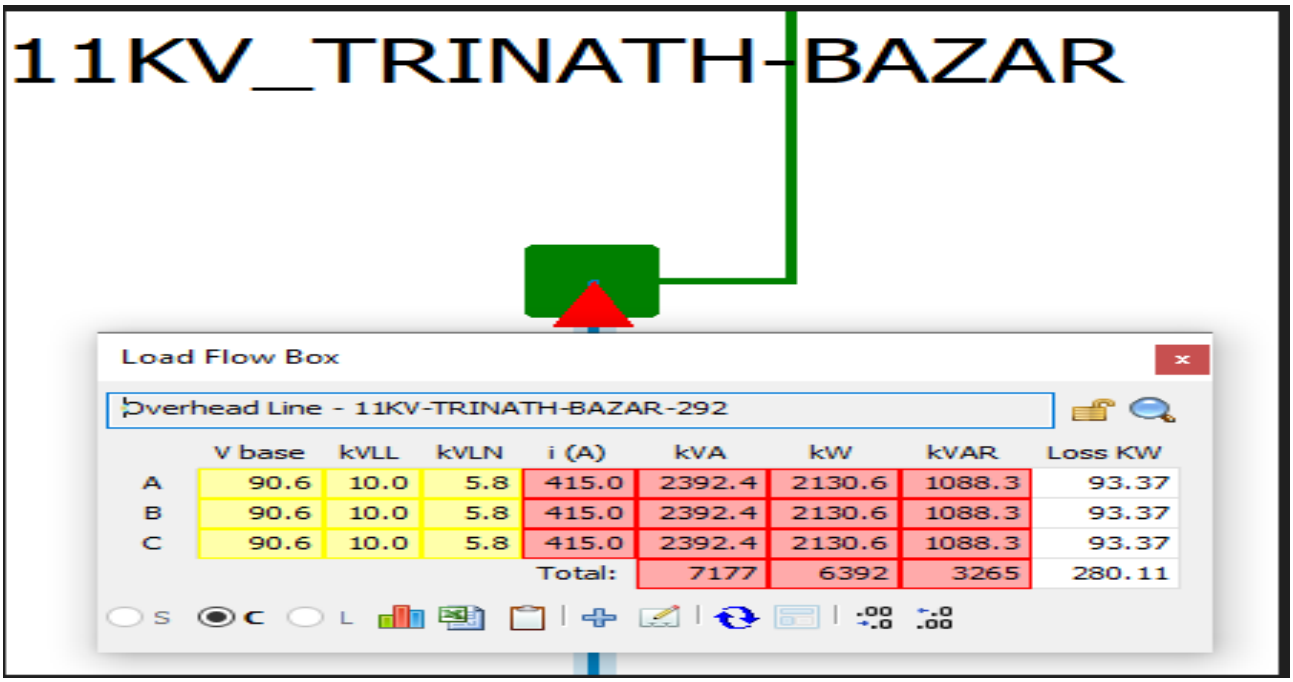
Objective: To mitigate the overloading issue of 11kV Trinath Bazar feeder.

Existing Scenario:

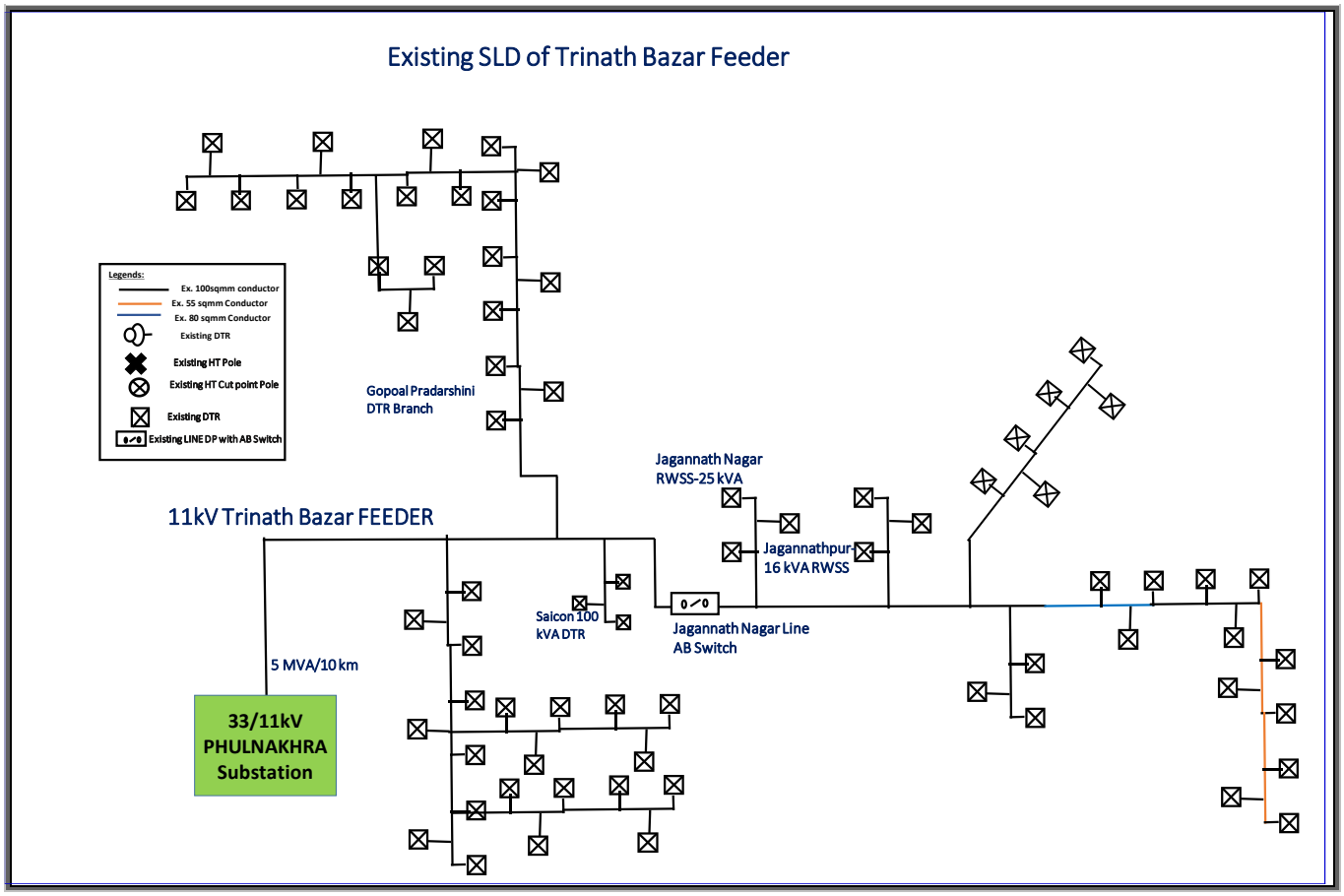
- At present, 11kV Trinath Bazar feeder is emanating from 33/11kV PHULNAKHARA PSS.Total length of this feeder is 10 km and the peak load is 5 MVA.
- In the existing scenario, conductor size of 11kV Trinath Bazar feeder is 100/80/sqmm & the feeder is 96% loaded w.r.t the current carrying capacity of the conductor and 139% loaded considering 20% load growth for Bhubaneswar rural & Urban feeders.
- This feeder is mostly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Phulnakhra	TRINATH BAZAR	5.19	5.00	96%	7.20	139%	Overload

AS-IS LOAD FLOW:



Existing SLD (summer'24):

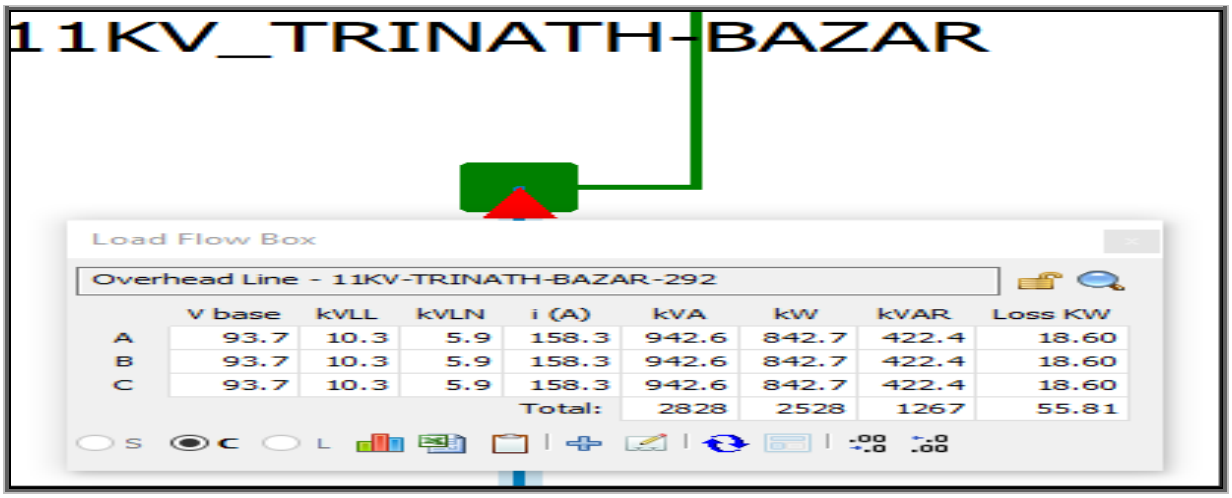


Proposed Scenario:

Proposal for Construction of 3.5KM New line using 3Cx400sqmm U/G cable from Phulnakhara PSS to Jaganath Nagar Line AB switch of Trinath Bazar feeder to bifurcate load.

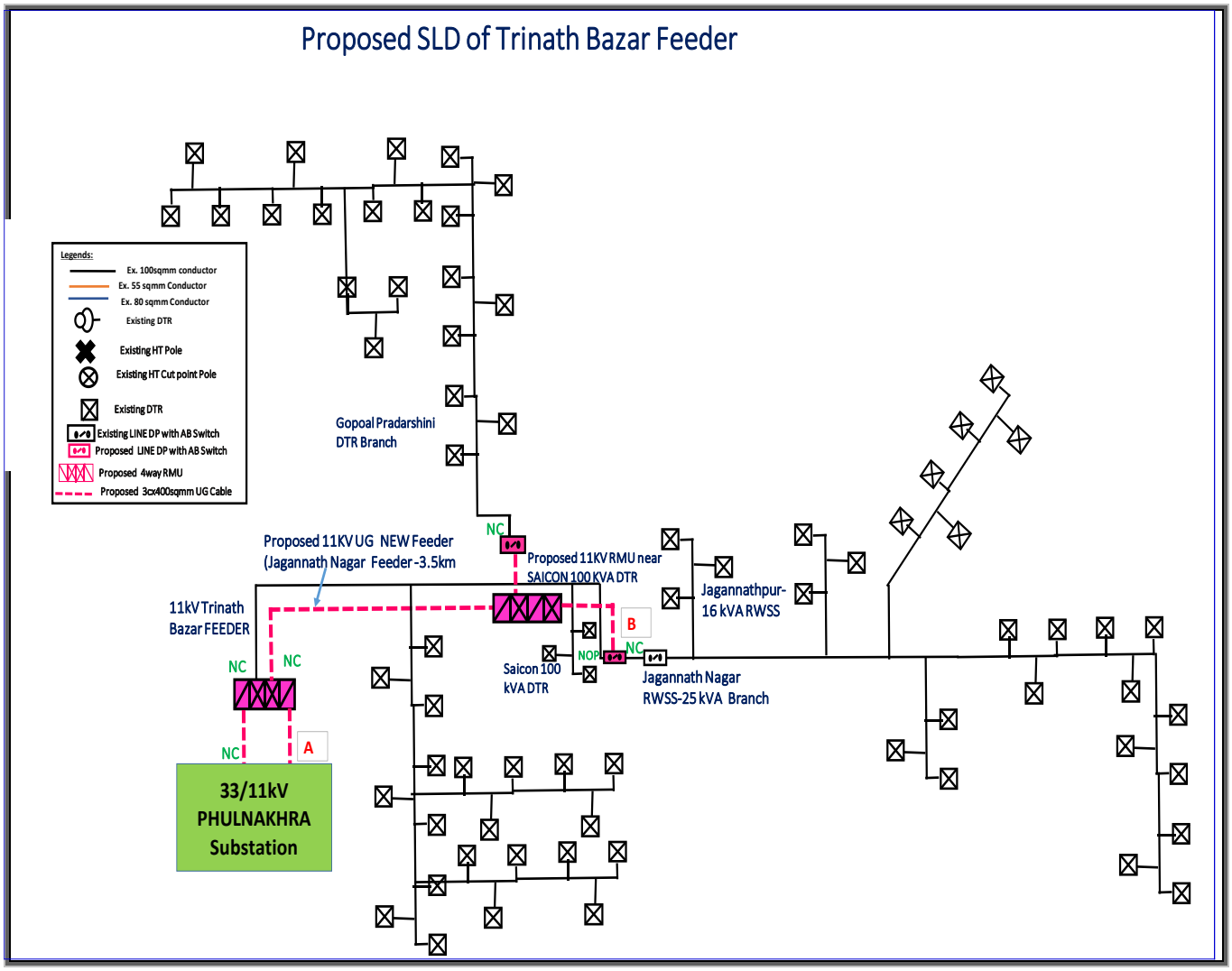
Proposed Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Proposed Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Phulnakhra	TRINATH BAZAR	5.19	2.00	39%	2.88	55%	Underload
Phulnakhra	TRINATH BAZAR NEW	5.76	3.00	52%	4.32	75%	Underload

Proposed Load flow:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	93.7	10.3	5.9	158.3	942.6	842.7	422.4	18.60
B	93.7	10.3	5.9	158.3	942.6	842.7	422.4	18.60
C	93.7	10.3	5.9	158.3	942.6	842.7	422.4	18.60
				Total:	2828	2528	1267	55.81

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		BED
Name of the Sub-Division : -		RASULGARH
Name of the Section : -		PHULNAKHARA
11kV Feeder Name:-		11KV TRINATH BAZAR
Name of the Work :-		Proposal for Construction of 3.5KM of 3CX400SQMM UG Cable New line from Phulnakhara PSS to Jagannath Nagar Line AB Switch using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Construction of 3.5KM of 3CX400SQMM UG Cable New line from Phulnakhara PSS to Jagannath Nagar Line AB Switch using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	2,59,96,721.23
2	PART-B: Installation of 2No of 11kV RMU at Phulnakhara PSS and near Saicon DTR .	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Phulnakhara PSS to near Saicon 100 KVA DTR	4,64,161.10
4	**Total Gross**	**3,02,67,469.76**
Total estimated cost is Rs. 3.03Cr.		

Cost Estimate: 3.03 cr. (For detailed BoQ refer Annexure 9.3)

Benefit:

- To maintain reliable Power Supply to urban & rural consumers by strengthening the line & mitigation of overloading issue of 11kV Atala feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

4. **Mitigation of Feeder Overloading issue of 11kV RASULGARH Feeder:**

Proposal: Proposal for Construction of 2.5 KM New Linking line using 3Cx400sqmm U/G cable from RASULGARH PSS to PHD Palasuni DTR of Rasulgarh feeder eminating from Rasulgarh PSS.

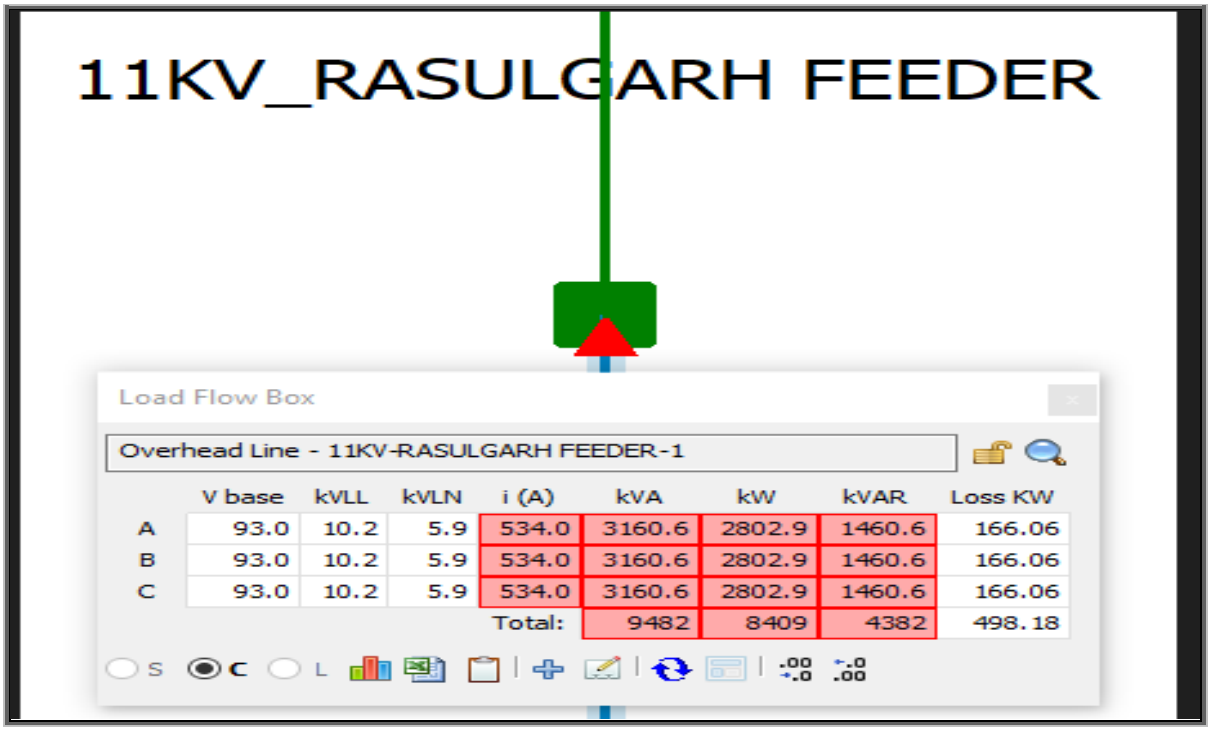
Objective: To mitigate the overloading issue of 11kV Rasulgarh feeder.

Existing Scenario:

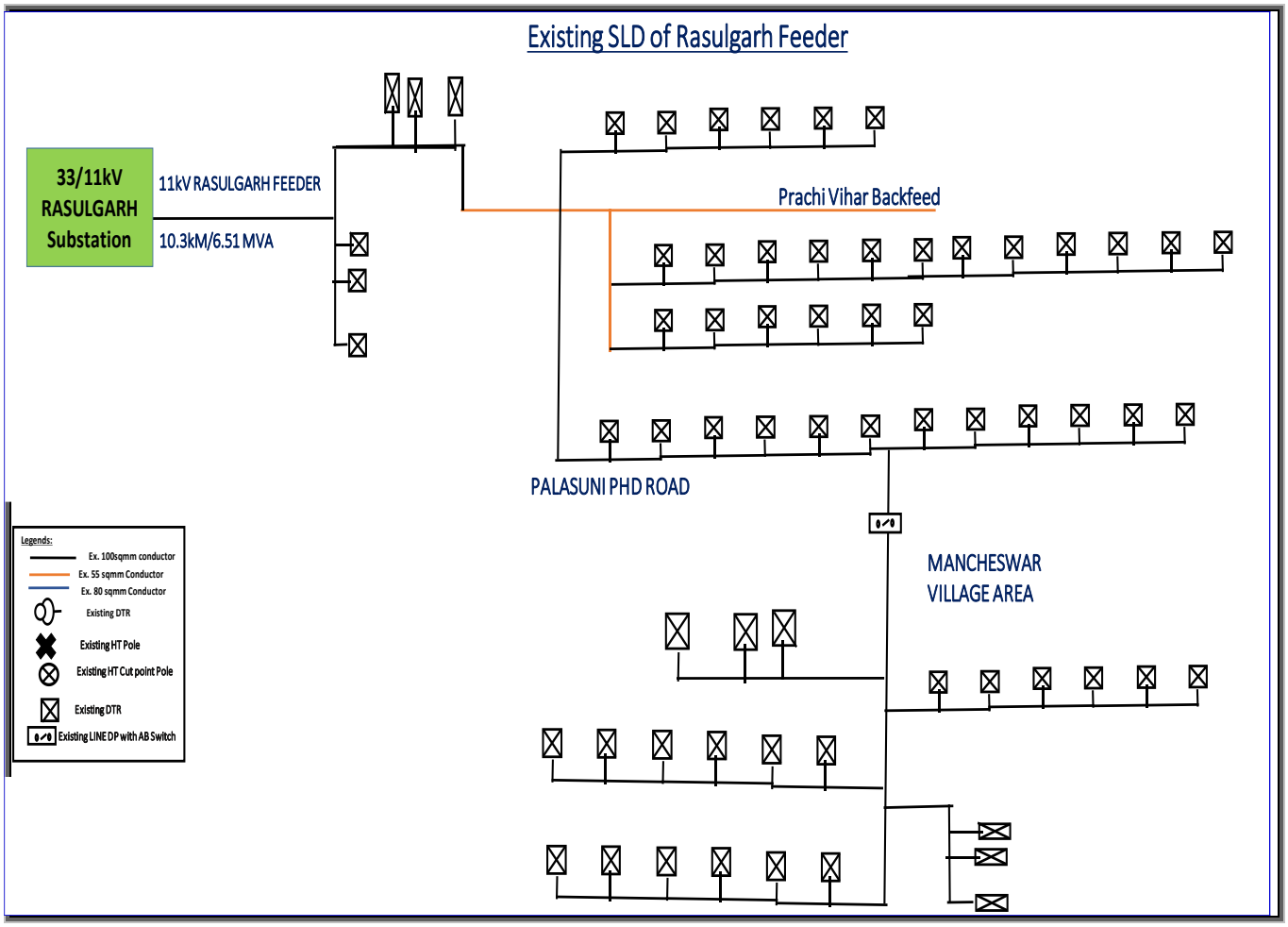
- At present, 11kV Rasulgarh feeder is emanating from 33/11kV RAsulgarh PSS.Total length of this feeder is 10.3 km and the peak load is 6.51 MVA.
- In the existing scenario, conductor size of 11kV Rasulgarh feeder is 100/80/55sqmm & the feeder is 125% loaded w.r.t the current carrying capacity of the conductor and 181% loaded considering 20% load growth for urban feeders.
- This feeder is mostly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
RASULGARH	RASULGARH	5.19	6.51	125%	9.37	181%	Overload

AS –IS CYME LOAD FLOW:



Existing SLD (summer'24):

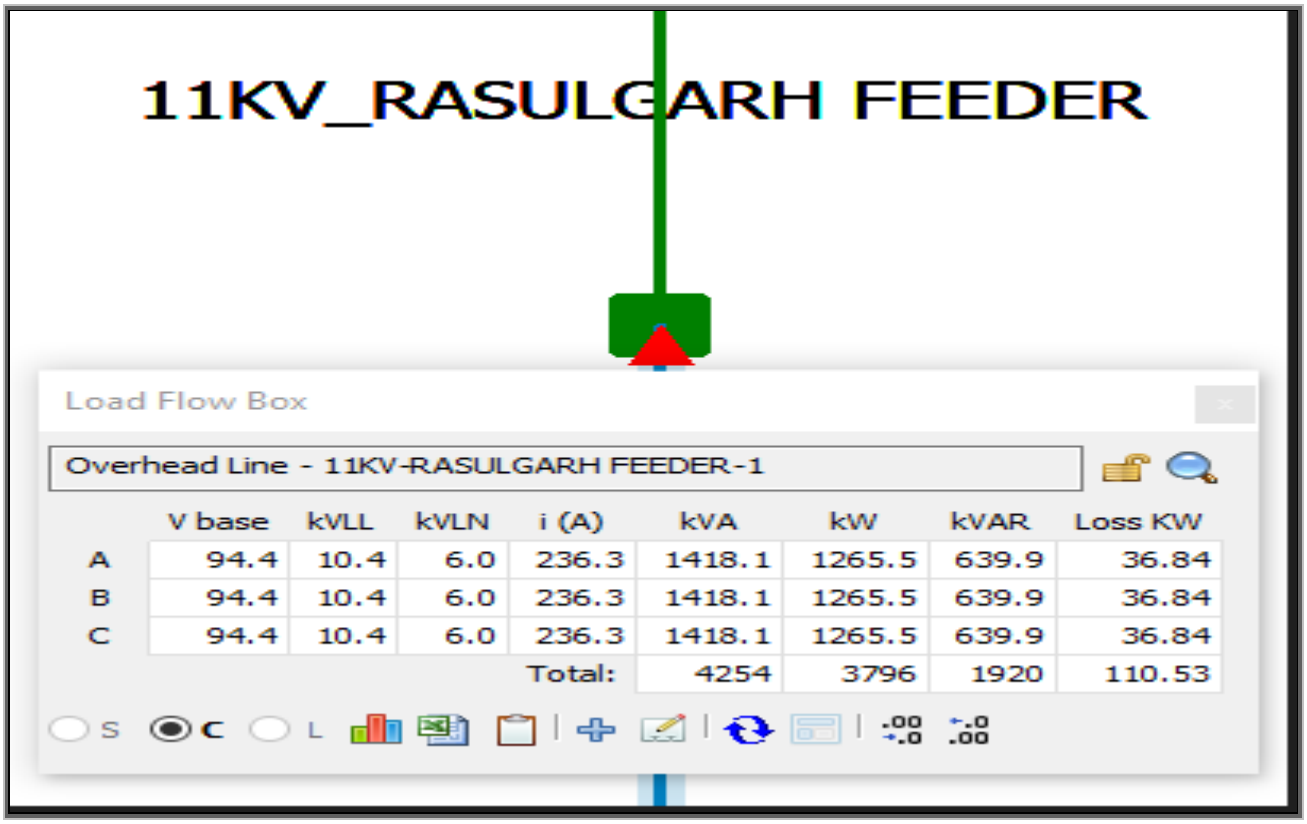


Proposed Scenario:

Proposal for Construction of 2.5KM New line using 3Cx400sqmm U/G cable from Rasulgarh PSS to Palasuni PHD DTR of Rasulgarh feeder.

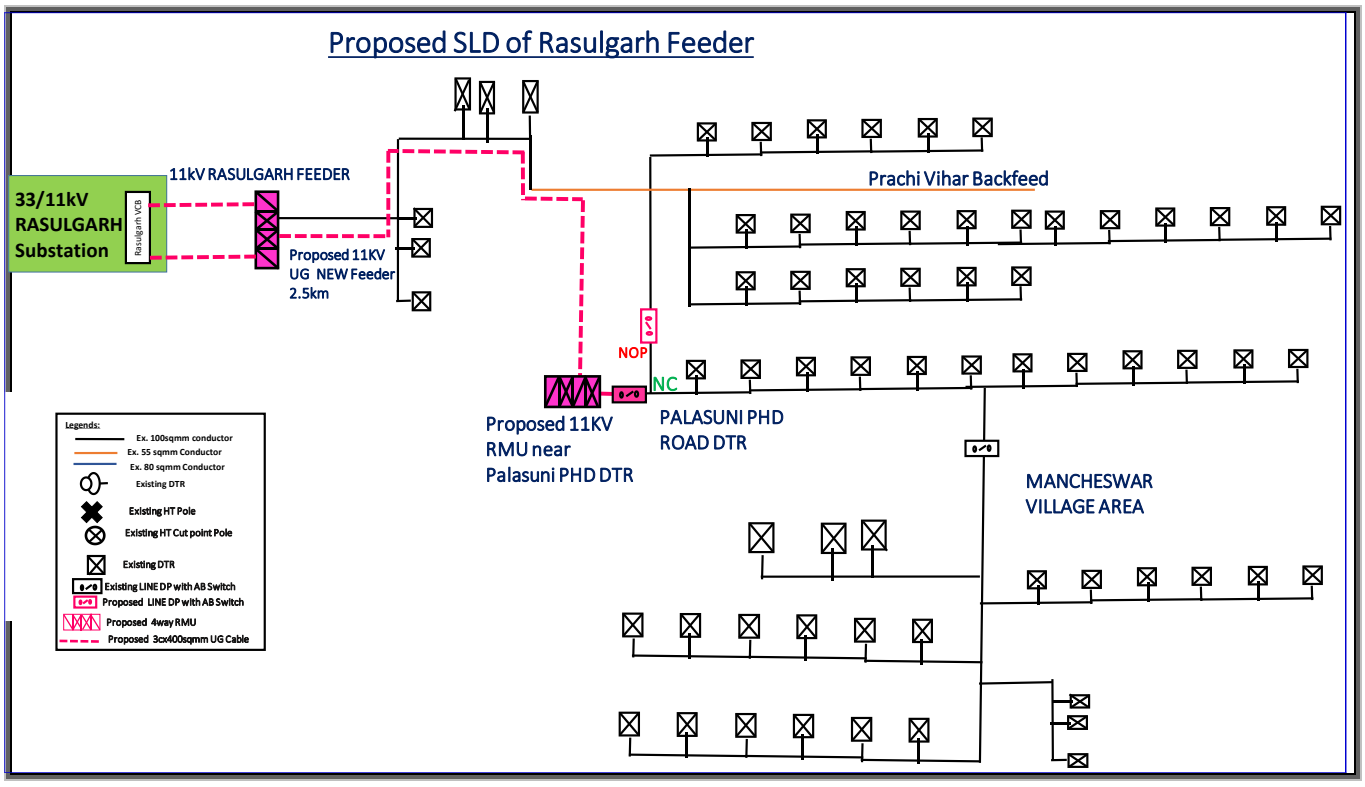
Proposed Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Proposed Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
RASULGARH	RASULGARH	5.19	3.01	58%	4.33	83%	Underload
RASULGARH	New RasulgarhUG Feeder(PHD Feeder)	5.76	3.50	61%	5.04	87%	Underload

Proposed Cyme Load Flow:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	94.4	10.4	6.0	236.3	1418.1	1265.5	639.9	36.84
B	94.4	10.4	6.0	236.3	1418.1	1265.5	639.9	36.84
C	94.4	10.4	6.0	236.3	1418.1	1265.5	639.9	36.84
				Total:	4254	3796	1920	110.53

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		BED
Name of the Sub-Division : -		RASULGARH
Name of the Section : -		RASULGARH
11kV Feeder Name:-		11KV RASULGARH
Name of the Work :-		Proposal for Construction of 2.5KM of 3CX400SQMM UG Cable New line from Rasulgarh PSS to Palasuni PHD DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Construction of 2.5KM of 3CX400SQMM UG Cable New line from Rasulgarh PSS to Palasuni PHD DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	1,85,63,532.01
2	PART-B: Installation of 2No of 11kV RMU at Palasuni PHD DTR	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Rasulgarh PSS to Palasuni PHD DTR	4,64,161.10
4	**Total Gross**	**2,28,34,280.54**
Total estimated cost is Rs. 2.28Cr.		

Cost Estimate: 2.28 cr. (For detailed BoQ refer Annexure 9.4)

Benefit:

- To maintain reliable Power Supply to urban consumers by strengthening the line & mitigation of overloading issue of 11kV Rasulgarh feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

5. **Mitigation of Feeder Overloading issue of 11kV MANCHESWAR FEEDER-3 Feeder:**

Proposal: Proposal for Construction of 0.7 KM New Linking line using 3Cx400sqmm U/G cable from Mancheswar PSS to Samagadiya Line AB switch of Mancheswar feeder-3 .

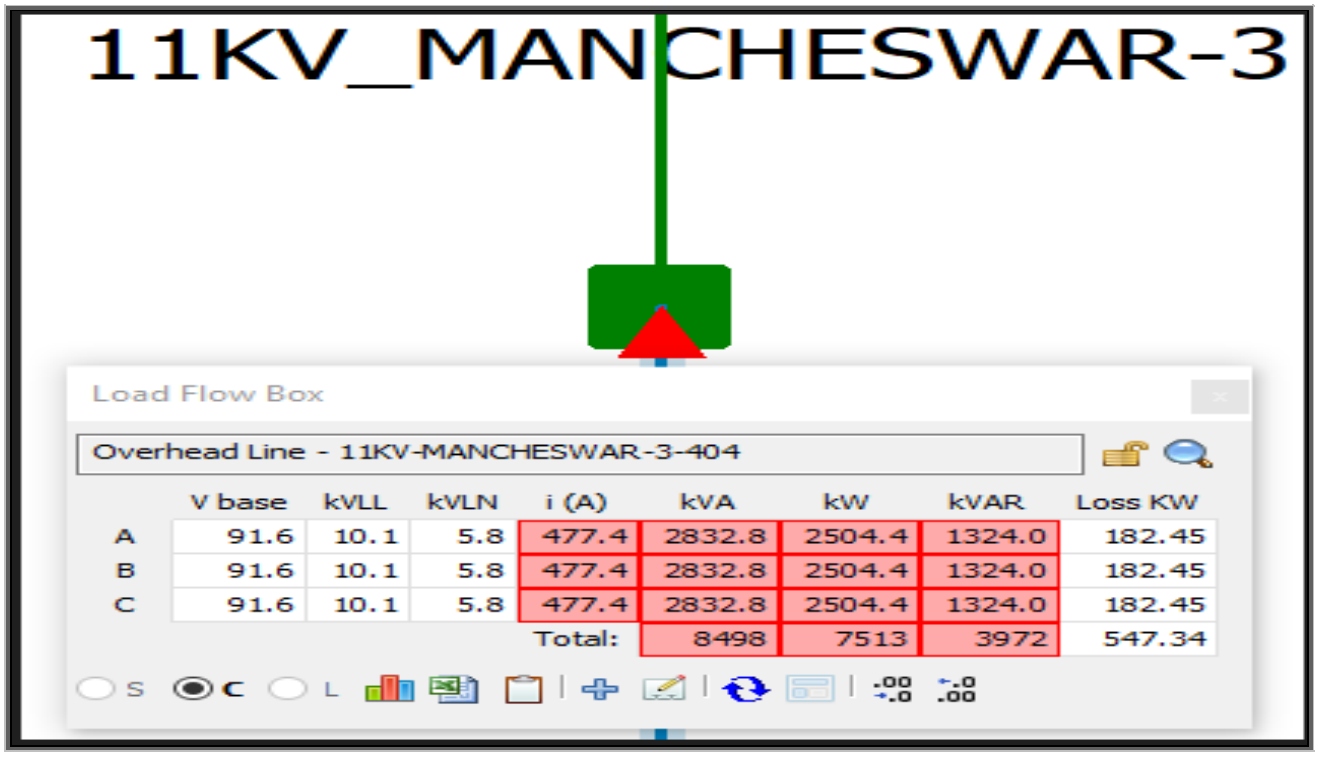
Objective: To mitigate the overloading issue of 11kV Mancheswar feeder-3 .

Existing Scenario:

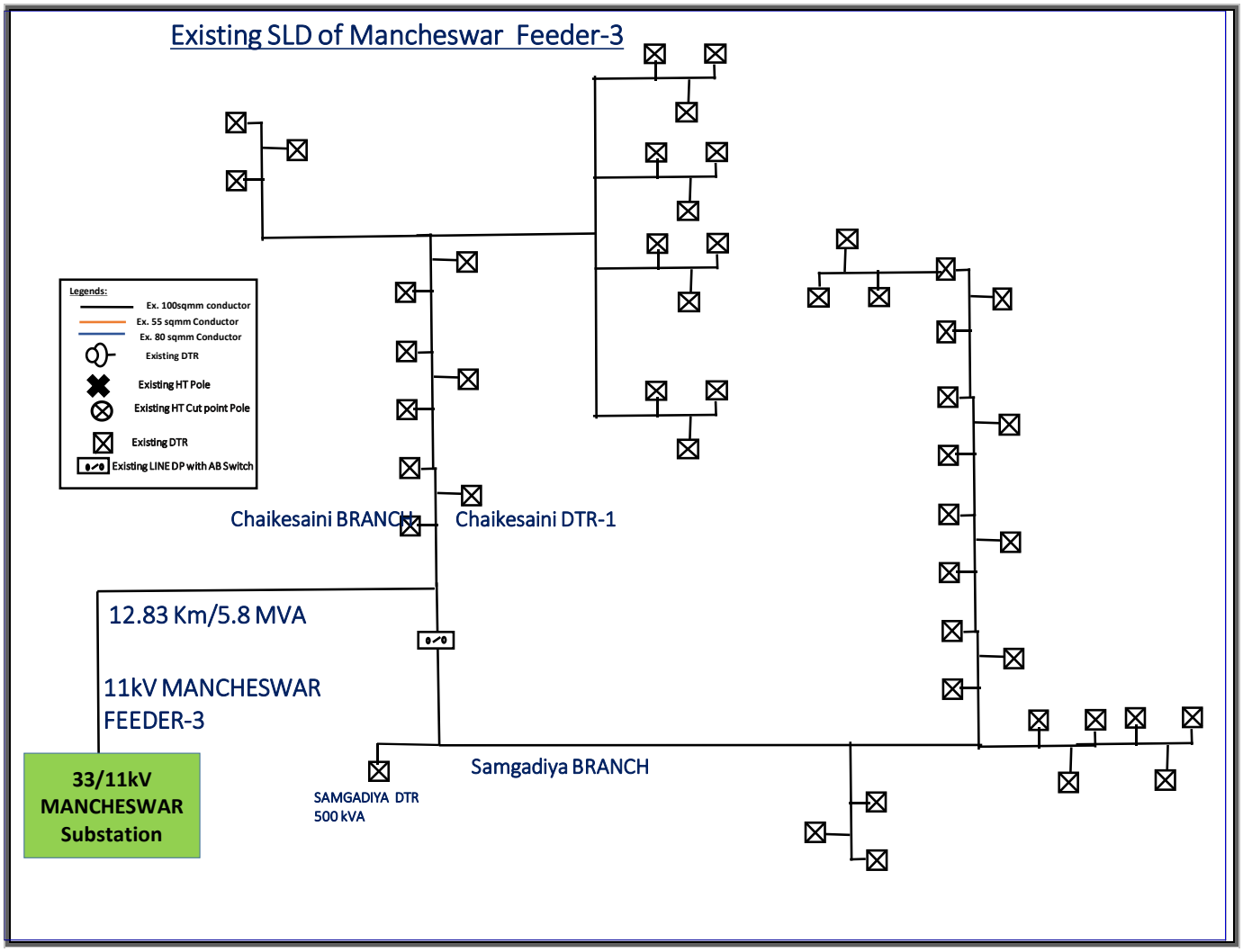
- At present, 11kV Mancheswar feeder-3 is emanating from 33/11kV MANCHESWAR PSS.Total length of this feeder is 12.83 km and the peak load is 5.8 MVA.
- In the existing scenario, conductor size of 11kV Mancheswar feeder-3 is 100/80sqmm & the feeder is 112% loaded w.r.t the current carrying capacity of the conductor and 181% loaded considering 20% load growth for urban (Industrial) feeders.
- This feeder is mostly feeding Industrial consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
MANCHESWAR	MANCHESWAR-3	5.19	5.80	112%	8.35	161%	Overload

AS-IS Load flow:



Existing SLD (summer'23):

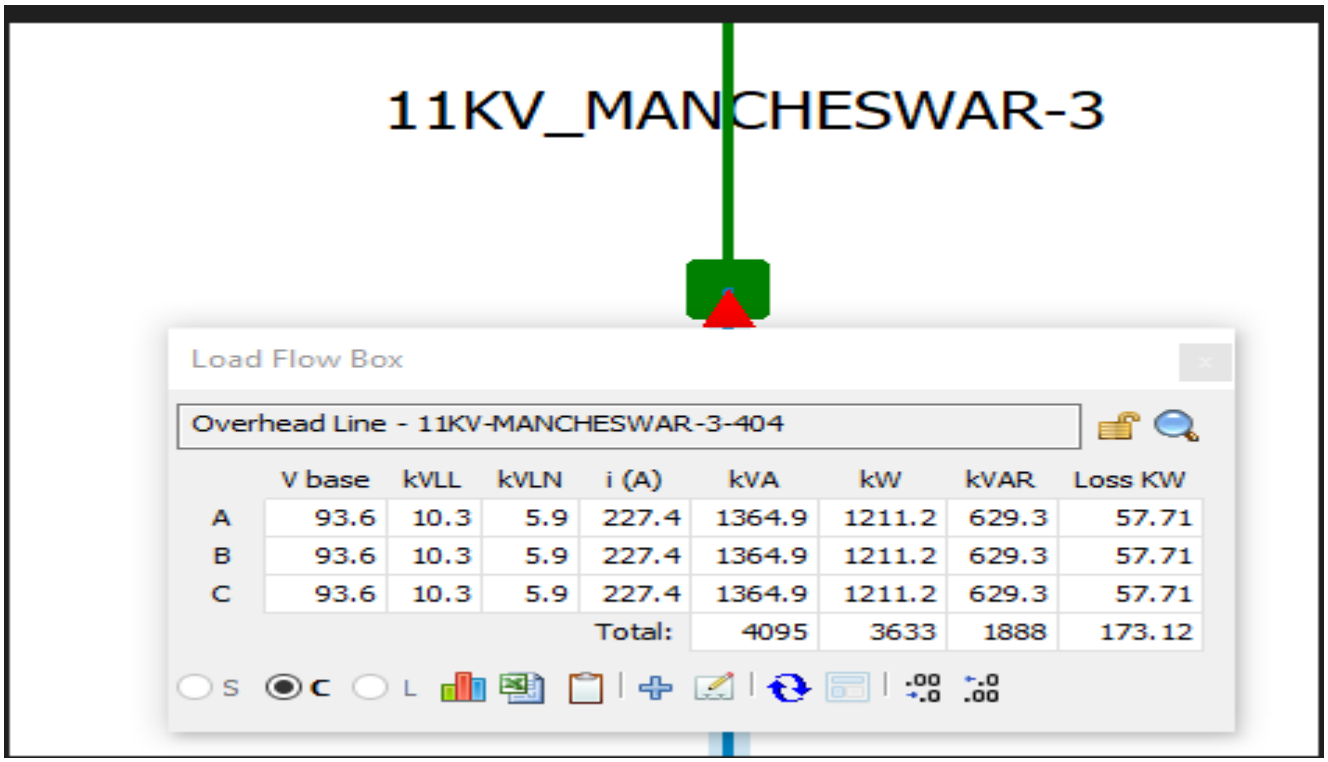


Proposed Scenario:

Proposal for Construction of 0.7KM New line using 3Cx400sqmm U/G cable from Mancheswar PSS to Samgadiya Line AB Switch of Mancheswar feeder-3.

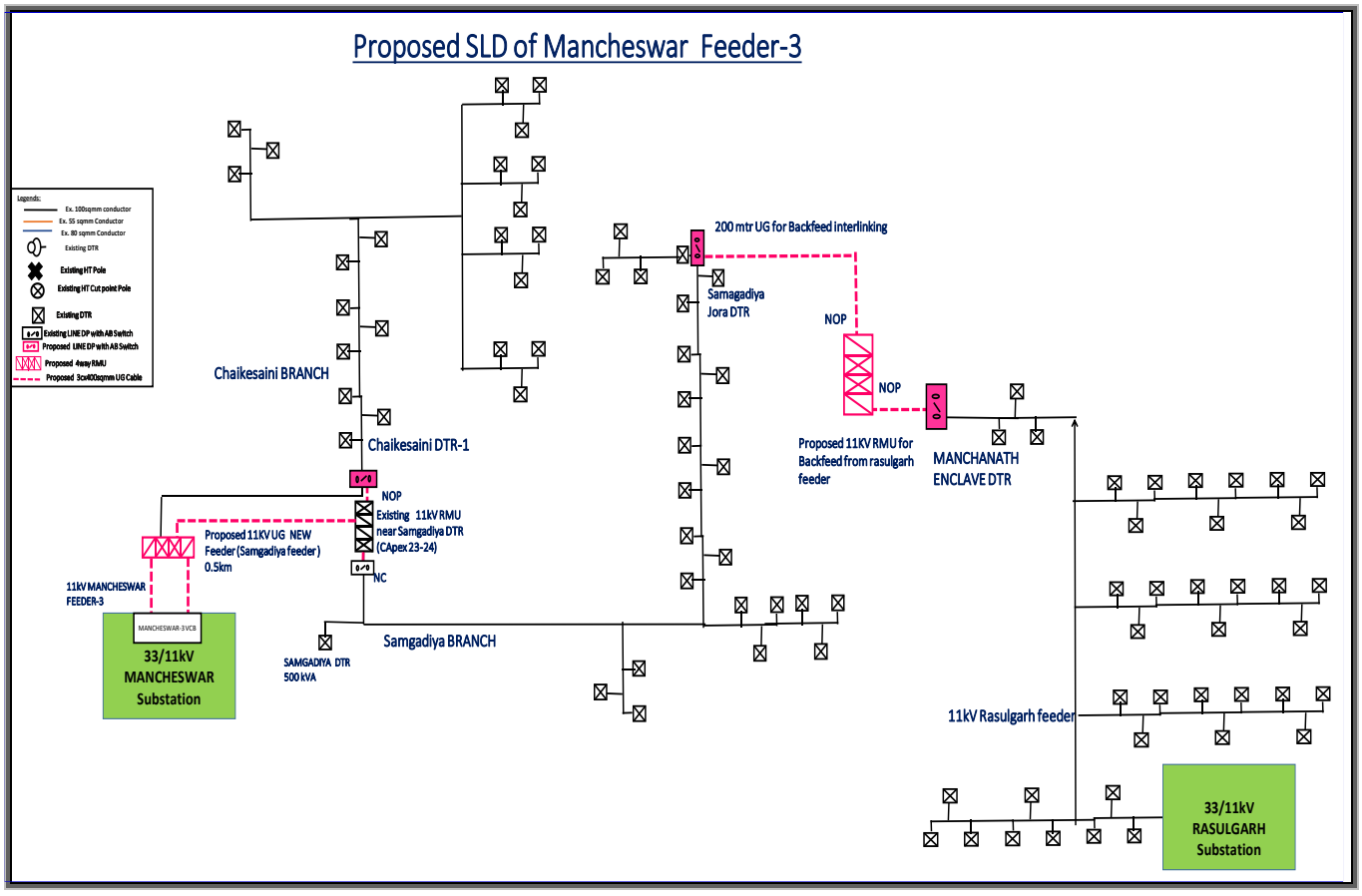
Proposed Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Proposed Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
MANCHESWAR	MANCHESWAR-3	5.19	2.80	54%	4.03	78%	Underload
MANCHESWAR	New Mancheswar UG Feeder-3(Samgadiya Feeder)	5.76	3.00	52%	4.32	75%	Underload

Proposed Load Flow:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	93.6	10.3	5.9	227.4	1364.9	1211.2	629.3	57.71
B	93.6	10.3	5.9	227.4	1364.9	1211.2	629.3	57.71
C	93.6	10.3	5.9	227.4	1364.9	1211.2	629.3	57.71
				Total:	4095	3633	1888	173.12

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		BED
Name of the Sub-Division : -		RASULGARH
Name of the Section : -		MANCHESWAR
Name of the Feeder : -		MANCHESWAR FEEDER-3
Name of the Work :-		Proposal for Construction of 0.7KM of 3CX400SQMM UG Cable New line from Mancheswar PSS to Existing 11kV RMU Samgadiya DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Construction of 0.7KM of 3CX400SQMM UG Cable New line from Mancheswar PSS to Existing 11kV RMU Samgadiya DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	51,47,358.36
2	PART-B: Installation of 2 No of 11kV RMU at Mancheswar PSS and near Mancheswar Enclave DTR .	38,06,587.43
3	PART C: 11kV Line DP with AB Switch -3 nos.	6,96,241.65
4	**Total Gross**	**96,50,187.44**
Total estimated cost is Rs. 0.96Cr.		

Cost Estimate: 0.96 cr. (For detailed BoQ refer Annexure 9.5)

Benefit:

- To maintain reliable Power Supply to Industrial consumers by mitigation of overloading issue of 11kV Mancheswar feeder-3.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

6. **Mitigation of Feeder Overloading issue of 11kV Rajarani Feeder:**

Proposal: Proposal for Construction of 2 KM New Linking line using 3Cx400sqmm U/G cable from Badagada PSS to near Jyoti Ranjan DTR location of Rajarani feeder eminating from Badagada PSS.

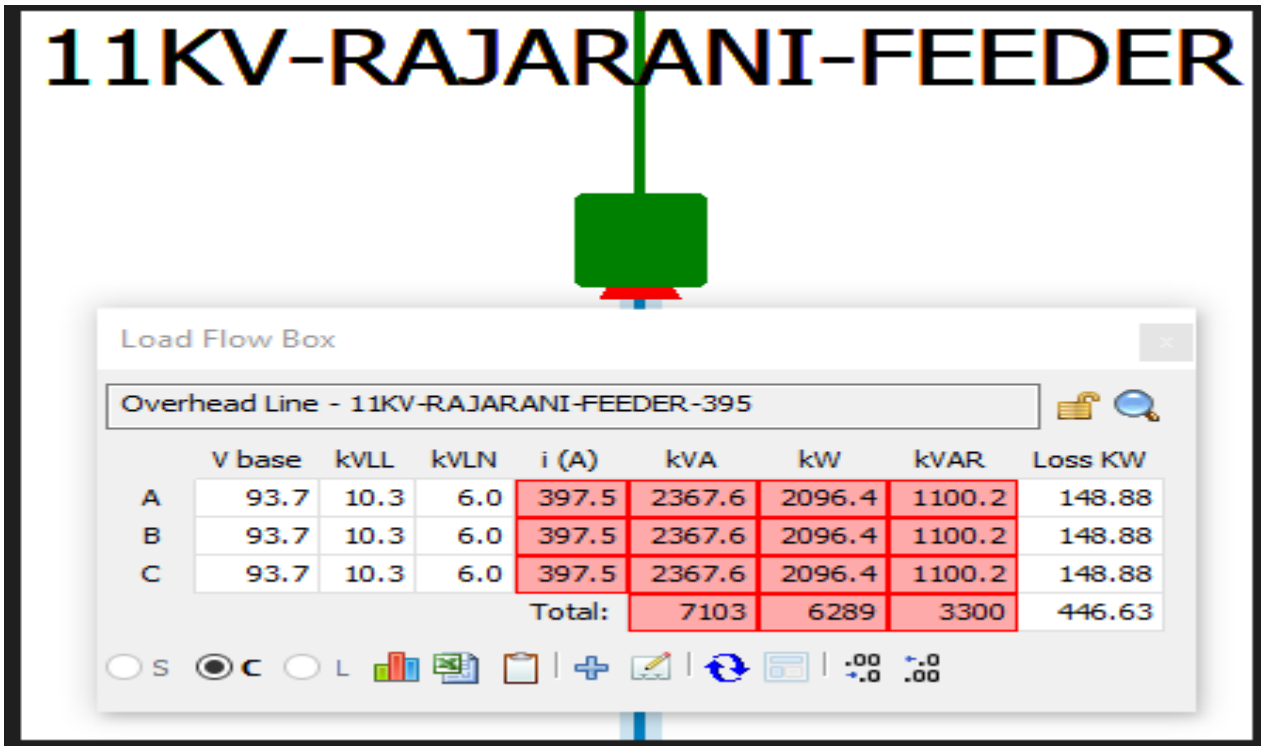
Objective: To mitigate the overloading issue of 11kV Rajarani feeder.

Existing Scenario:

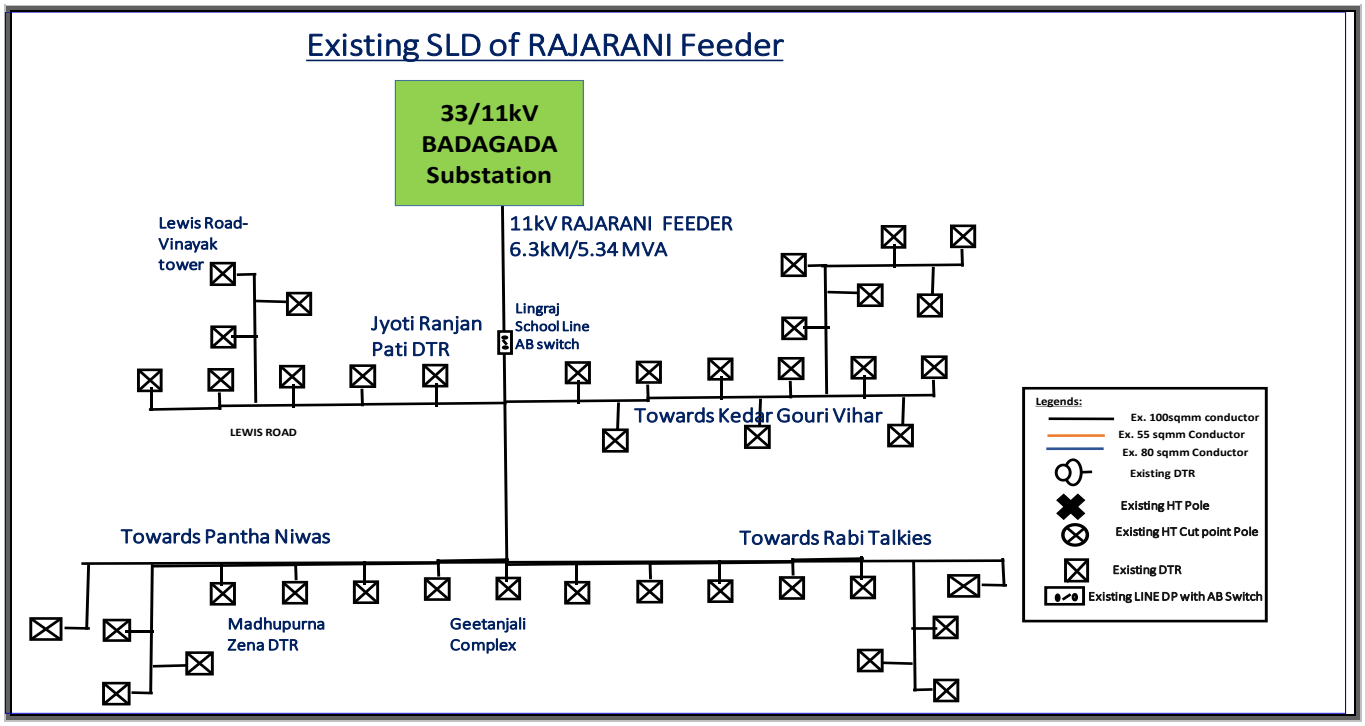
- At present, 11kV Rajarani feeder is emanating from 33/11kV Badagada PSS.Total length of this feeder is 6.31 km and the peak load is 5.34 MVA.
- In the existing scenario, conductor size of 11kV Rajarani feeder is 100/55sqmm & the feeder is 103% loaded w.r.t the current carrying capacity of the conductor and 144% loaded considering 20% load growth for urban feeders.
- This feeder is feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Badagada	RAJARANI	5.19	5.34	103%	7.48	144%	Overload

As-IS Load flow:



Existing SLD (summer'23):

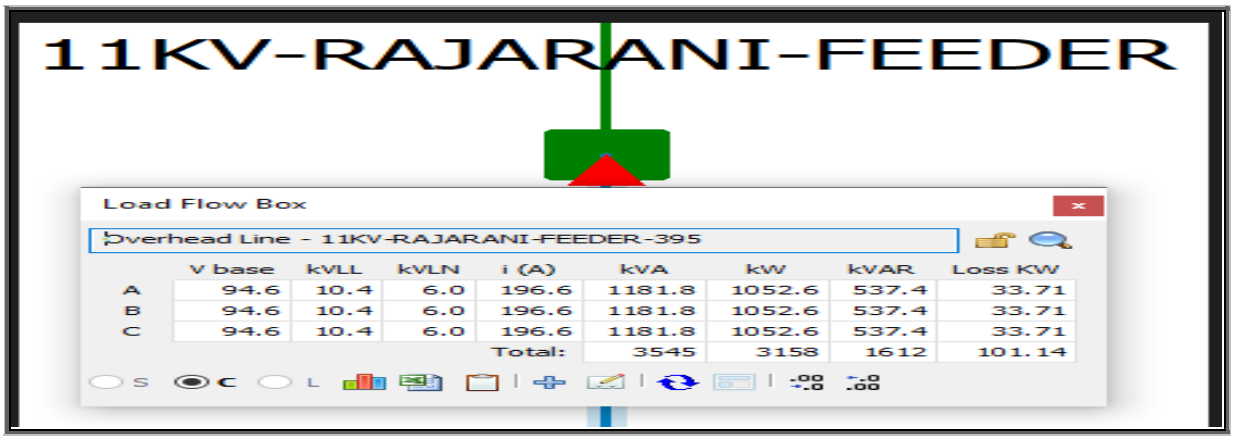


Proposed Scenario:

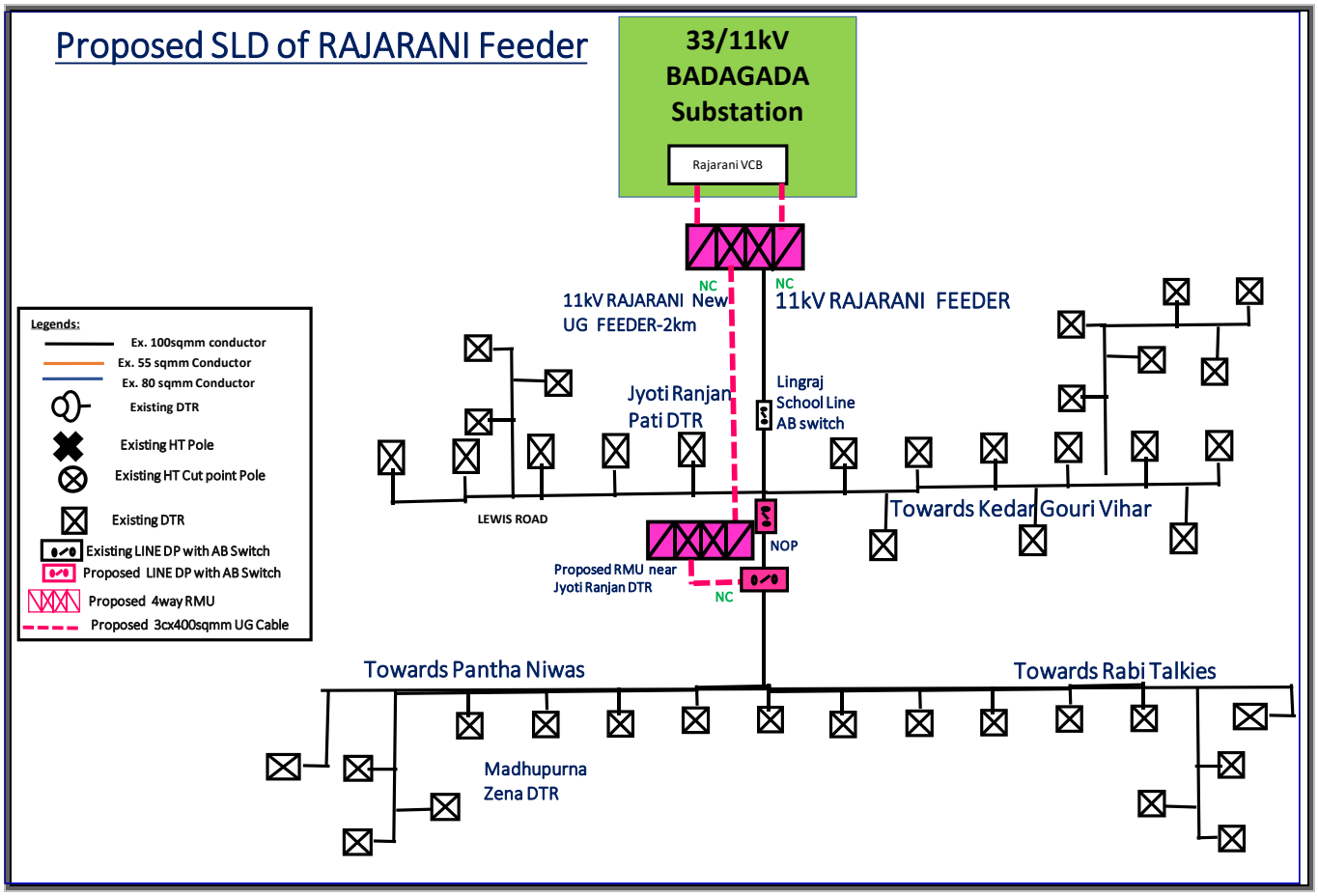
Proposal for Construction of 2KM New line using 3Cx400sqmm U/G cable from Badagada PSS to near Jyoti Ranjan DTR of Rajarani Feeder.

Proposed Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% proposed Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Badagada	RAJARANI	5.19	2.50	48%	3.60	69%	Underload
Badagada	RAJARANI-New Feeder	5.76	2.84	49%	4.09	71%	Underload

Proposed Load Flow:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BED
Name of the Sub-Division : -	TEMPLE
Name of the Section : -	BADAGADA
11kV Feeder Name:-	11KV RAJARANI
Name of the Work :-	Proposal for Construction of 2KM of 3CX400SQMM UG Cable New line from Badagada PSS to near Jyoti Ranjan DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 2KM of 3CX400SQMM UG Cable line from Badagada PSS to near Jyoti Ranjan DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	1,48,48,141.67
2	PART-B: Installation of 2No of 11kV RMU at Badagada PSS and Jyoti Ranjan Pati DTR	36,86,972.04

3	PART C: 11kV Line DP with AB Switch for new line from Badagada PSS to Gauri Nagar	4,64,161.10
4	**Total Gross**	**1,89,99,274.81**
Total estimated cost is Rs. 1.90Cr.		

Cost Estimate: 1.90 cr. (For detailed BoQ refer Annexure 9.6)

Benefit:

- To maintain reliable Power Supply to Industrial consumers by mitigation of overloading issue of 11kV Rajarani Feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

7. **Mitigation of Feeder Overloading issue of 11kV BHIMTANGI LINGRAJ Feeder:**

Proposal: Proposal for Construction of 1 KM New Linking line using 3Cx400sqmm U/G cable from Bhimatangi PSS to Nanda Enclave (Azad Nagar Squre) of Bhimtangi Lingraj feeder eminating from Bhimtangi PSS.

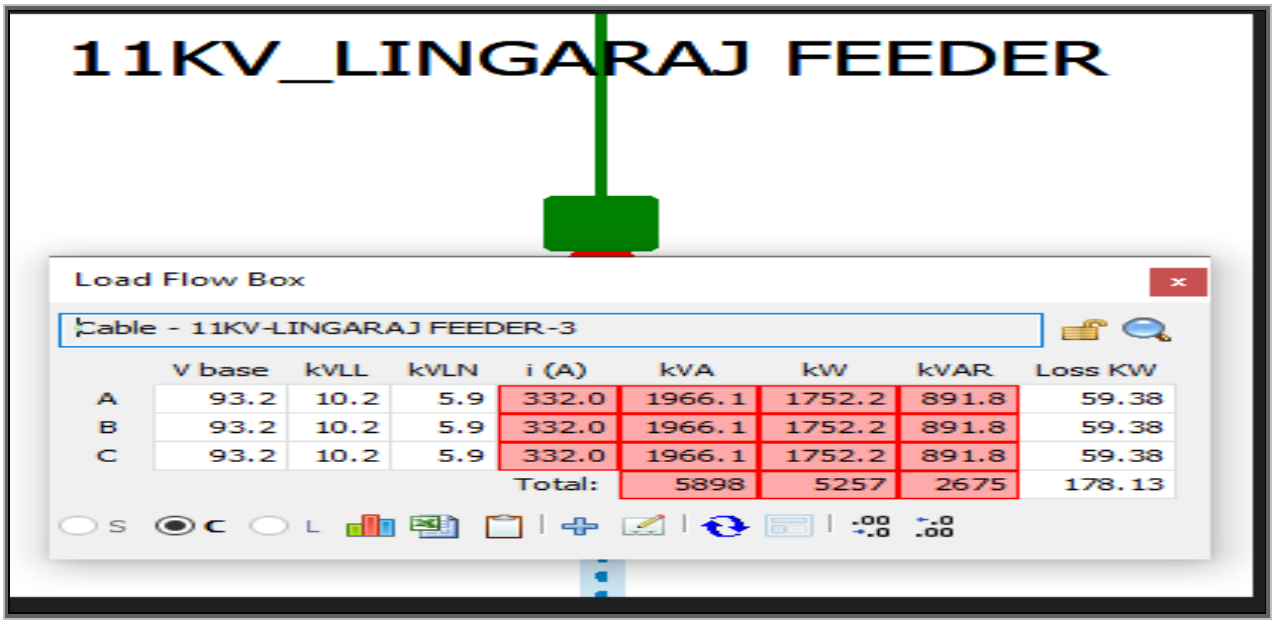
Objective: To mitigate the overloading issue of 11kV Bhimtangi Lingraj feeder.

Existing Scenario:

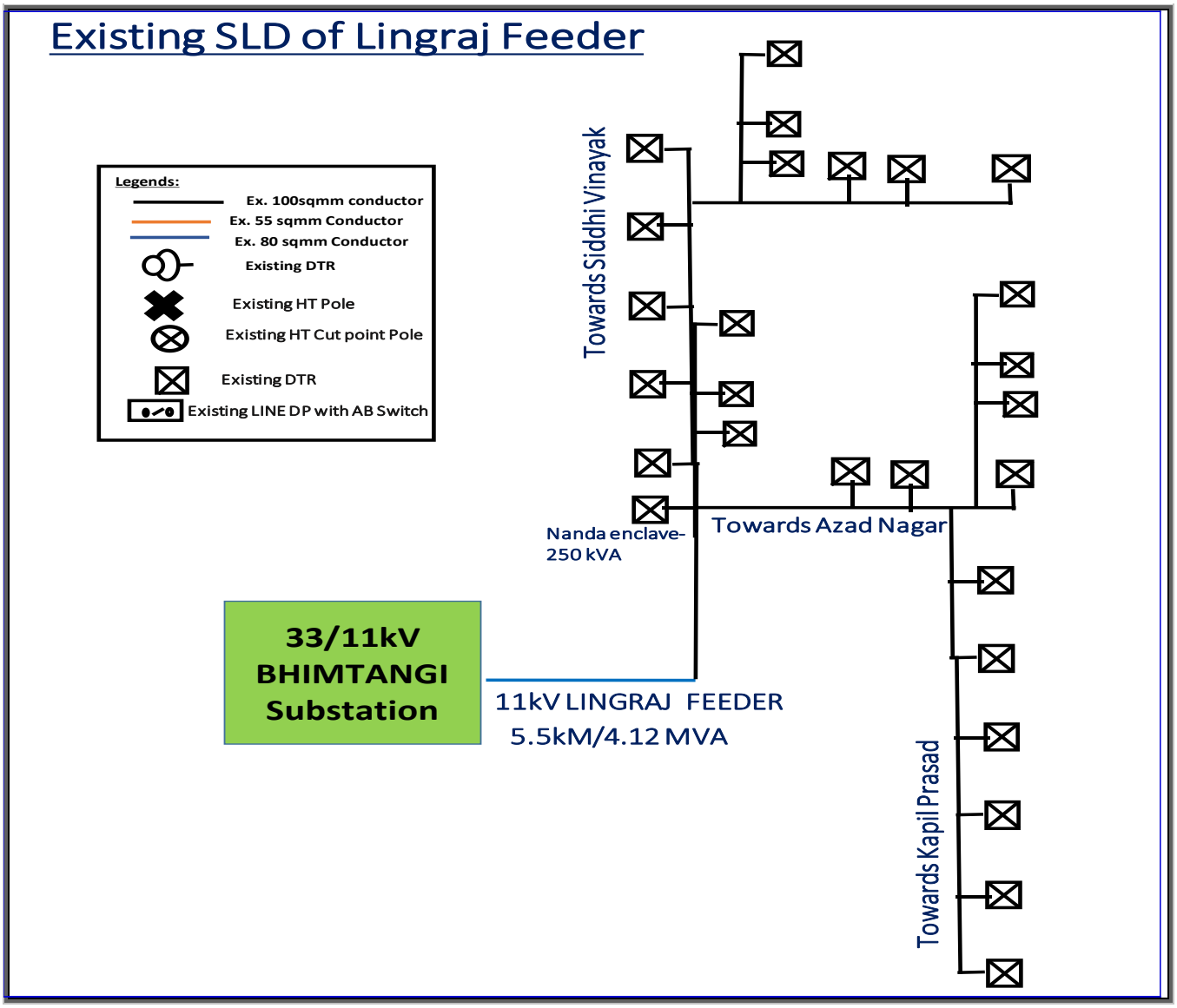
- At present,11kV Bhimtangi Lingraj feeder is emanating from 33/11kV BHIMTANGI PSS.Total length of this feeder is 3 km and the peak load is 4.12 MVA.
- In the existing scenario, conductor size of 11kV Bhimtangi Lingraj feeder is 100/80sqmm & the feeder is 91% loaded w.r.t the current carrying capacity of the conductor and 131% loaded considering 20% load growth for Urban feeders.
- This feeder is feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Bhimatangi	LINGARAJ	4.52	4.12	91%	5.94	131%	Overload

AS-IS Load Flow:



Existing SLD (summer'24):

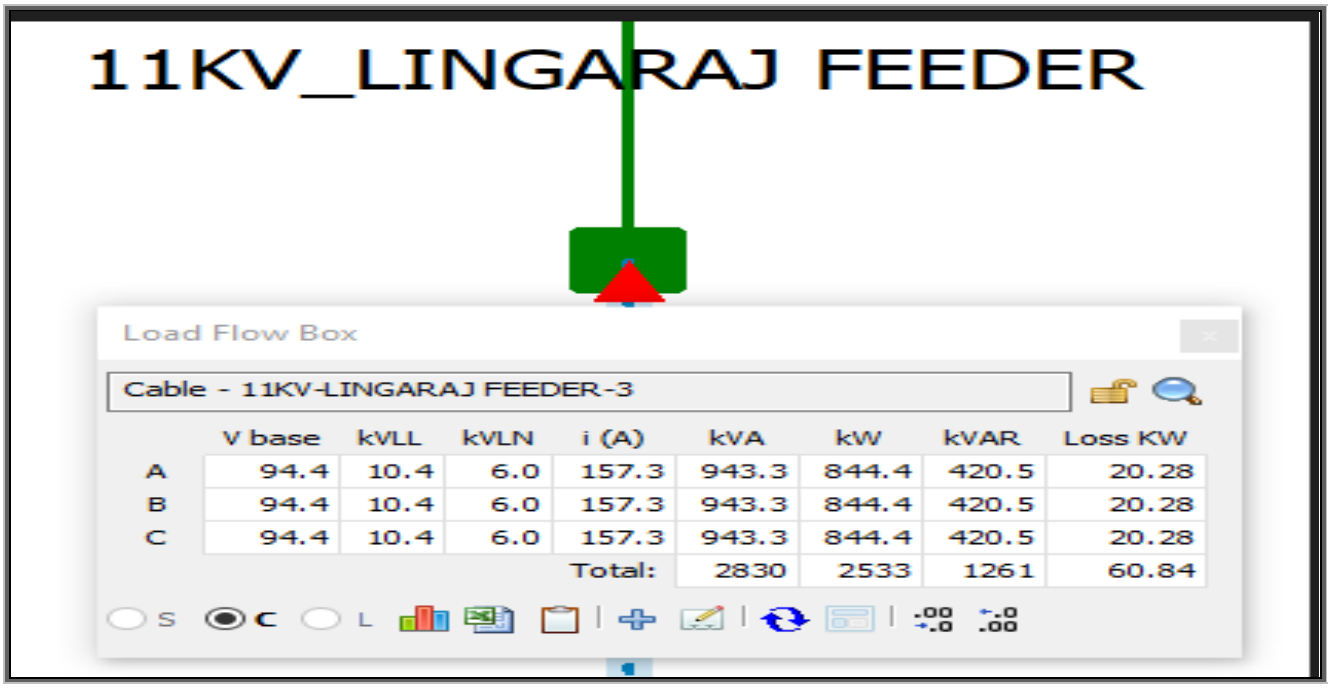


Proposed Scenario:

Proposal for Construction of 1KM New line using 3Cx400sqmm U/G cable from Bhimtangi PSS to Nanda enclave DTR of Bhimtangi Lingraj Feeder.

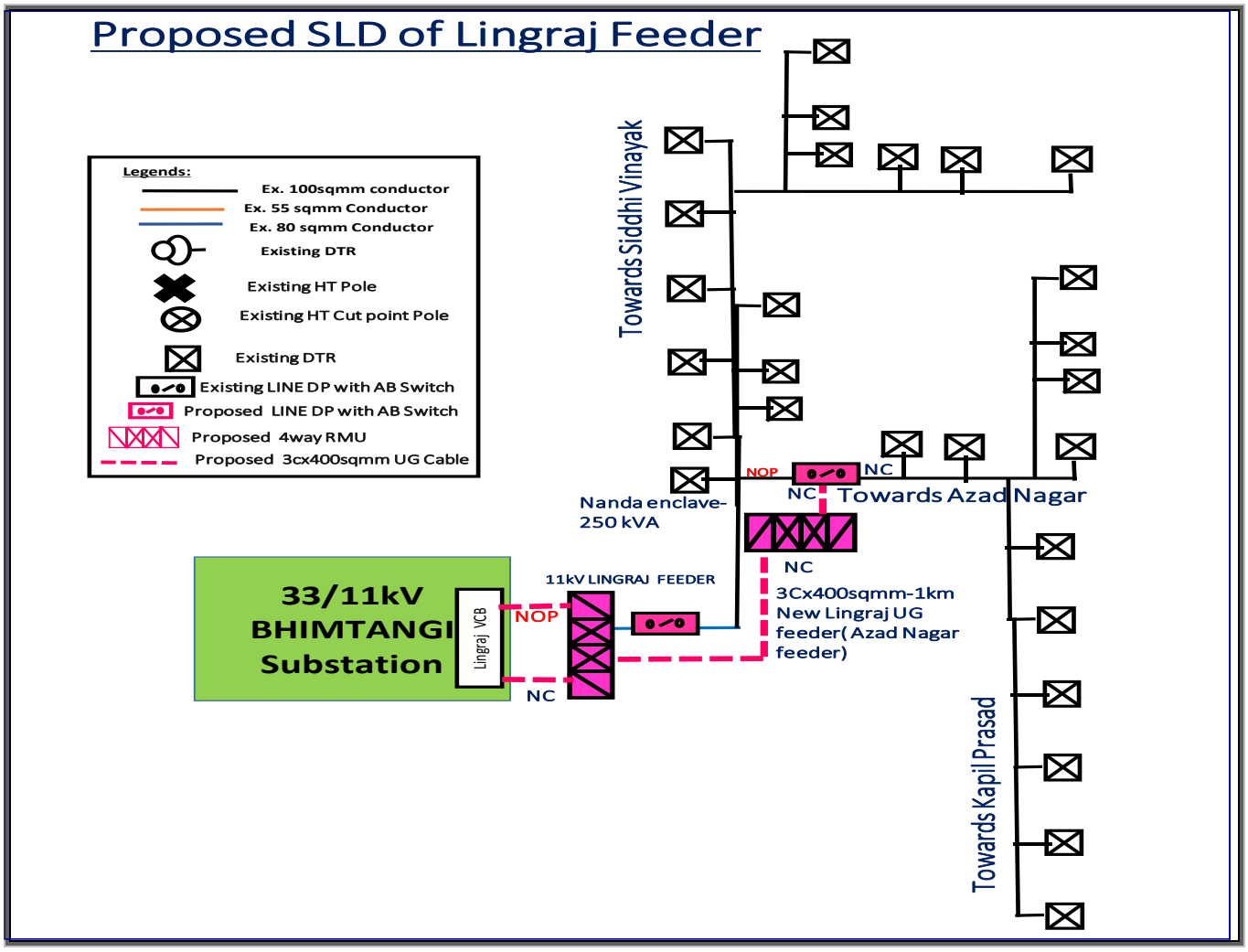
Proposed Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Proposed Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Bhimatangi	LINGARAJ	4.52	2.00	44%	2.88	64%	Underload
Bhimatangi	New LINGARAJ UG Feeder	5.76	2.12	37%	3.06	53%	Underload

Proposed Load Flow:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	94.4	10.4	6.0	157.3	943.3	844.4	420.5	20.28
B	94.4	10.4	6.0	157.3	943.3	844.4	420.5	20.28
C	94.4	10.4	6.0	157.3	943.3	844.4	420.5	20.28
				Total:	2830	2533	1261	60.84

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		BED
Name of the Sub-Division : -		TEMPLE
Name of the Section : -		DHAULI
11kV Feeder Name:-		11KV BHIMTANGI LINGRAJ
Name of the Work :-		Proposal for Construction of 1KM of 3CX400SQMM UG Cable New line from Bhimtangi PSS to using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Construction of 1KM of 3CX400SQMM UG Cable New line from Bhimtangi PSS to NANDA ENCLAVE DTR (Azad Nagar Square) using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	75,09,929.15
2	PART-B: Construction of 2No of 11kV RMU at Bhimtangi PSS &NANDA ENCLAVE DTR (Azad Nagar Square)	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Bhimtangi PSS to Shankar Bazar	4,64,161.10
4	**Total Gross**	**1,17,80,677.68**
Total estimated cost is Rs. 1.17Cr.		

Cost Estimate: 1.17 cr. (For detailed BoQ refer Annexure 9.7)

Benefit:

- To maintain reliable Power Supply to Industrial consumers by mitigation of overloading issue of 11kV Rajarani Feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

8. **Mitigation of Feeder Overloading issue of 11kV GOUTAM NAGAR Feeder:**

Proposal: Proposal for Construction of 1.5KM Linking line using 3Cx400sqmm U/G cable from Mausima Chhak to Maa gouri Hellow world Shop of Ratharoad UG feeder eminating from Mulapadia PSS.

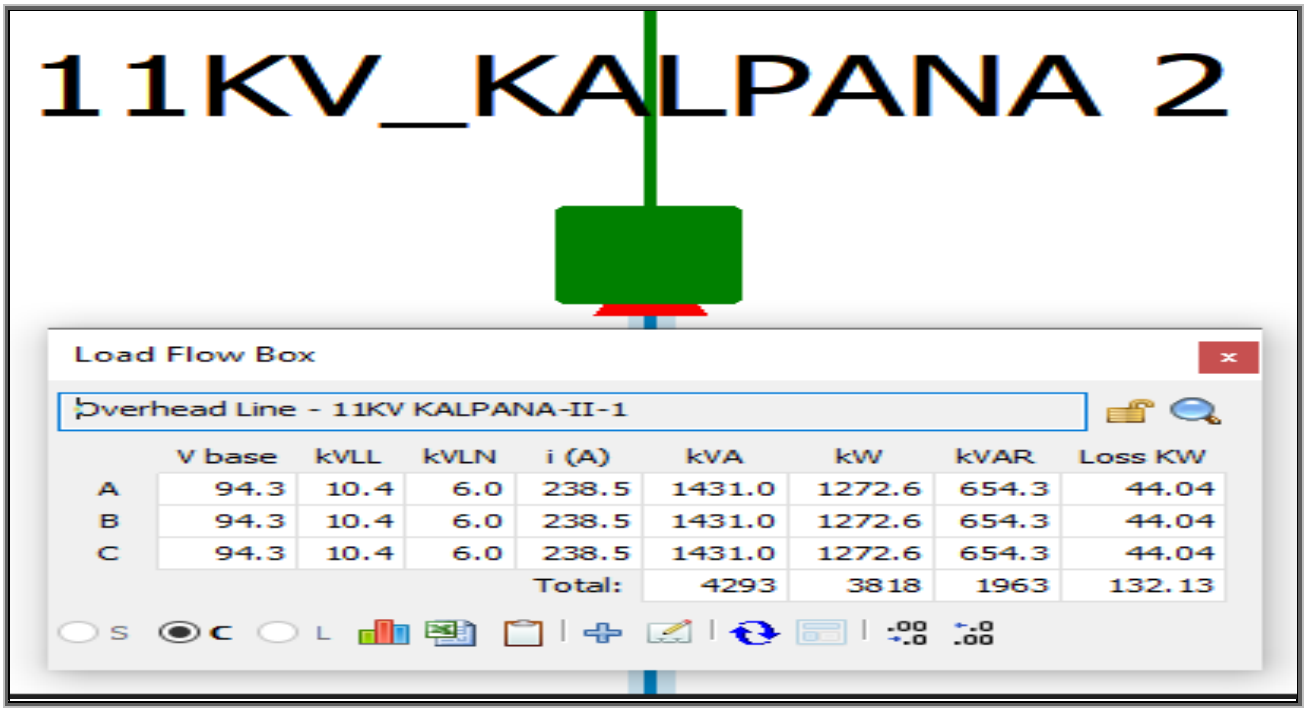
Objective: To mitigate the overloading issue of 11kV GOUTAM NAGAR feeder.

Existing Scenario:

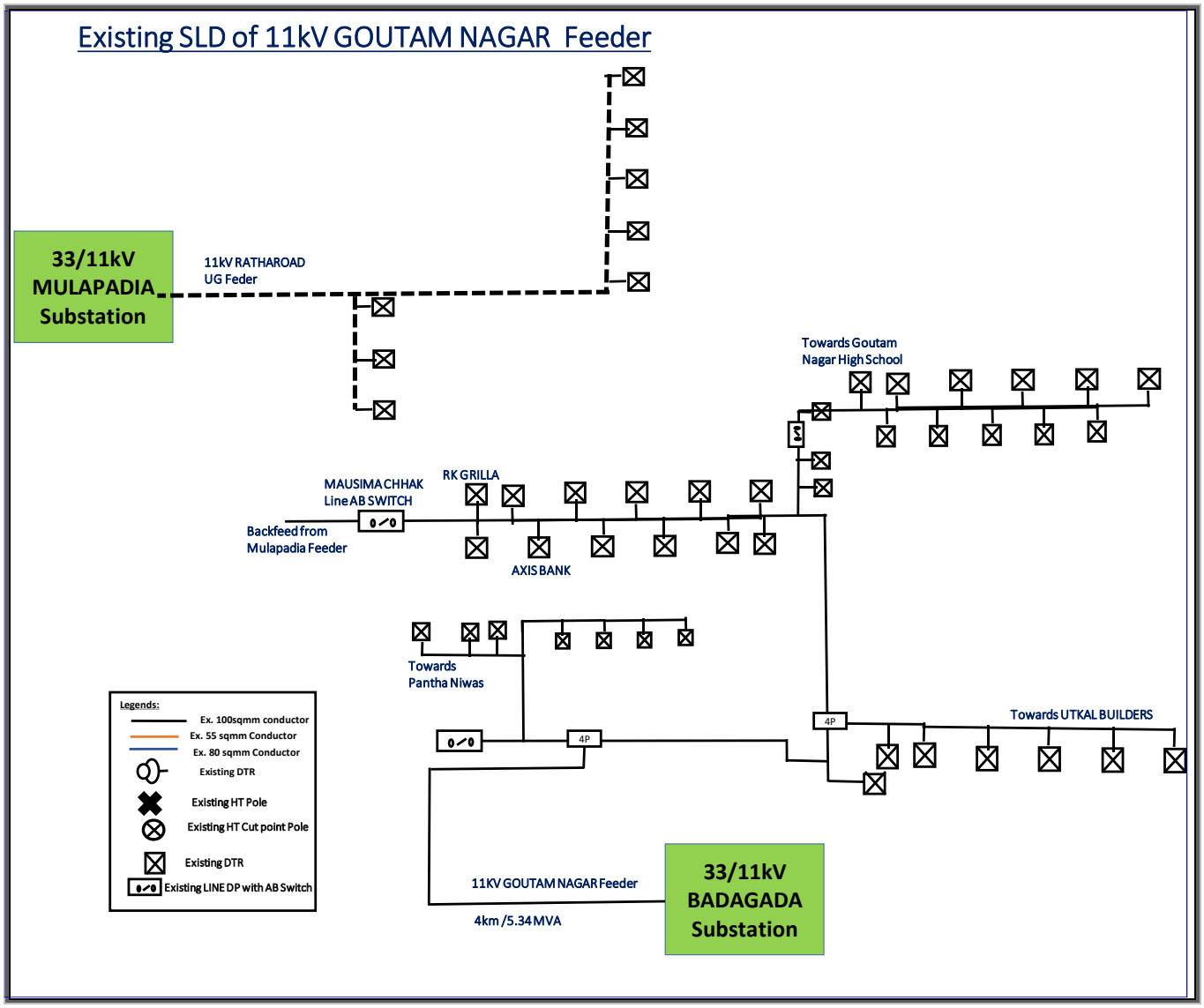
- At present,11kV Goutam Nagar feeder is emanating from 33/11kV Badagada PSS.Total length of this feeder is 4 km and the peak load is 5.34 MVA.
- In the existing scenario, conductor size of 11kV GOUTAM NAGAR feeder is 100/55qmm & the feeder is 103% loaded w.r.t the current carrying capacity of the conductor and 148% loaded considering 20% load growth for Urban feeders.
- This feeder is feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, Interlinking of this feeder with Ratharaoad is proposed for improving reliability

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Badagada	GOUTAM NAGAR	5.19	5.34	103%	7.69	148%	Overload
Mulapadia	RATHAROAD UG	5.76	1.77	31%	2.48	43%	Underload

AS-IS LOAD FLOW:



Existing SLD (summer'23):

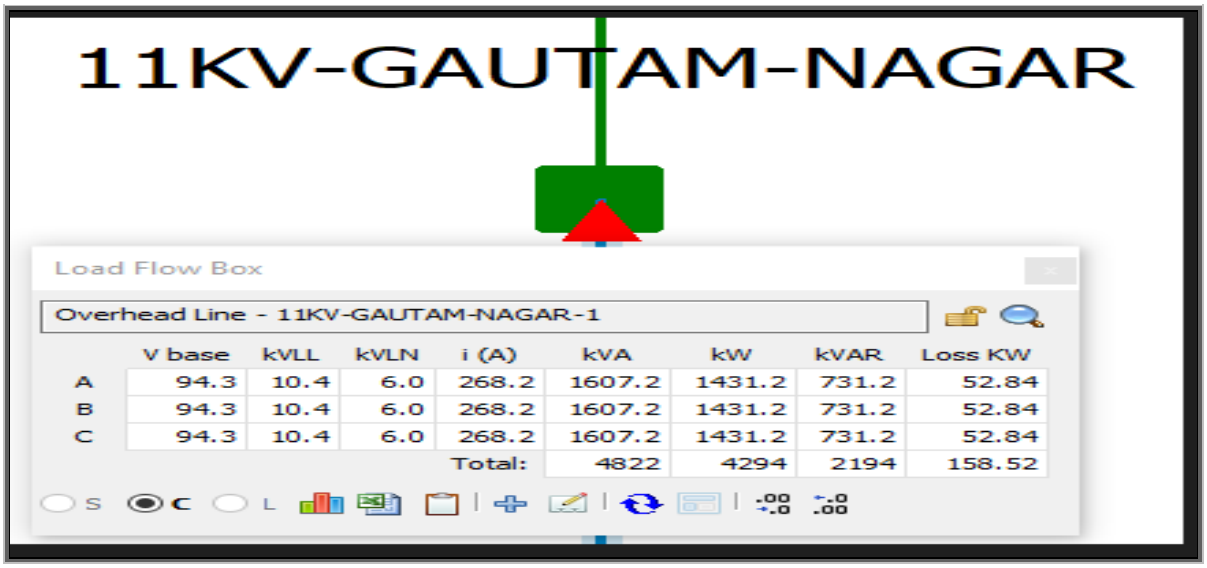


Proposed Scenario:

Proposal for Construction of 1.5KM New line using 3Cx400sqmm U/G cable from Maa Gouri Hellow world Shop to Mausima Chhak of Goutam Nagar Feeder.

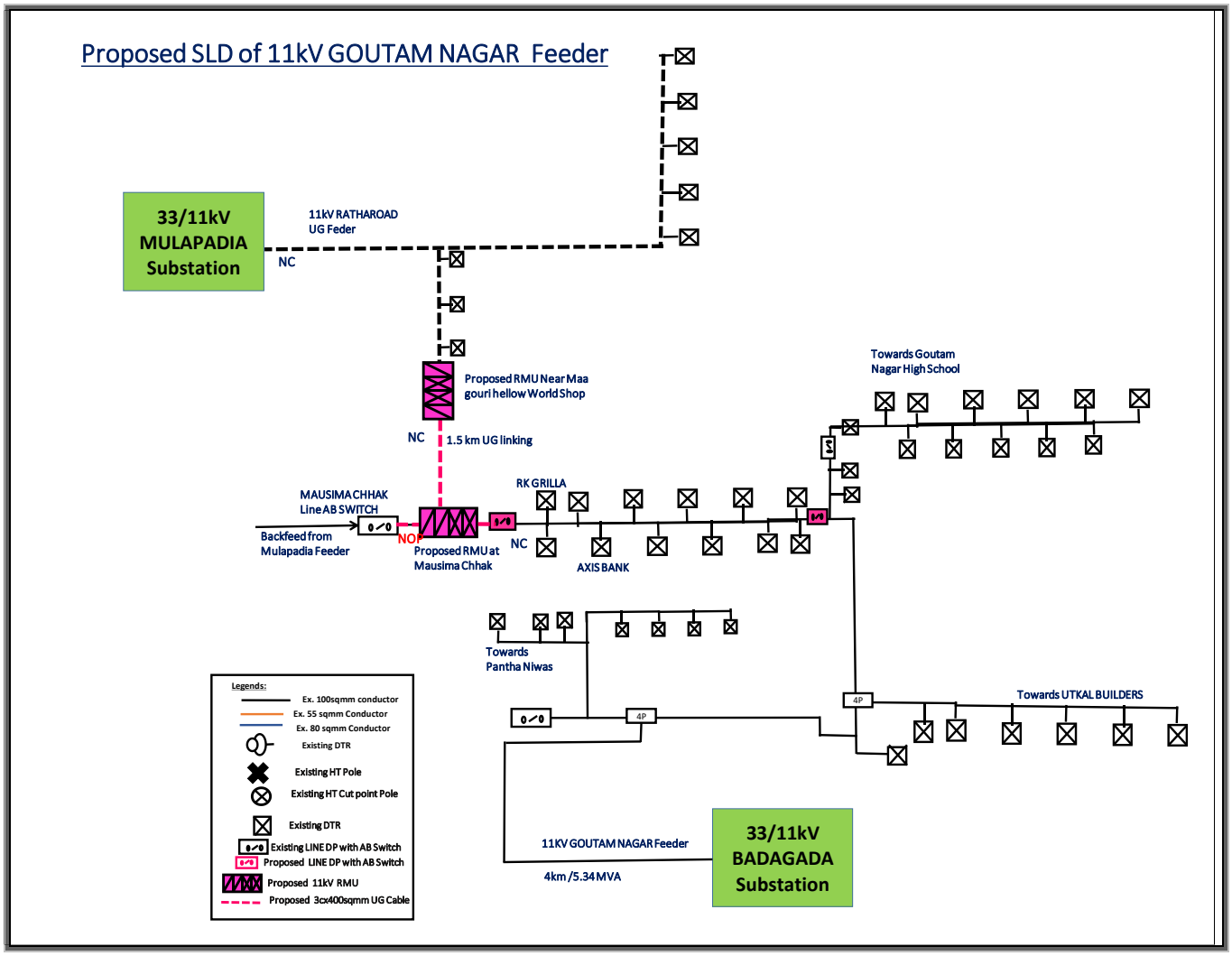
Proposed Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Badagada	RAJARANI	5.19	3.34	64%	4.81	93%	Underload
Mulapadia	RATHAROAD UG	5.76	3.77	65%	5.44	94%	Underload

Proposed Load flow:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	94.3	10.4	6.0	268.2	1607.2	1431.2	731.2	52.84
B	94.3	10.4	6.0	268.2	1607.2	1431.2	731.2	52.84
C	94.3	10.4	6.0	268.2	1607.2	1431.2	731.2	52.84
				Total:	4822	4294	2194	158.52

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		BED
Name of the Sub-Division : -		TEMPLE
Name of the Section : -		BADAGADA
Name of the Feeder:-		11kV GOUTAM NAGAR
Name of the Work :-		Proposal for Construction of 1.5KM of 3CX400SQMM UG Cable Feeder linking from Gautam nagar feeder to Ratharoad UG Feeder using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Construction of 1.5KM of 3CX400SQMM UG Cable Feeder linking from Mausima Chhak to Maa gouri Hellow world Shop of Ratharoad UG Feeder using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	1,11,79,046.66
2	PART-B: Installation of 2No of 11kV RMU at Mausima Chhak of goutam Nagar Feeder & near Maa gouri Hellow world Shop of Ratharoad UG feeder.	36,86,972.04
3	PART C: 11kV Line DP with AB Switch for new Feeder linking from Gautam nagar feeder to Ratharoad UG Feeder	4,64,161.10
4	**Total Gross**	**1,53,30,179.80**
Total estimated cost is Rs. 1.53Cr.		

Cost Estimate: 1.53 cr. (For detailed BoQ refer Annexure 9.8)

Benefit:

- To maintain reliable Power Supply to Industrial consumers by mitigation of overloading issue of 11kV GOUTAM NAGAR Feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.1

9. **Mitigation of Feeder Overloading issue of 11kV KALPANA-2 Feeder:**

Proposal: Proposal for Construction of 0.1 KM Linking line using 3Cx400sqmm U/G cable at Laxmisagar PSS.

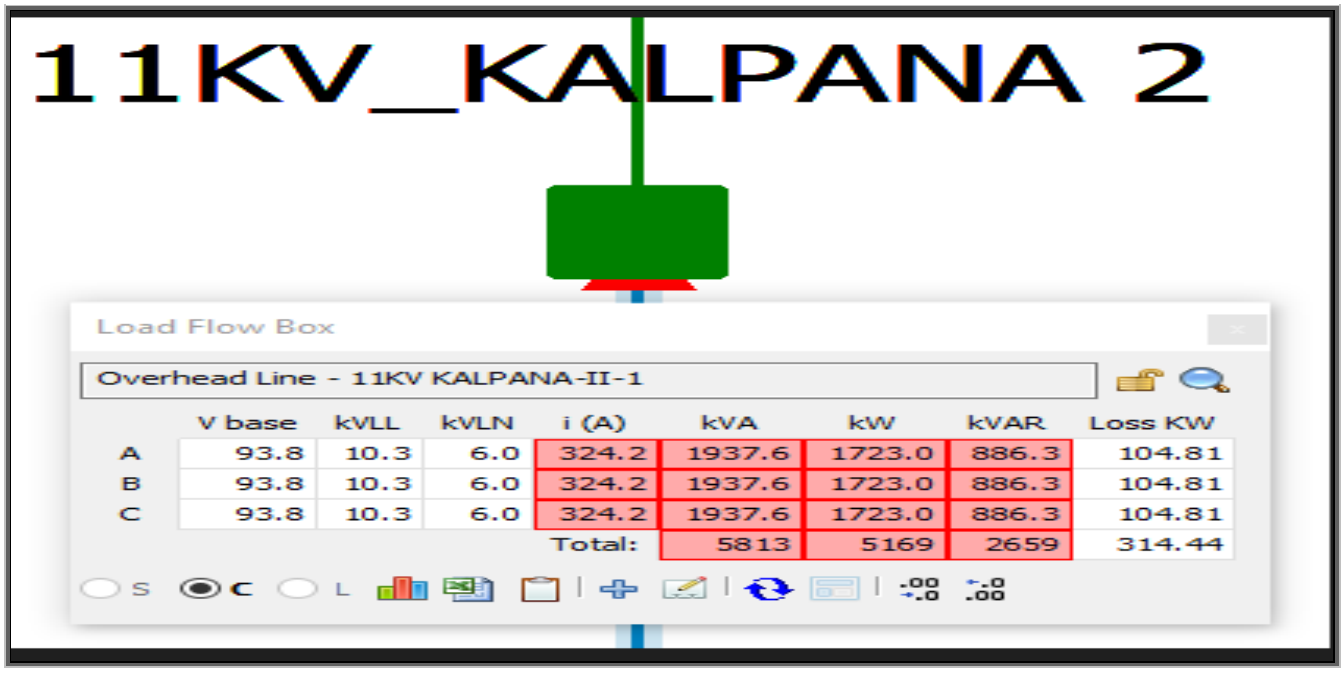
Objective: To mitigate the overloading issue of 11kV KALPANA-2 feeder.

Existing Scenario:

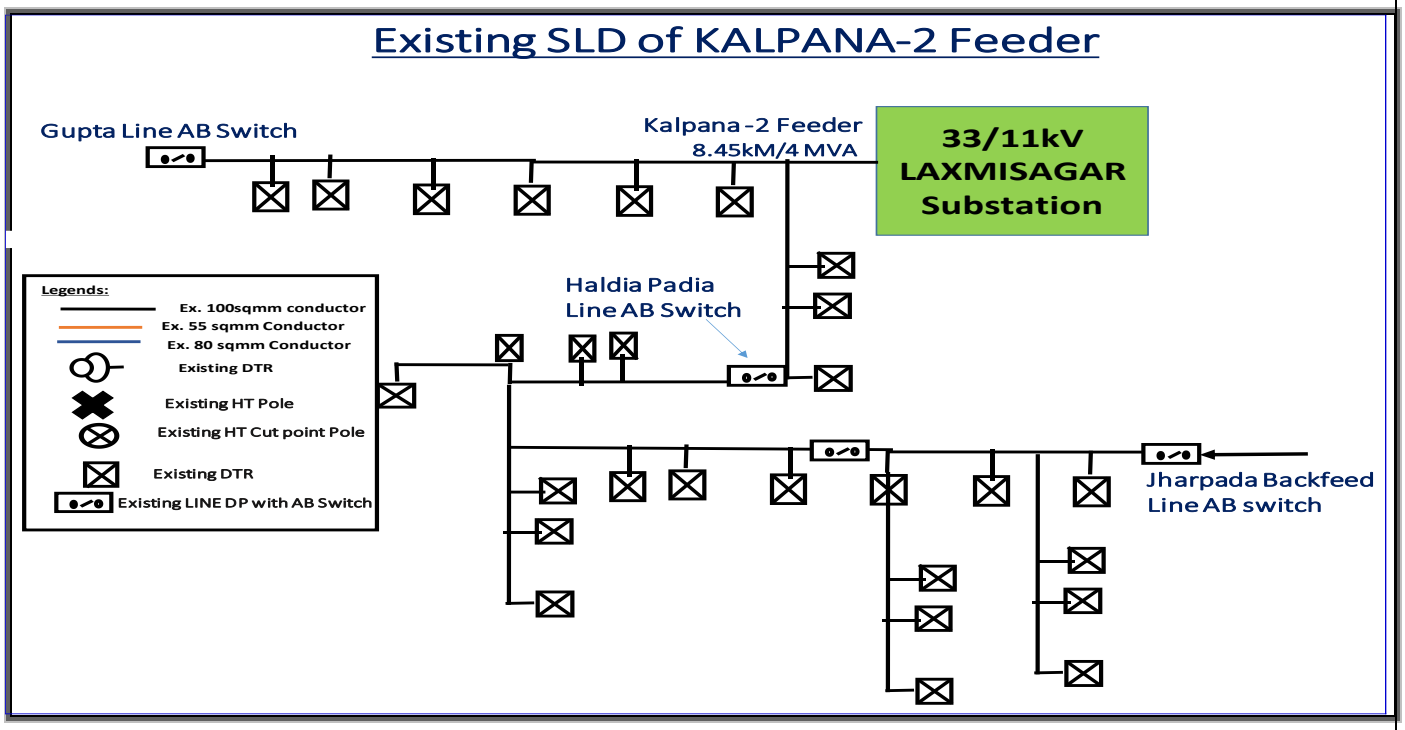
- At present, 11kV Kalpana-2 feeder is emanating from 33/11kV Laxmisagar PSS.Total length of this feeder is 8.45 km and the peak load is 4 MVA.
- In the existing scenario, conductor size of 11kV Kalpana-2 feeder is 100/55qmm & the feeder is 77% loaded w.r.t the current carrying capacity of the conductor and 111% loaded considering 20% load growth for Urban feeders.
- This feeder is feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Laxmisagar	KALPANA-2	5.19	4.01	77%	5.77	111%	Overload
Laxmisagar	KALPANA-1	5.19	1.91	37%	2.67	51%	Overload

AS-IS LOAD FLOW:



Existing SLD (summer'23):

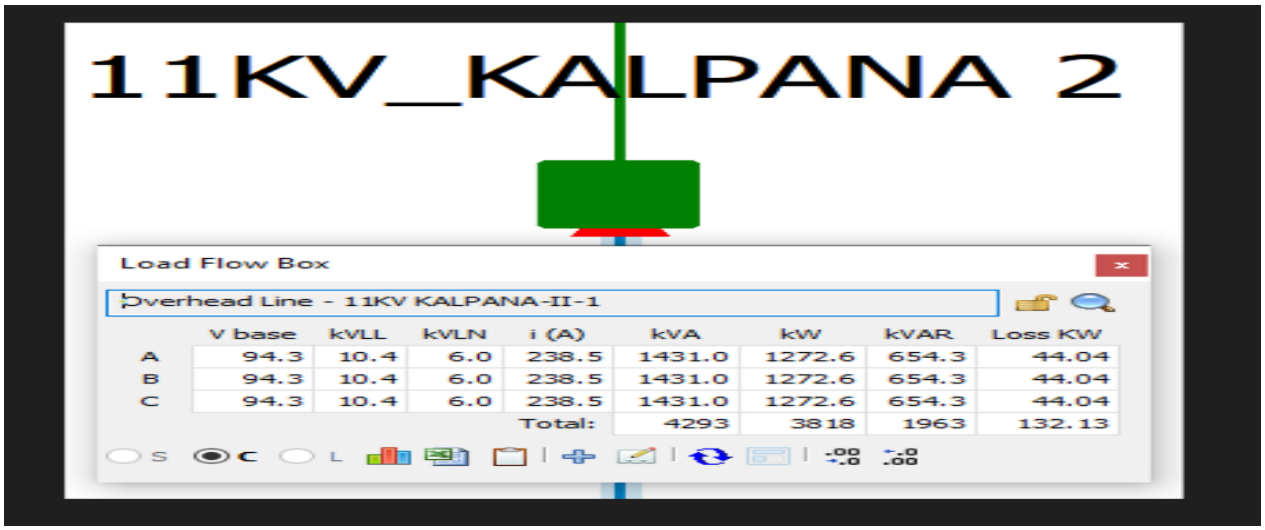


Proposed Scenario:

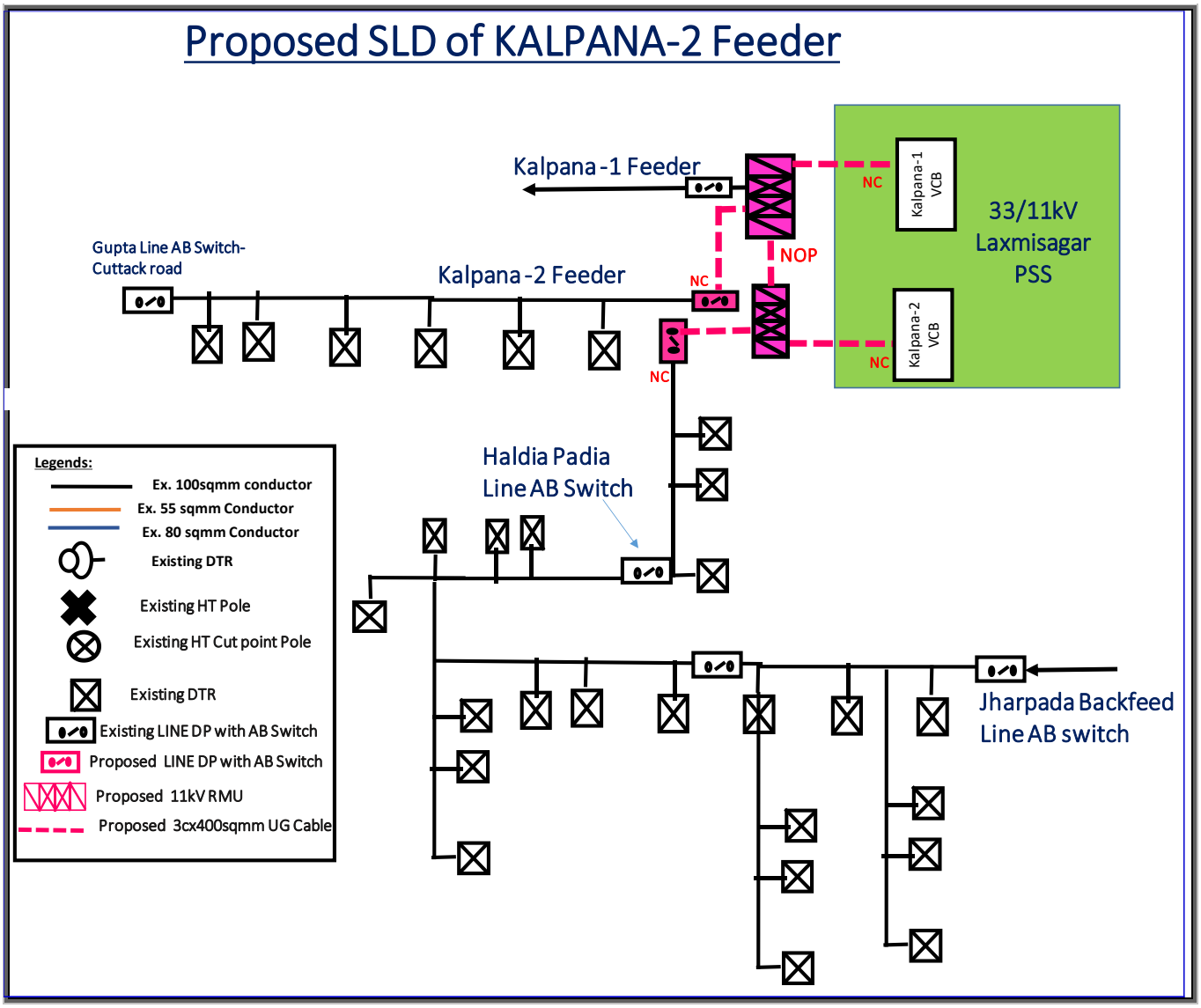
Proposal for Construction of 0.1KM Linking line using 3Cx400sqmm U/G cable at Laxmisagar PSS.

Proposed Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**%Proposed Loading of feeder**	**Summer 25 Loading in MVA**	**% Loading in Summer-25**	**Feeder Status**
Laxmisagar	KALPANA-2	5.19	3.01	58%	4.33	83%	Underload
Laxmisagar	KALPANA-1	5.19	2.91	56%	4.19	81%	Underload

Proposed Load Flow:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		BED
Name of the Sub-Division : -		RASULGARH
Name of the Section : -		KALPANA-2
Name of the Feeder: -		KALPANA-2
Name of the Work :-		Proposal for Construction of 0.1 KM of 3CX400SQMM UG Cable linking line for bifurgate load on Kalpana-1 Feeder using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**

1	PART A: Construction of 0.1KM of 3CX400SQMM UG Cable line for bifurgate load on Kalpana-1 Feeder using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	7,71,535.46
2	PART-B: Construction of 2No of 11kV RMU at Laxmisagar PSS.	31,49,665.90
3	PART C: 11kV Line DP with AB Switch for bifurgate load on Kalpana-1 Feeder	4,64,161.10
4	**Total Gross**	**43,85,362.46**
Total estimated cost is Rs. 0.44Cr.		

Cost Estimate: 0.44 cr. (For detailed BoQ refer Annexure 9.9)

Benefit:

- To maintain reliable Power Supply to Industrial consumers by mitigation of overloading issue of 11kV KALPANA-2 Feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping is mitigated because of overloading is adressed through above proposal.1

10.**Mitigation of Feeder Overloading issue of 11kV Gajapati Nagar Feeder:**

Proposal: Proposal for Augmentation of existing 11KV line using from 80sqmm to 148sqmm from Sainik School PSS to Barrack Battalion of length 4km and Construction of 1.8 Km new linking line from RRL PSS to near IIT campus.

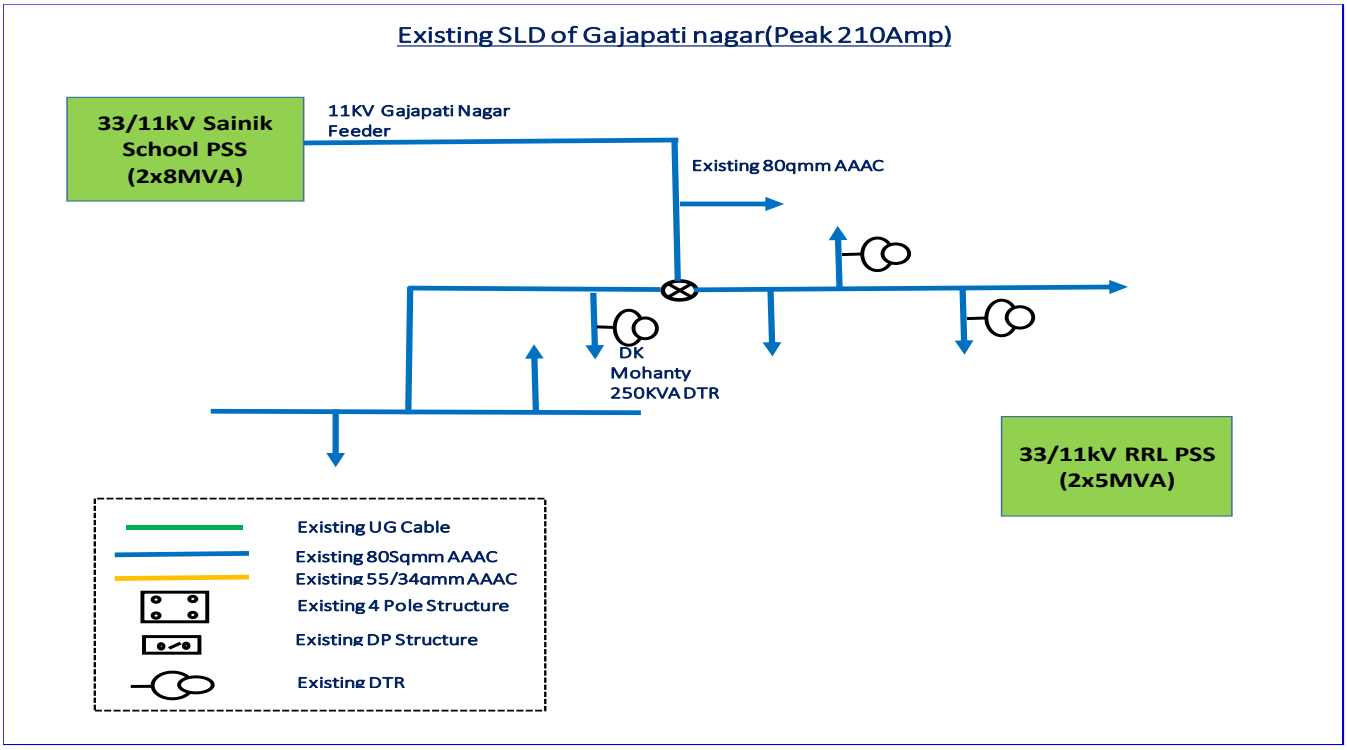
Objective: To mitigate the overloading issue of **11kV Gajapati Nagar** feeder.

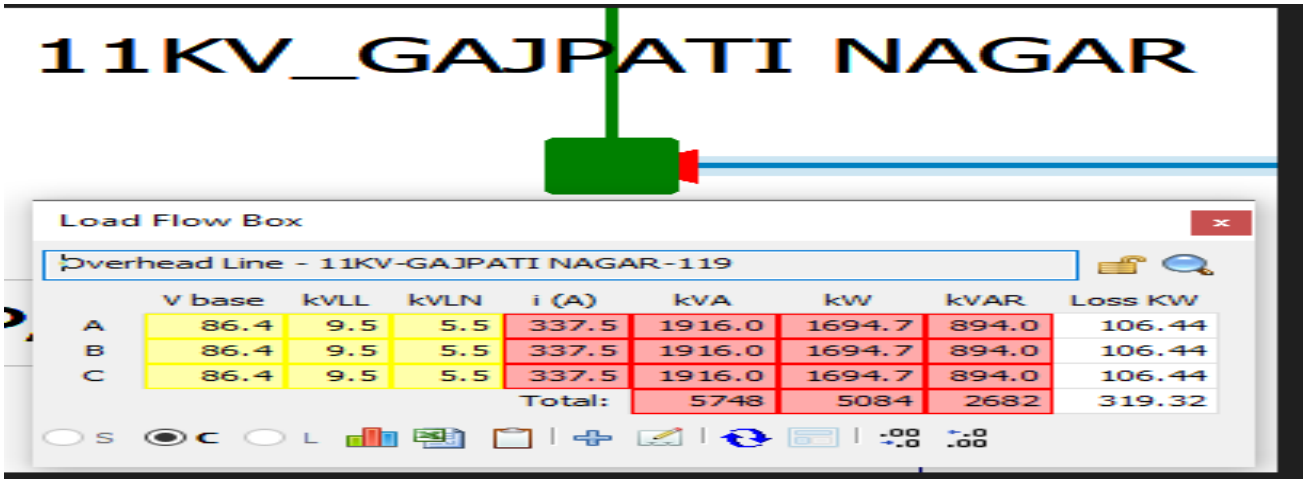
Existing Scenario:

- At present, 11kV Gajapati Nagar feeder is emanating from 33/11kV Sainik Schiool PSS.Total length of this feeder is 5 km and the peak load is 4 MVA.
- In the existing scenario, conductor size of 11kV Gajapati Nagar feeder is 80sqmm & the feeder is 89% loaded w.r.t the current carrying capacity of the conductor and 128% loaded considering 20% load growth for Urban feeders.
- This feeder is completely feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Sainik School	11KV-Gajpati Nagar	4.52	4.01	89%	5.77	128%	Overload

Existing SLD (summer'23):



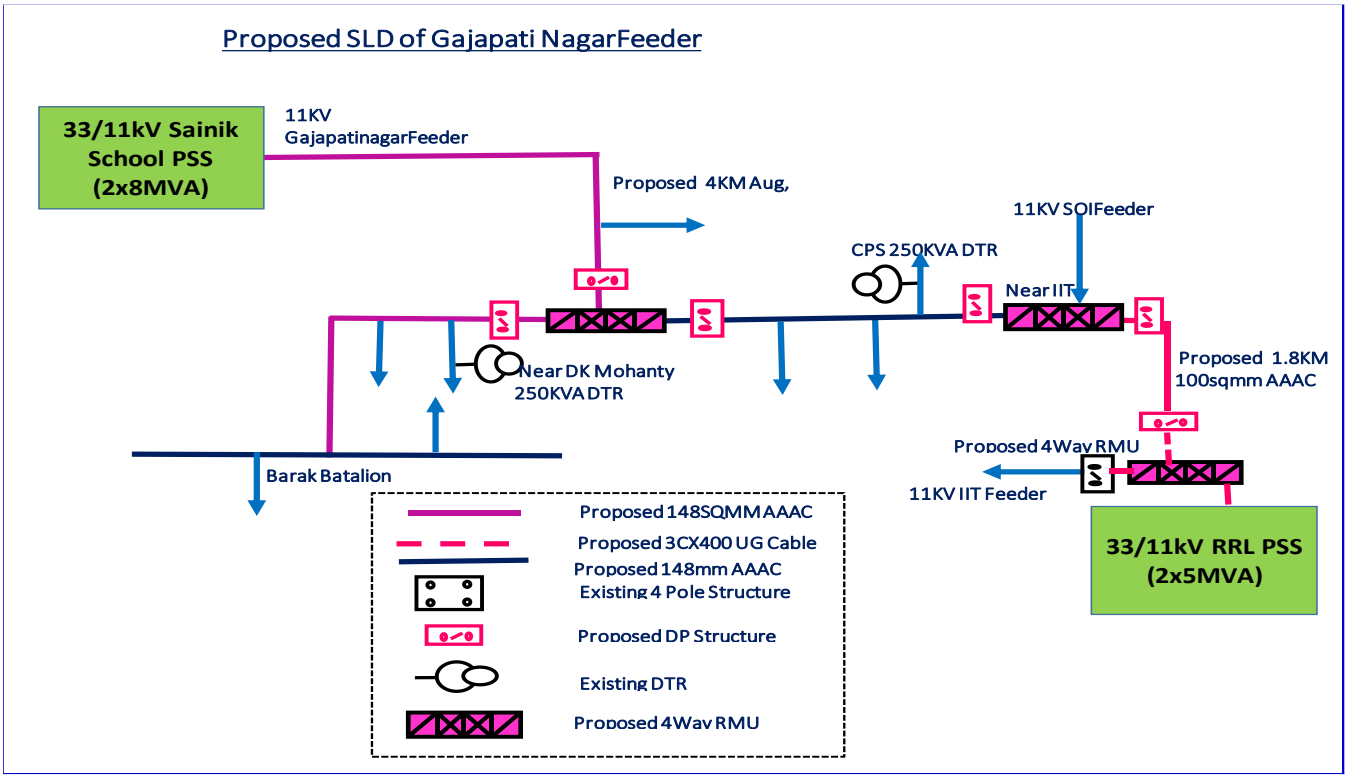


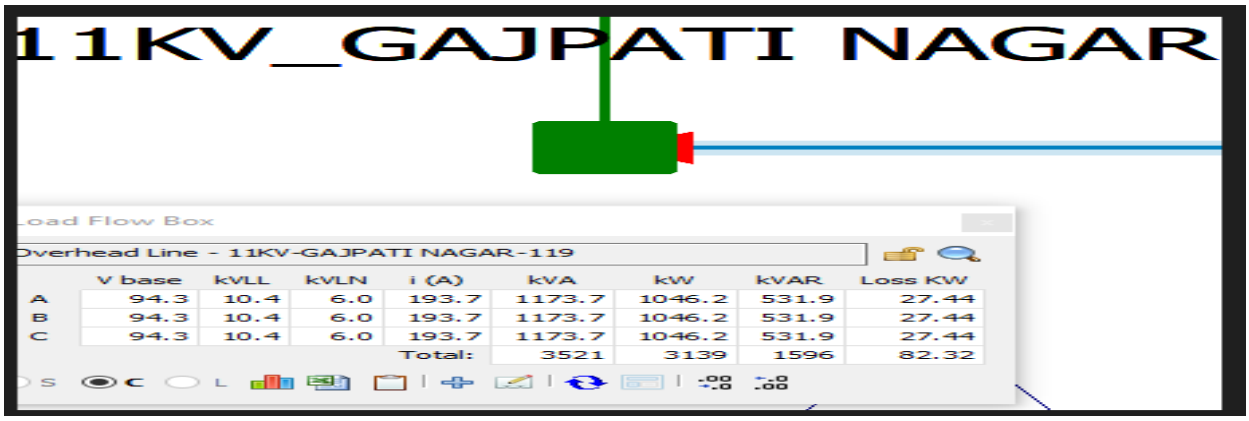
Proposed Scenario:

Proposal for Augmentation of existing 11KV line using from 80sqmm to 148sqmm from Sainik School PSS to Barrack Battalion of length 4km and Construction of 1.8 Km new linking line from RRL PSS to near IIT campus.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Proposed Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Sainik School	11KV-Gajpati Nagar	6.68	2.51	38%	3.61	54%	OK
RRL PSS	New Feeder	5.78	1.5	26%	2.16	37%	OK

Proposed SLD (summer'25):





Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	NAYAPALLI
Name of the Section : -	VSS Nagar
Name of the Feeder: -	11kV Gajapati Nagar Feeder
Name of the Work :-	Proposal for Construction for Augmentation of Construction of 4KM of Augmentation using 148 SQ.MM. -AAA Conductor from Sainik school PSS to Barrack Battalion and new 11KV Line from RRL PSS to CPS 250KVA DTR
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART-A; Construction of 4KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAA Conductor from Augmentation of conductor from 80mm2 to 148mm2 of length 4 KM from Sainik school PSS to Barrack Battalion.	61,86,828.80
2	PART-B; Construction of 1.8KM of New line using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAA Conductor from RRL PSS to CPS 250KVA DTR	36,89,540.17
3	PART-C: Construction of Guarding for Line Protecting Guarding on Double Pole for Road Crossing	69,000.49
4	PART-D: Construction of 11kV RMU from RRL PSS to CPS 250KVA DTR	57,66,195.70
5	PART E: 11kV Line Length with 40 Mtr. Span using 100 SQ.MM. -AAA Conductor	13,92,483.30
4	**Total Gross**	**1,71,04,048.47**
Total estimated cost is Rs. 1.71Cr.		

(For detailed BoQ refer Annexure 9.10)

Benefit:

- To maintain reliable Power Supply to urban consumers by strengthening the line & mitigation of overloading issue of 11kV Gajapati Nagar feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping is mitigated because of overloading is adressed through above proposal.

11.**Mitigation of Feeder Overloading issue of 11kv Jaidev vihar Feeder**

Proposal: Proposal for Construction of 1KM of New Linking line using 3Cx400sqmm from NAYAPALLY PSS to Biju Pattanaik College of jaidev vihar feeder.

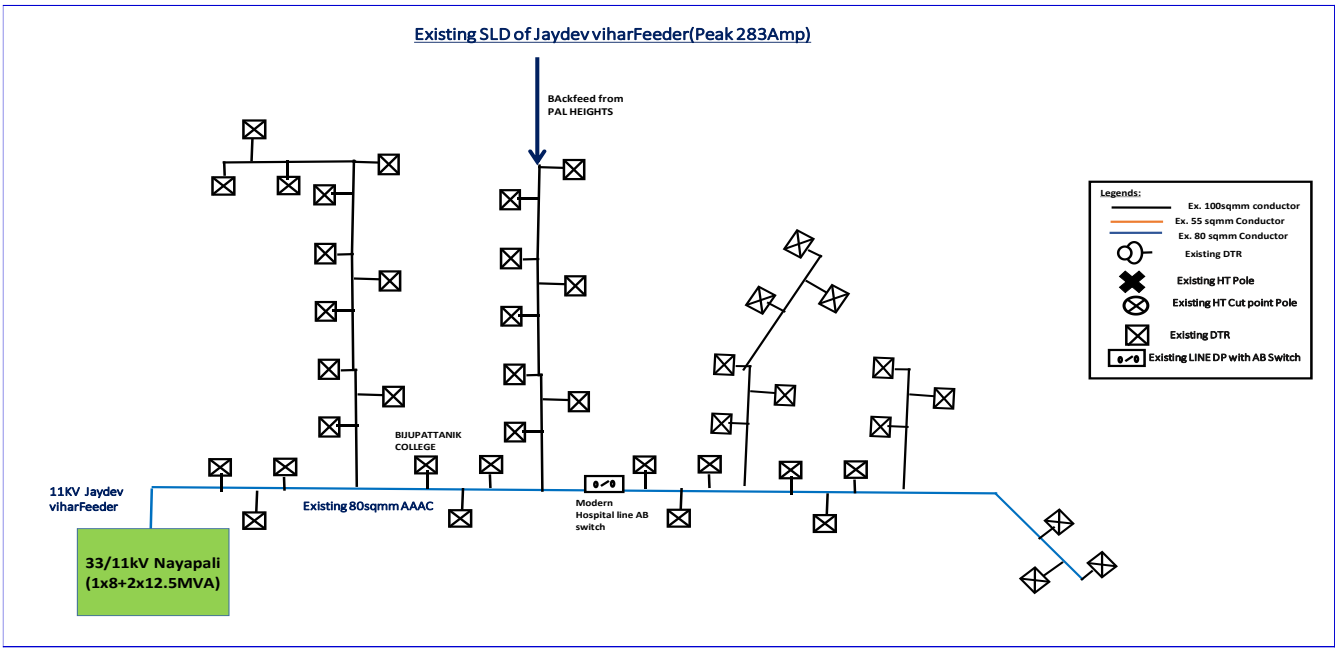
Objective: To mitigate the overloading issue of 11kV Jaidev vihar Feeder.

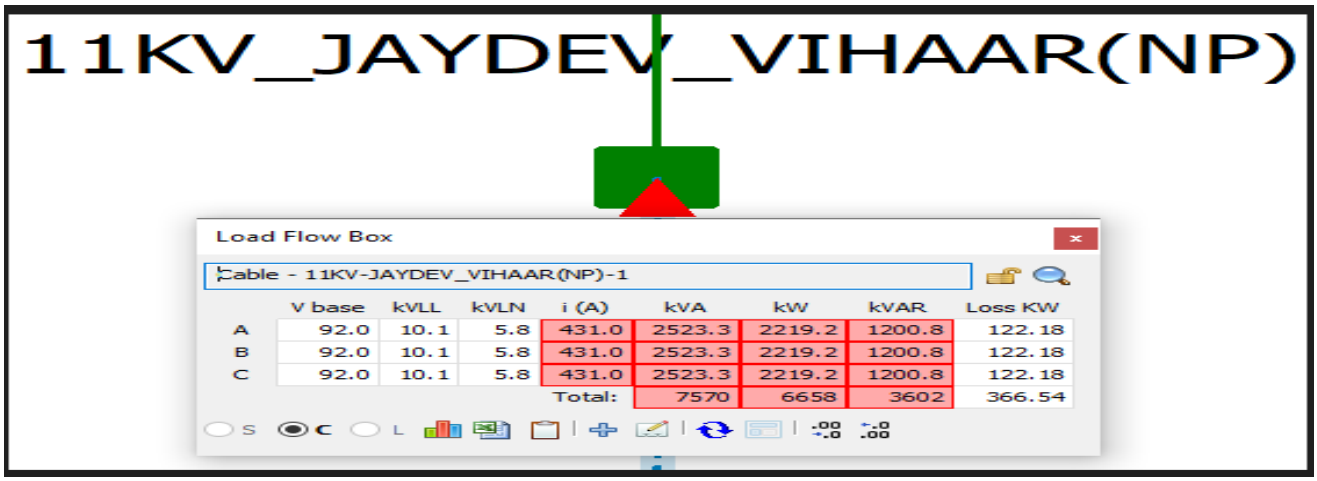
Existing Scenario:

- At present, 11kV Jaidev Vihar feeder is emanating from 33/11kV Nayapally PSS.Total length of this feeder is 6km and the peak load is 5.4MVA.
- In the existing scenario, conductor size of 11kV Jaidev Vihar feeder is 80sqmm & the feeder is 119% loaded w.r.t the current carrying capacity of the conductor and 172% loaded considering 20% load growth for urban feeders.
- This feeder is completely feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Nayapalli	JAYDEV VIHAR	4.52	5.40	119%	7.78	172%	Overload

Existing SLD (summer'23):



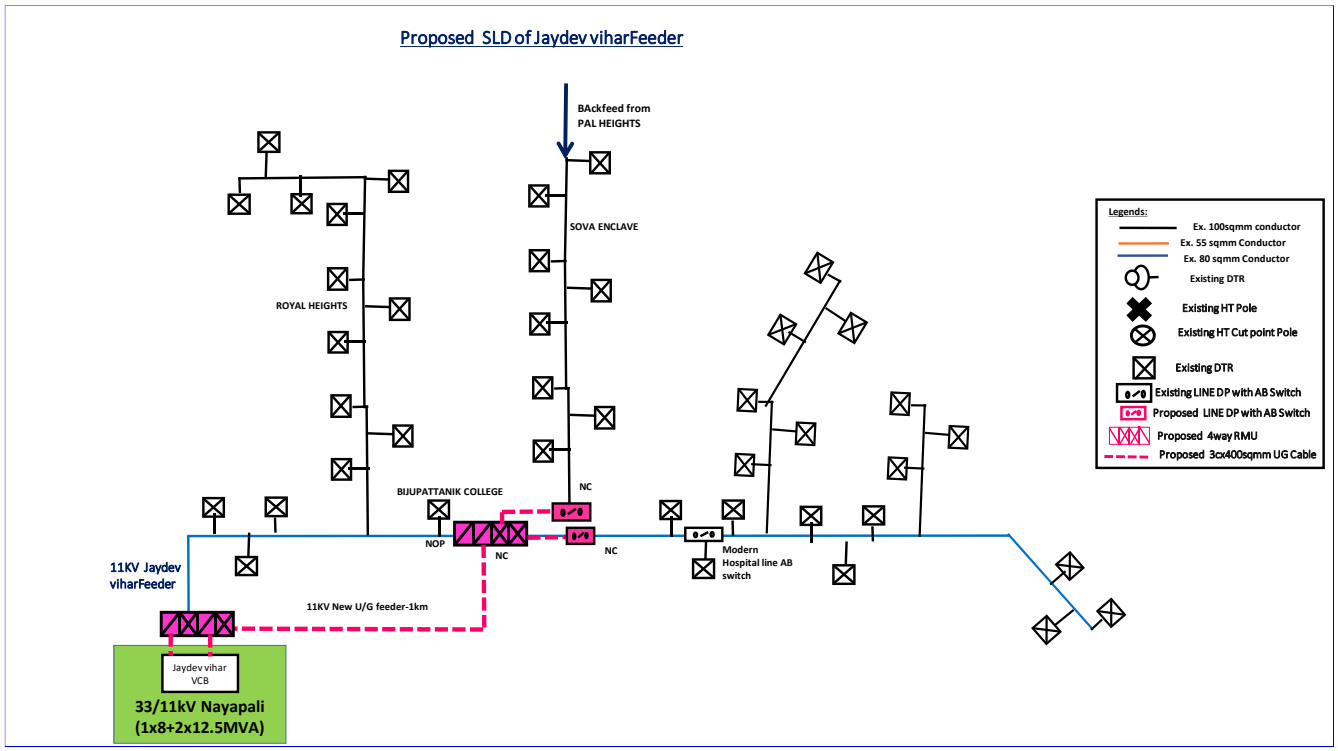


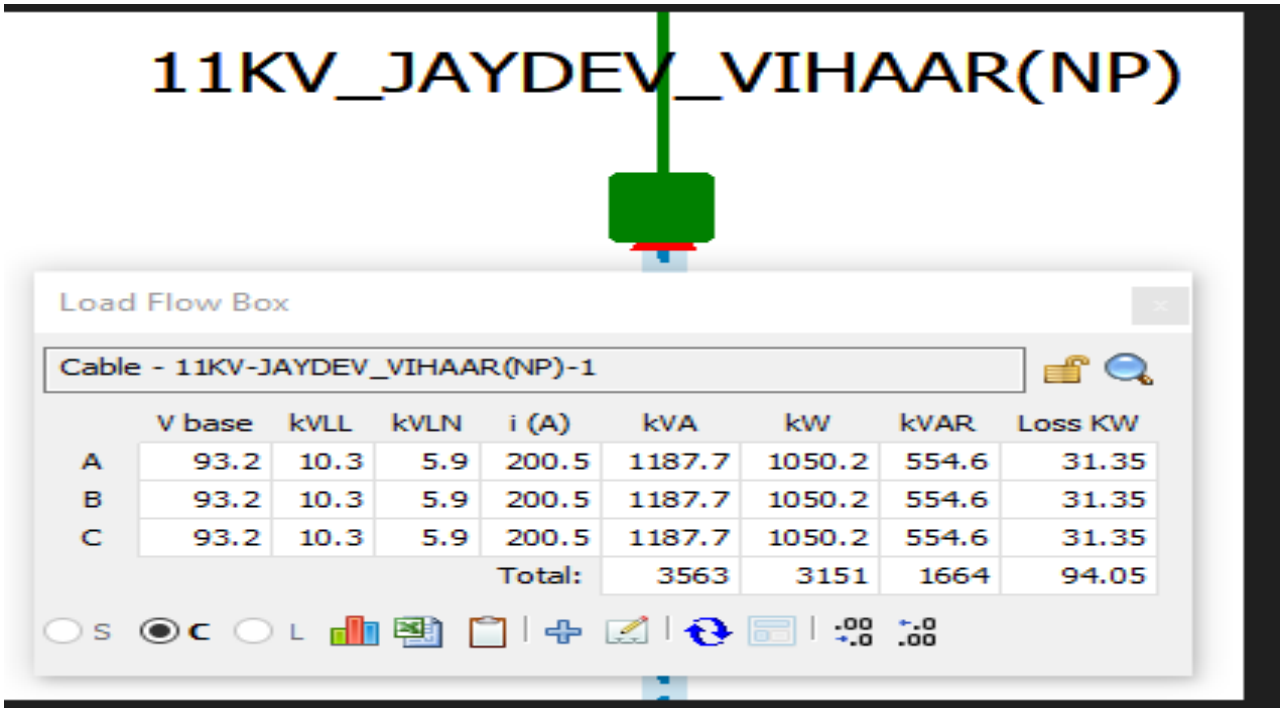
Proposed Scenario:

Proposal for Construction of 1KM of New Linking line using 3Cx400sqmm from JAIDEV VIHAR PSS to Biju Pattanaik College of jaidev vihar feeder.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**Proposed Loading of feeder**	**Summer 25 loading considering 20% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Nayapalli	JAYDEV VIHAR	4.52	2.40	53%	3.46	76%	OK
Nayapalli	JAYDEV VIHAR New	5.78	3	52%	4.32	75%	OK

Proposed SLD (summer'25):





Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	NAYAPALLI
Name of the Section : -	NAYAPALLI
Name of the Feeder : -	JAIDEV VIHAR
Name of the Work :-	Proposal for Bifurcation of existing 11 KV Jaydevvihar Feeder load emanating from 33/11 KV Nayapalli PSS by constructing 1 No. of new feeder from 33/11 KV Nayapalli PSS through RMU and 1KM 11KV new line from Nayapalli PSS to Bijupatnaik Clg using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 1KM of 3CX400SQMM UG Cable New line from Nayapalli PSS to Bijupatnaik Clg using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	74,14,952.45
2	PART-B: Installation of 11kV RMU for new line from Nayapalli PSS to Bijupatnaik Clg	76,13,254.14
3	PART C: 11kV Line DP with AB Switch for new line from Nayapalli PSS to Bijupatnaik Clg	4,64,161.10

4	**Total Gross**	**1,54,92,367.69**
Total estimated cost is Rs. 1.55Cr.		

(For detailed BoQ refer Annexure 9.11)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kv Jaidev Vihar feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

12.**Mitigation of Feeder Overloading issue of 11kv IRC-1 Feeder**

Proposal: Proposal for Construction of 1KM of New Linking line using 3Cx400sqmm from NAYAPALLY PSS to ID MARKET Tapping of IRC-1 feeder.

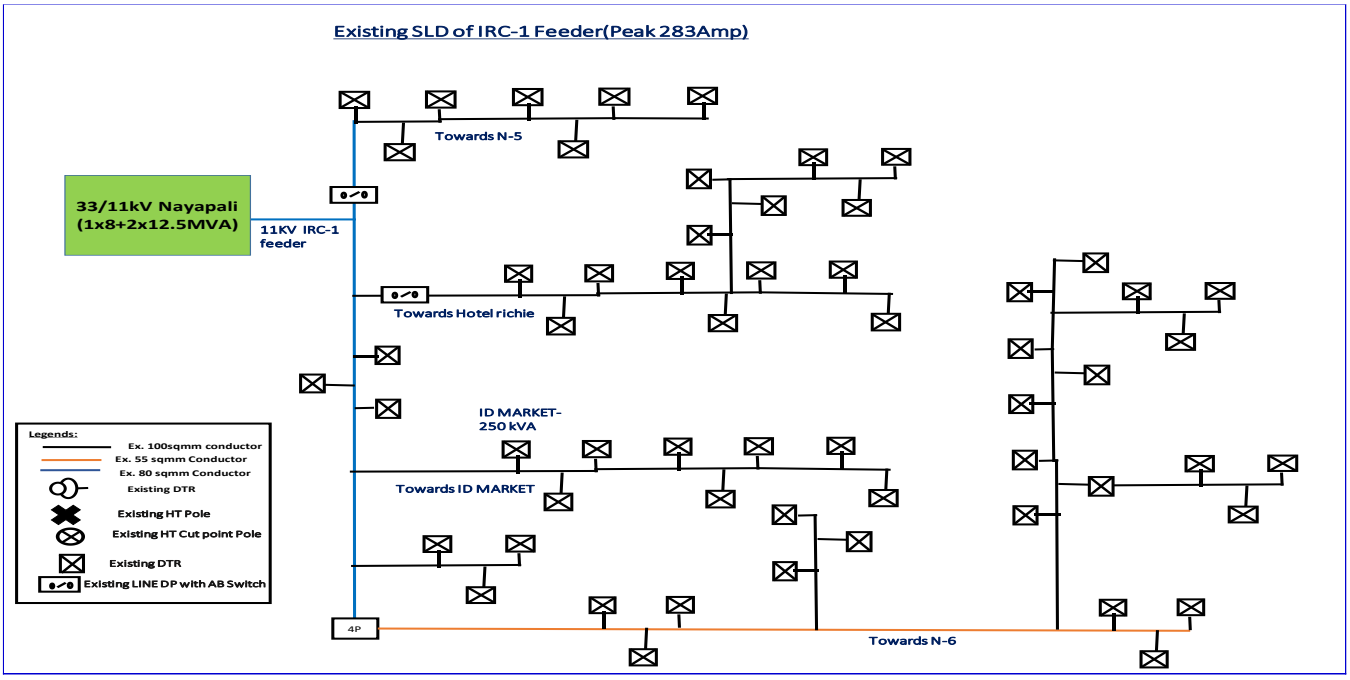
Objective: To mitigate the overloading issue of 11kV IRC-1 Feeder.

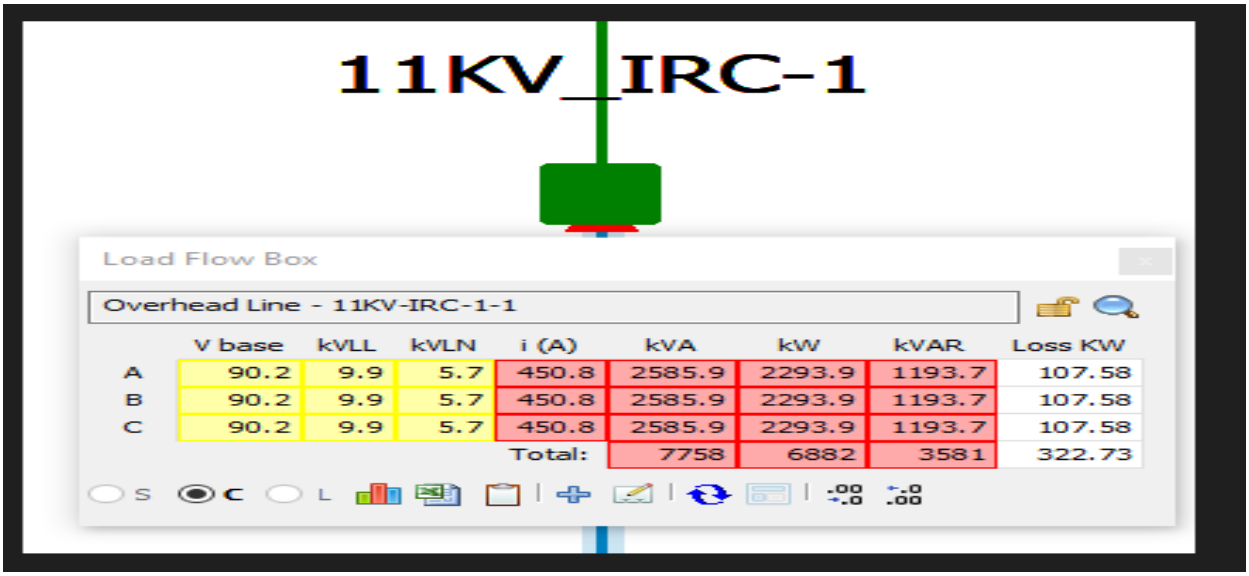
Existing Scenario:

- At present, 11kV IRC-1 feeder is emanating from 33/11kV Nayapally PSS.Total length of this feeder is 6.7km and the peak load is 5.4 MVA.
- In the existing scenario, conductor size of 11kV IRC-1 feeder is 80sqmm, 55sqmm & the feeder is 119% loaded w.r.t the current carrying capacity of the conductor and 172% loaded considering 20% load growth for urban feeders.
- This feeder is completely feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Nayapalli	IRC-1	4.52	5.40	119%	7.78	172%	Overload

Existing SLD (summer'23):





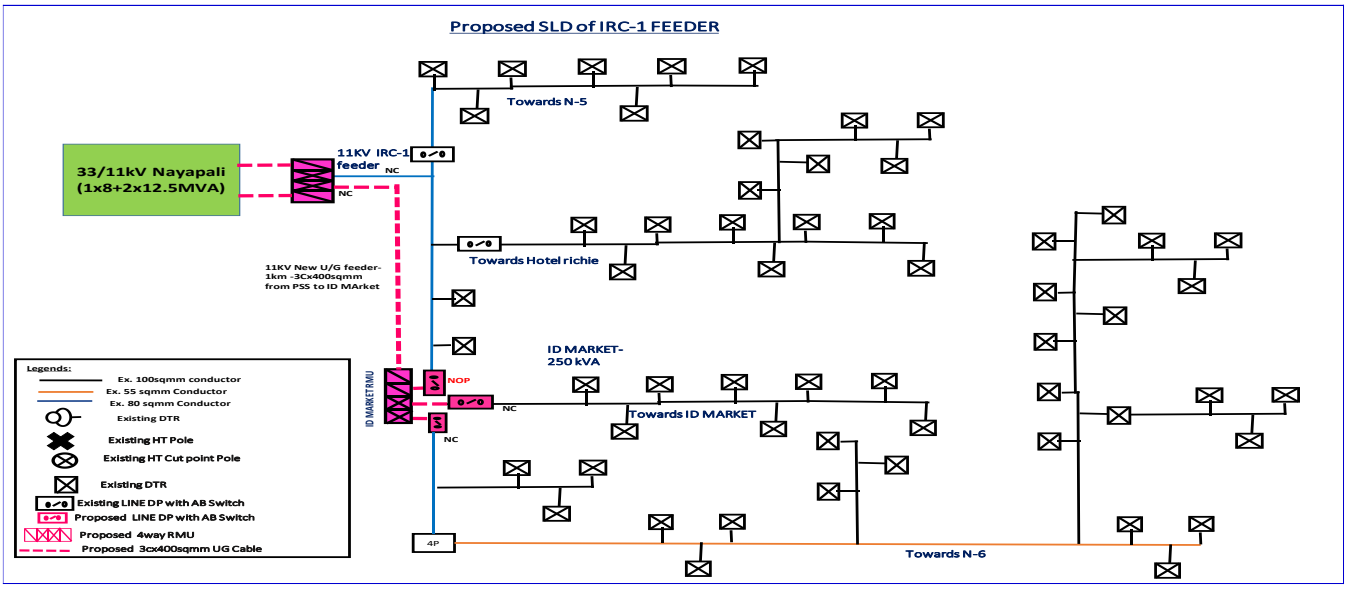
	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	90.2	9.9	5.7	450.8	2585.9	2293.9	1193.7	107.58
B	90.2	9.9	5.7	450.8	2585.9	2293.9	1193.7	107.58
C	90.2	9.9	5.7	450.8	2585.9	2293.9	1193.7	107.58
				Total:	7758	6882	3581	322.73

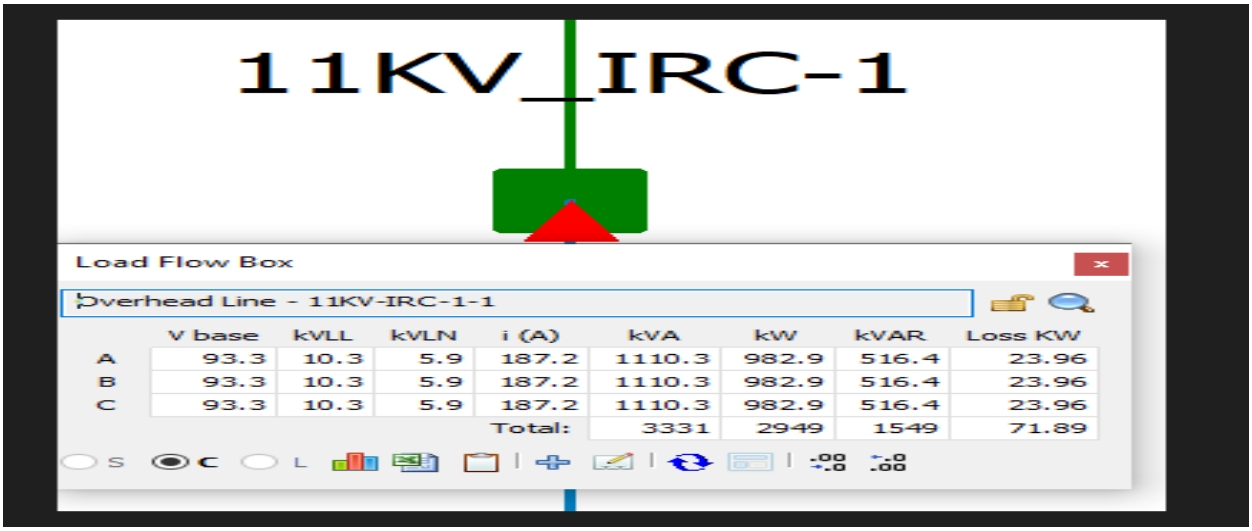
Proposed Scenario:

Proposal for Construction of 1KM of New Linking line using 3Cx400sqmm from NAYAPALLY PSS to ID MARKET Tapping of IRC-1 feeder along with installation of 11KV RMU

Loading Of Feeder after Proposal							
Name of the PSS	11 kV kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 20%Load Growth for 2 Years	% Loading in Summer-25	Feeder Status
Nayapalli	IRC-1	4.52	2.40	53%	3.46	76%	OK
Nayapalli	IRC-1 New	5.78	3	52%	4.32	75%	OK

Proposed SLD (summer'25):





Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	NAYAPALLI
Name of the Section : -	NAYAPALLI
Name of the Feeder : -	IRC-1
Name of the Work :-	Proposal for Bifurcation of existing 11 KV IRC-1 Feeder load emanating from 33/11 KV Nayapalli PSS by constructing 1 No. of new feeder from 33/11 KV Nayapalli PSS through RMU and 1KM 11KV new line from Nayapalli PSS to IRC feeder near ID Market using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 1KM of 3CX400SQMM UG Cable New line from Nayapalli PSS to IRC feeder near ID Market using 11kV 3C, 400sqmm UG Cable along with 11kV RMU	74,14,952.45
2	PART-B:Installation of 11kV RMU for new line from Nayapalli PSS to IRC feeder near ID Market	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Nayapalli PSS to IRC feeder near ID Market	6,96,241.65
3	**Total Gross**	**1,19,17,781.53**
Total estimated cost is Rs. 1.19Cr.		

(For detailed BoQ refer Annexure 9.12)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kv IRC-1 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping is mitigated because of overloading is adressed through above proposal.

13.**Mitigation of Feeder Overloading issue of 11kv IRC-2 Feeder**

Proposal: Proposal for Construction of 1.5KM of New Linking line using 3Cx400sqmm from NAYAPALLY PSS to RBI Tapping of IRC-2 feeder.

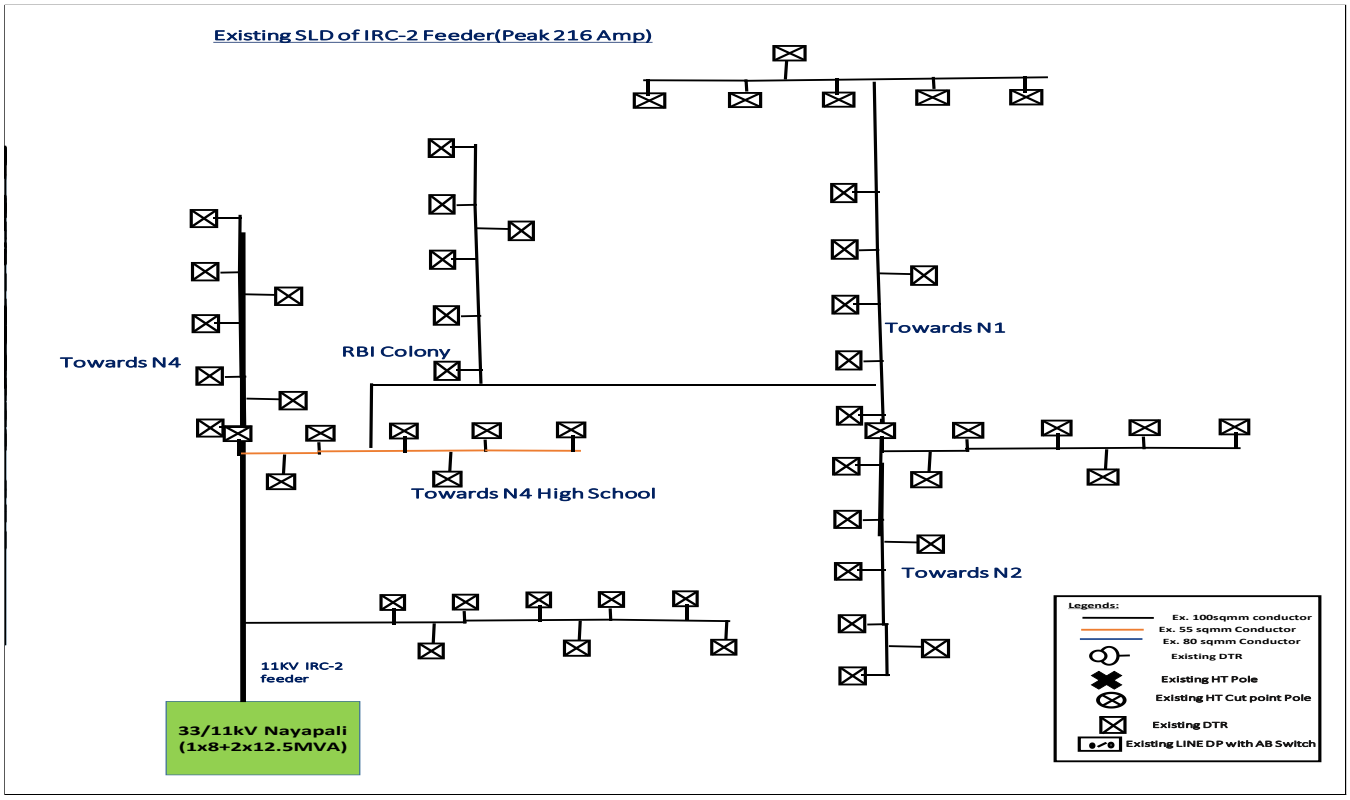
Objective: To mitigate the overloading issue of 11kV IRC-2 Feeder.

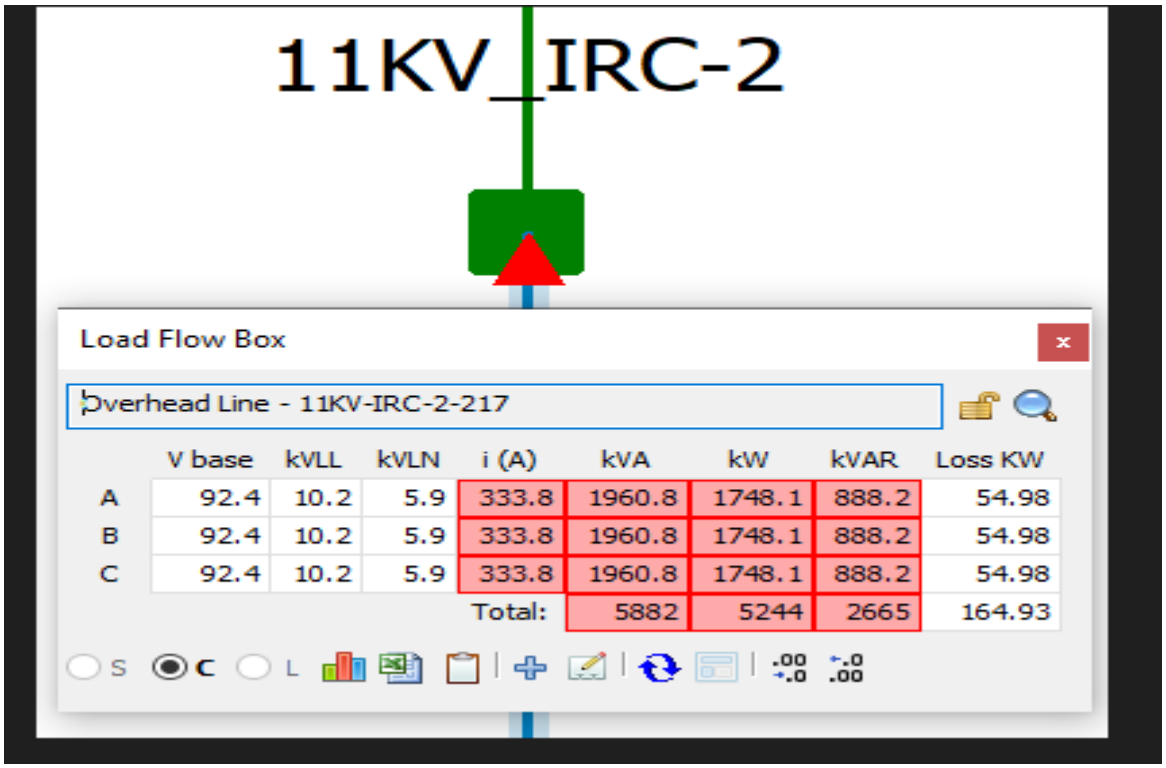
Existing Scenario:

- At present, 11kV IRC-II feeder is emanating from 33/11kV Nayapally PSS.Total length of this feeder is 5km and the peak load is 4.12 MVA.
- In the existing scenario, conductor size of 11kV IRC-II feeder is 100sqmm,55 sqmm & the feeder is 79% loaded w.r.t the current carrying capacity of the conductor and 114% loaded considering 20% load growth for urban feeders.
- This feeder is completely feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Nayapalli	IRC-2	5.19	4.12	79%	5.94	114%	Overload

Existing SLD (summer'23):



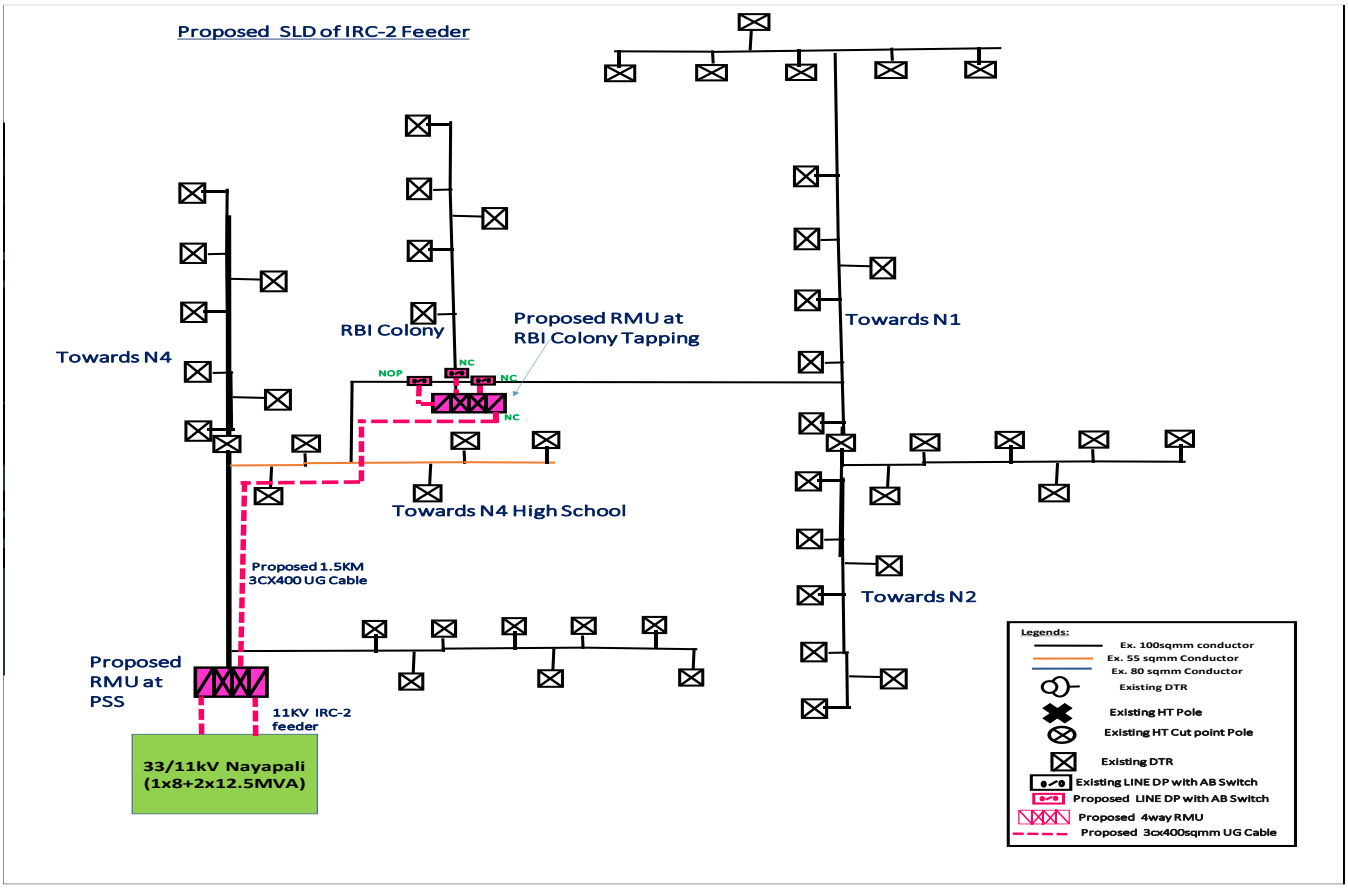


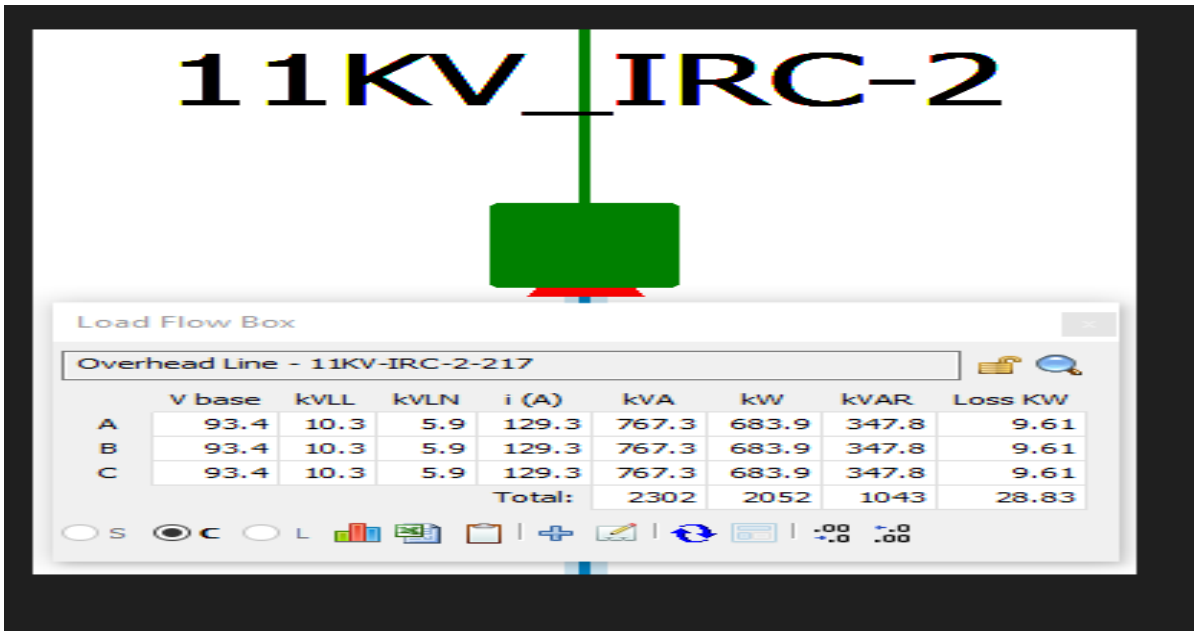
Proposed Scenario:

Proposal for Construction of 1.5KM of New Linking line using 3Cx400sqmm from NAYAPALLY PSS to RBI Tapping of IRC-II feeder along with RMU.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Nayapalli	IRC-2	5.19	1.62	31%	2.34	45%	OK
Nayapalli	IRC-2 New	5.78	2.5	43%	3.60	62%	OK

Proposed SLD (summer'25):





	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	93.4	10.3	5.9	129.3	767.3	683.9	347.8	9.61
B	93.4	10.3	5.9	129.3	767.3	683.9	347.8	9.61
C	93.4	10.3	5.9	129.3	767.3	683.9	347.8	9.61
				Total:	2302	2052	1043	28.83

Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	Nayapali
Name of the Section : -	Nayapali
Name of the Feeder : -	IRC-2
Name of the Work :-	Proposal for Bifurcation of existing 11 KV IRC-2 Feeder load emanating from 33/11 KV Nayapalli PSS by constructing 1 No. of new feeder from 33/11 KV Nayapalli PSS through RMU and 1KM 11KV new line from Nayapali PSS to RBI Colony using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 1.5KM of 3CX400SQMM UG Cable New line from Nayapali PSS to RBI Colony	1,11,31,547.06
2	PART-B: Construction of 11kV RMU for new line from Nayapali PSS to RBI Colony	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Nayapali PSS to RBI Colony	6,96,241.65
4	**Total Gross**	**1,56,34,376.14**
Total estimated cost is Rs. 1.56Cr.		

(For detailed BoQ refer Annexure 9.13)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kV IRC-2 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

14.**Mitigation of Feeder Overloading issue of 11kv Pal Heights Feeder**

Proposal: Proposal for Conductor Augmentation from 55sqmm to 100sqmm of 3.5km from RRL PSS to May Fair lagoon DTR of Pal Heights feeder.

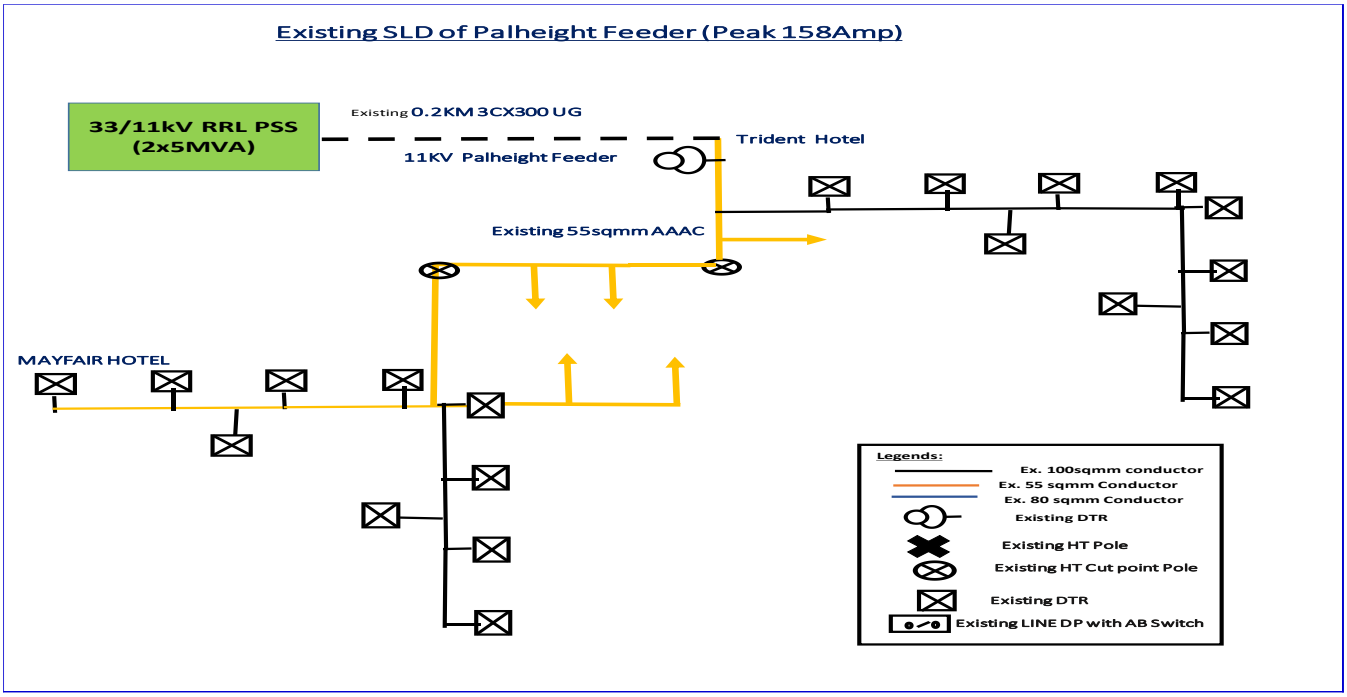
Objective: To mitigate the overloading issue of 11kV **Pal Heights** Feeder.

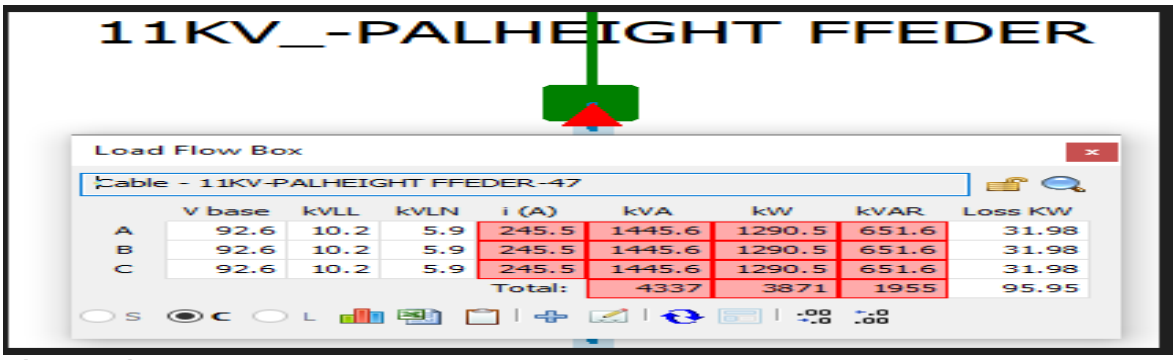
Existing Scenario:

- At present, 11kV Pal Heights feeder is emanating from 33/11kV RRL PSS.Total length of this feeder is 4km and the peak load is 3.02 MVA.
- In the existing scenario, conductor size of 11kV IRC-II feeder is 100sqmm,55 sqmm & the feeder is 85% loaded w.r.t the current carrying capacity of the conductor and 122% loaded considering 20% load growth for urban feeders.
- This feeder is completely feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 Loading in MVA**	**Summer 25 loading considering 20% Load Growth for 2 Years**	**Feeder Status**
RRL	PAL HEIGHT	3.55	3.02	85%	4.34	122%	Overload

Existing SLD (summer'23):



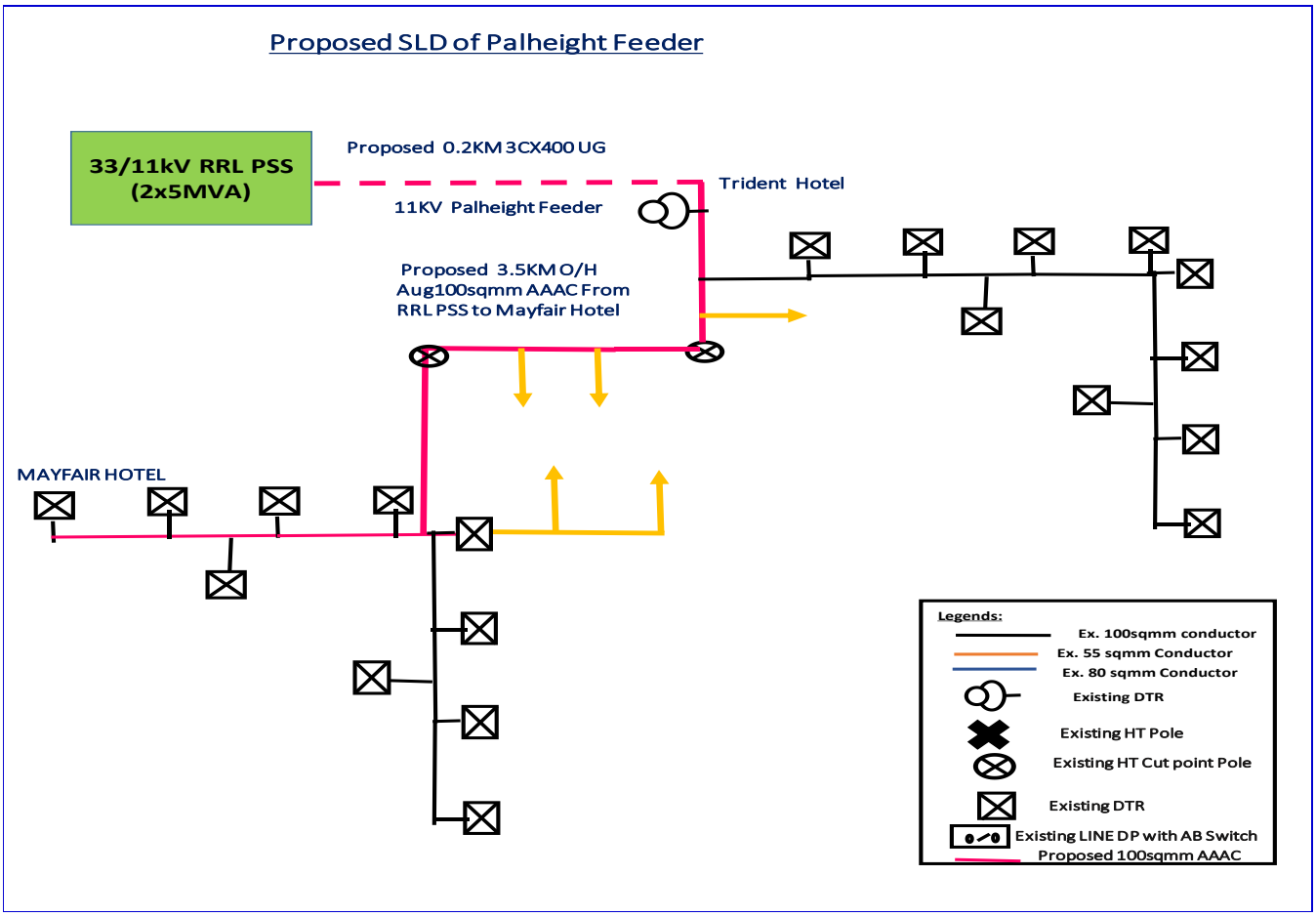


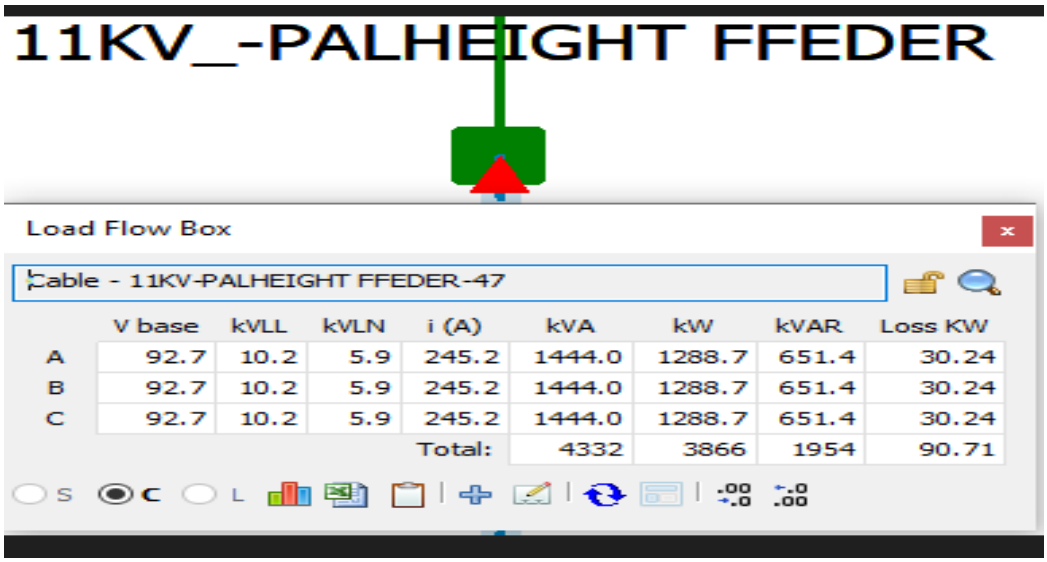
Proposed Scenario:

Proposal for Conductor Augmentation from 55sqmm to 100sqmm of 3.5km from RRL PSS to May Fair lagoon DTR of Pal Heights feeder

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Proposed Loading of feeder**	**Summer 25 Loading in MVA**	**Summer 25 loading considering 20% Load Growth for 2 Years**	**Feeder Status**
RRL	PAL HEIGHT	5.19	3.89	75%	4.34	84%	OK

Proposed SLD (summer'25):





Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	NAYAPALLI
Name of the Section : -	XAVIER
Name of the Feeder : -	PAL HEIGHTS
Name of the Work :-	Proposal for Construction of Augmentation of 3.5km of Line using 100 SQ.MM. -AAA Conductor from RLL PSS to Mayfair Hotel 250KVA
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of Augmentation of 3.5km of Line using 100 SQ.MM. -AAA Conductor from RLL PSS to Mayfair Hotel 250KVA	47,77,714.24
2	PART B: Construction of 0.2km UG of 3CX400 sqmm from RLL PSS to Mayfair Hotel 250KVA	15,13,650.59
3	**Total Gross**	**62,91,364.83**
Total estimated cost is Rs. 0.63Cr.		

(For detailed BoQ refer Annexure 9.14)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kV Pal Heights feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

15.**Mitigation of Feeder Overloading issue of 11kv Rental Feeder**

Proposal: Proposal for Construction of 1KM of New Linking line using 3Cx400sqmm from NAYAPALLY PSS to Satysai Temple of Rental Feeder along with RMU.

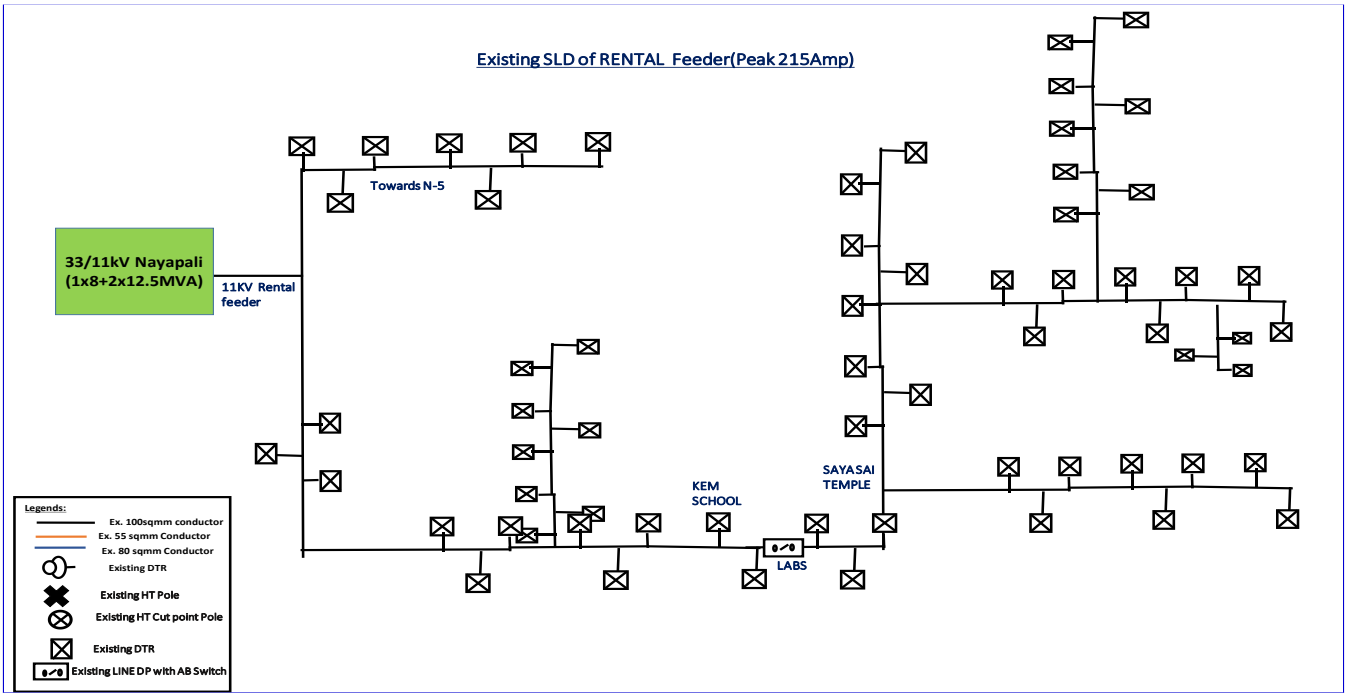
Objective: To mitigate the overloading issue of 11kV RENTAL Feeder.

Existing Scenario:

- At present, 11kV RENTAL feeder is emanating from 33/11kV Nayapally PSS.Total length of this feeder is 7km and the peak load is 4.1 MVA.
- In the existing scenario, conductor size of 11kV Rental feeder is 100sqmm& the feeder is 79% loaded w.r.t the current carrying capacity of the conductor and 114% loaded considering 20% load growth for urban feeders.
- This feeder is completely feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, bifurcation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Nayapalli	Rental	5.19	4.10	79%	5.91	114%	Overload

Existing SLD (summer'24):

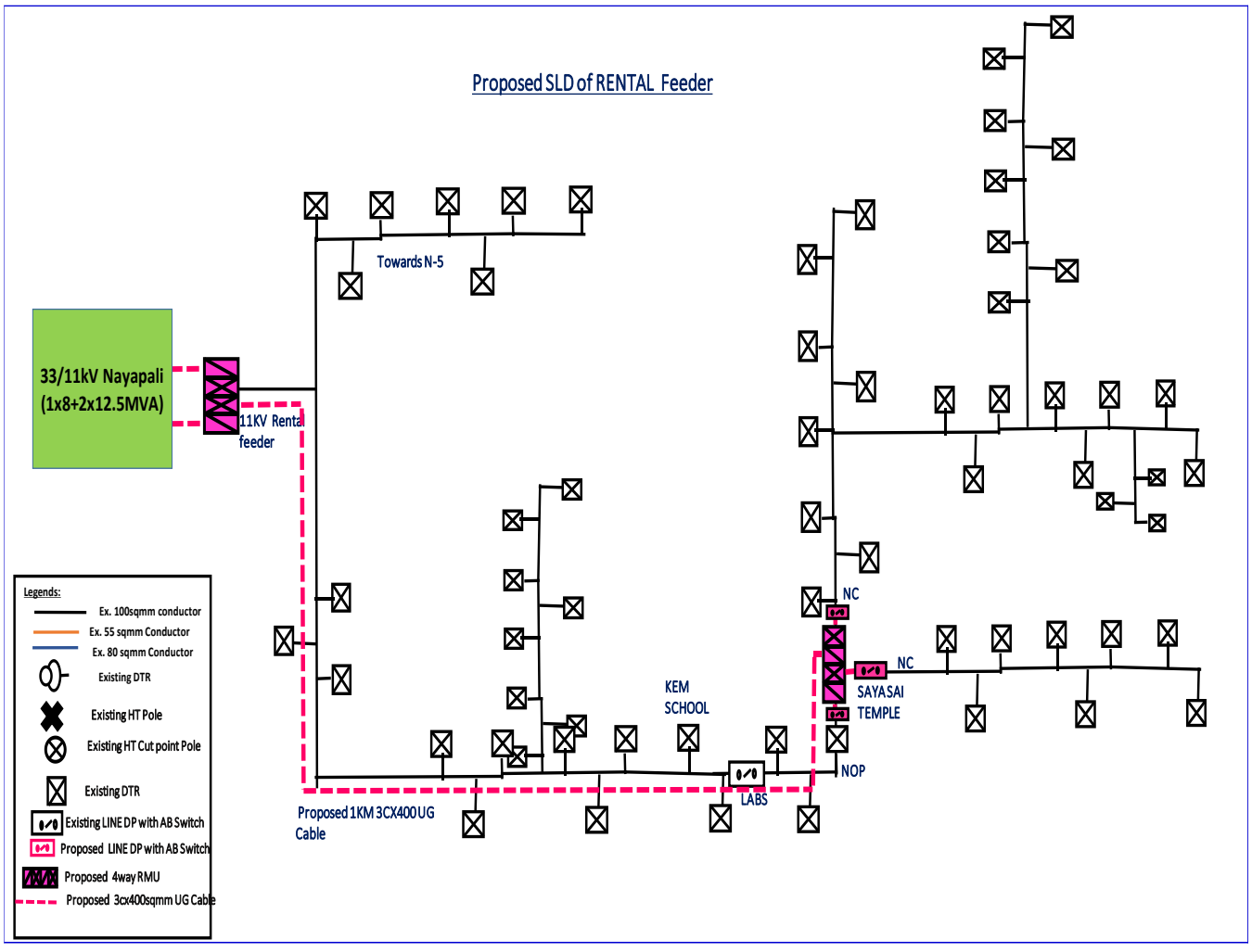


Proposed Scenario:

Proposal for Construction of 1KM of New Linking line using 3Cx400sqmm from NAYAPALLY PSS to Satysai Temple of Rental Feeder along with RMU.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Proposed Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Nayapalli	RENTAL	5.19	2.10	41%	3.03	58%	OK
Nayapalli	RENTAL New	5.78	2	35%	2.88	50%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		BCDD-2
Name of the Sub-Division : -		NAYAPALLI
Name of the Section : -		NAYAPALLI
Name of the Feeder : -		11KV RENTAL Feeder
Name of the Work :-		Proposal for Bifurcation of existing 11 KV Rental Feeder load emanating from 33/11 KV Nayapalli PSS by constructing 1 No. of new feeder from 33/11 KV Nayapalli PSS through RMU and 1KM 11KV new line from Nayapali PSS to Satysai Temple using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Construction of 1KM of 3CX400SQMM UG Cable New line from Nayapali PSS to Satysai Temple	74,14,952.45
2	PART-B: Construction of 11kV RMU for new line from Nayapali PSS to Satysai Temple	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Nayapali PSS to Satysai Temple	6,96,241.65
4	**Total Gross**	**1,19,17,781.53**
Total estimated cost is Rs. 1.19Cr.		

(For detailed BoQ refer Annexure 9.15)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kV RENTAL feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

16.Mitigation of Feeder Overloading issue of Baranga-1 Feeder

Proposal: Proposal for Construction for 8KM Augmentation of existing 11kV Baranga-1 Feeder emanating from 33/11kV New Baranga PSS with 100sqmm AAAC conductor from New Baranga PSS to Sashmita Sahoo 100KVA DTR

Objective: To mitigate the overloading issue of 11kV Baranga-1 Feeder.

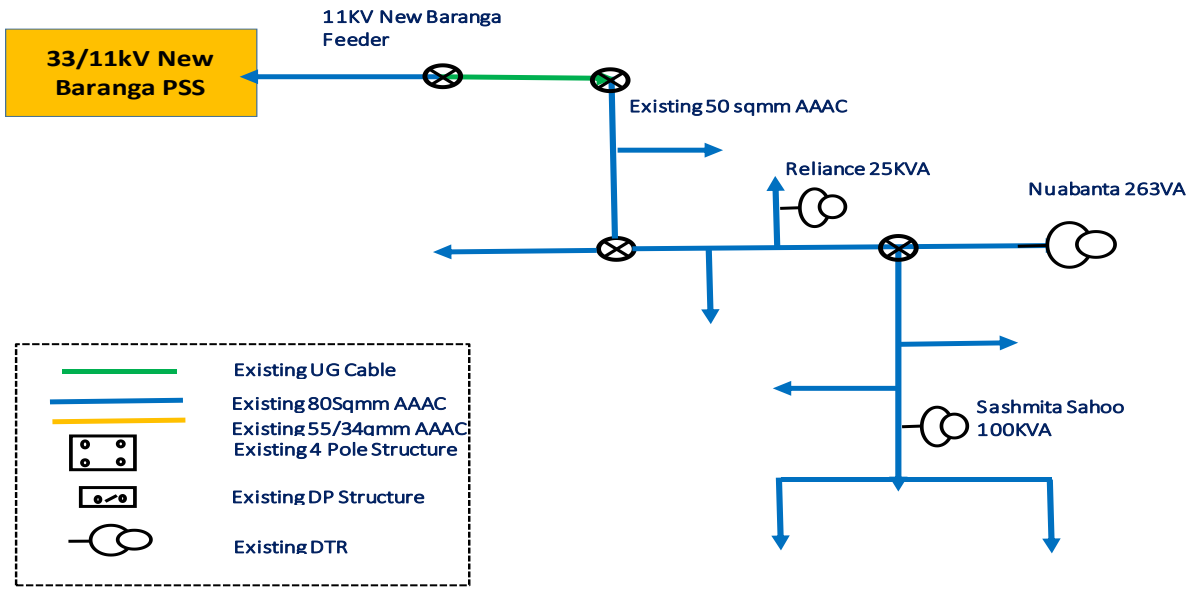
Existing Scenario:

- At present, 11kV Baranga-1 Feeder is emanating from 33/11kV New Baranga PSS.Total length of this feeder is 39.6km and the peak load is 2.92MVA.
- In the existing scenario, conductor size of 11kV Baranga-1 Feeder is 50sqmm & the feeder is 111% loaded w.r.t the current carrying capacity of the conductor and 159% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder for bifurcation of load is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
New Barang	BARANGA-1	2.63	2.92	111%	4.20	159%	Overload

Existing SLD (summer'23):

Existing SLD of Barnga-1 Feeder

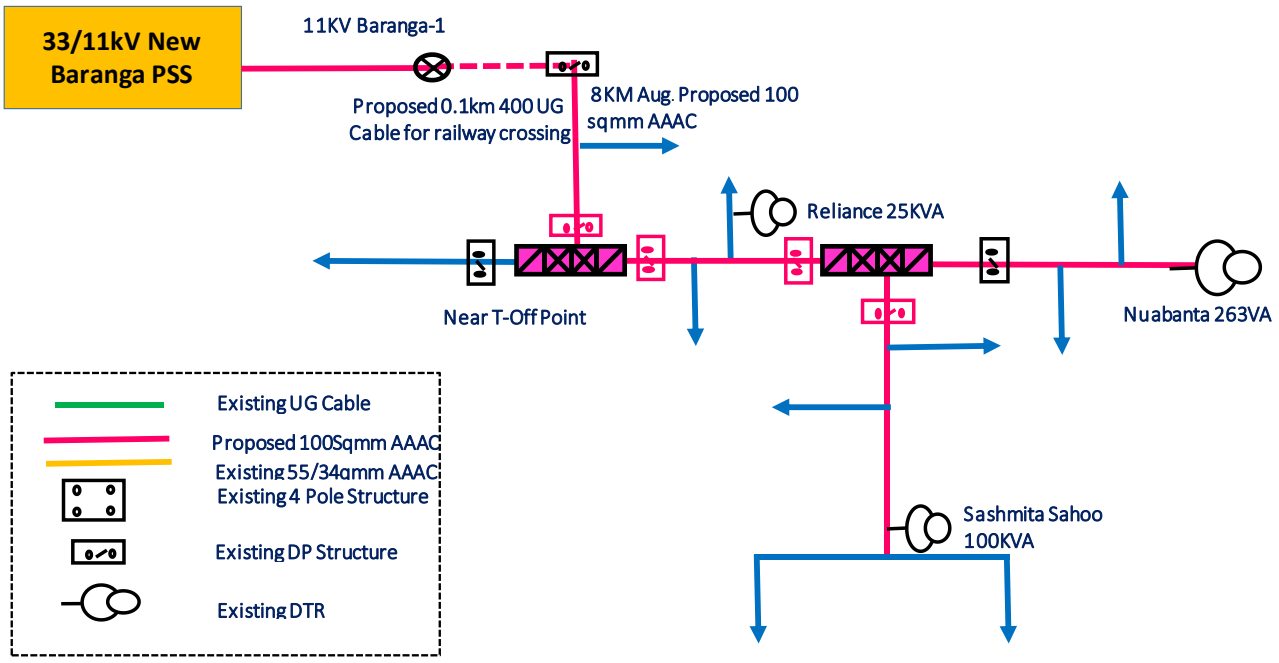


Proposed Scenario:

Construction for 8KM Augmentation of existing 11kV Baranga-1 Feeder emanating from 33/11kV New Baranga PSS with 100sqmm AAAC conductor from New Baranga PSS to Sashmita Sahoo 100KVA DTR

Proposed SLD (summer'25):

Proposed SLD of Barnga-1 Feeder



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	PERIPHERI
Name of the Section : -	BARANG
Name of the Work :-	Proposal for Construction of 8KM Augmentation of existing 11kV Baranga-1 Feeder emanating from 33/11kV New Baranga PSS with 100sqmm AAAC conductor from New Baranga PSS to Sashmita Sahoo 100KVA DTR
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction for 8KM of Augmentation Line using 100 SQ.MM. -AAA Conductor from New Baranga PSS to Sashmita Sahoo 100KVA DTR	10618282.12

2	PART B: Construction of 0.1km UG of 3CX400 sqmm from New Baranga PSS to Sashmita Sahoo 100KVA DTR	7,71,535.46
3	PART-C: Construction of 11kV RMU for new line from New Baranga PSS to Sashmita Sahoo 100KVA DTR	38,06,587.43
4	PART D: 11kV Line DP with AB Switch from Chandaka PSS to first DP AB Switch	9,28,322.20
5	**Total Gross**	**1,61,24,727.21**
Total estimated cost is Rs. 1.61Cr.		

(For detailed BoQ refer Annexure 9.16)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Baranga-1 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

17. **Mitigation of Feeder Overloading issue of Baranga-2 Feeder**

Proposal: Proposal for Construction of 3.5km 11KV new Feeder eminating from Kanan Vihar PSS to Near CSCRAR DTR using 11kV 3C,400sqmm UG Cable along with 11kV RMU.

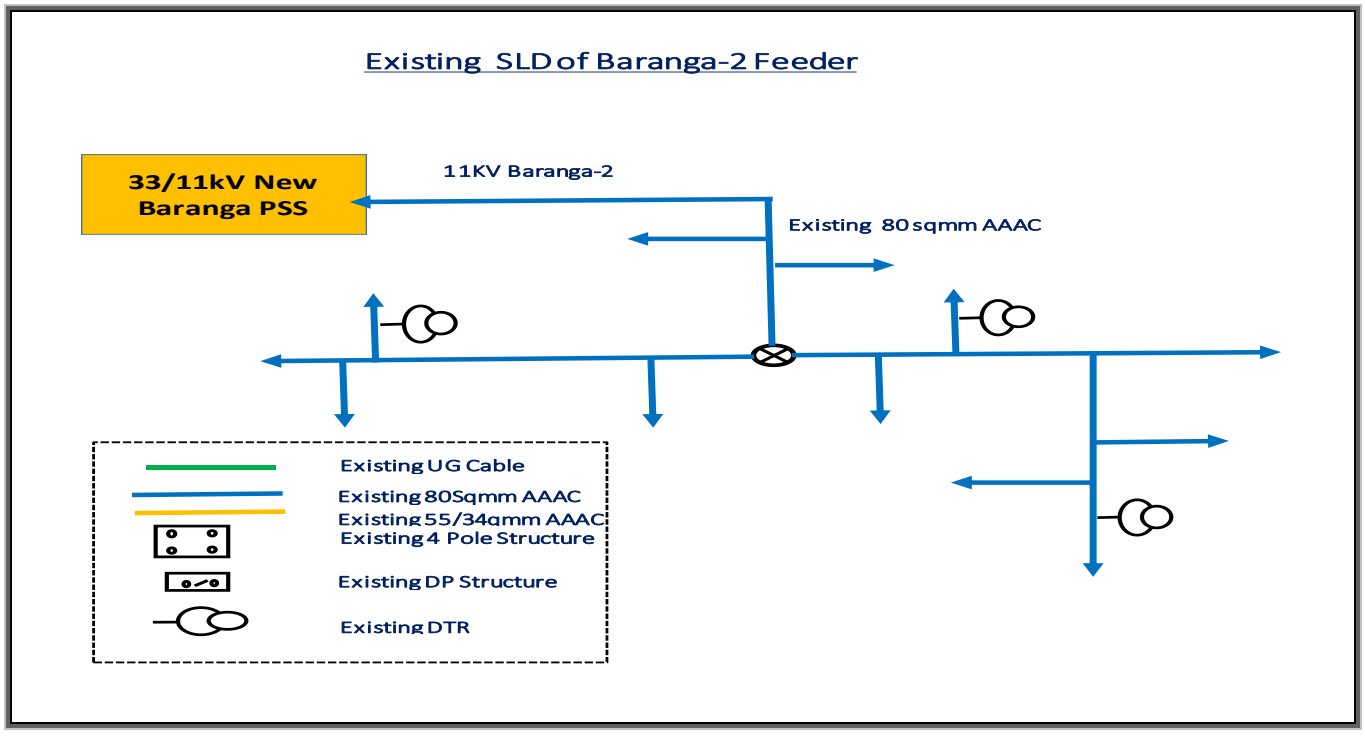
Objective: To mitigate the overloading issue of 11kV Baranga-2 feeder.

Existing Scenario:

- At present, 11kV Baranga-2 feeder is emanating from 33/11kV New Baranga PSS.Total length of this feeder is 20.6km and the peak load is 4.10MVA.
- In the existing scenario, conductor size of 11kV Baranga-2 Feeder is 80sqmm & the feeder is 91% loaded w.r.t the current carrying capacity of the conductor and 131% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
NEW BARANGA	BARANGA-2	4.52	4.10	91%	5.91	131%	Overload

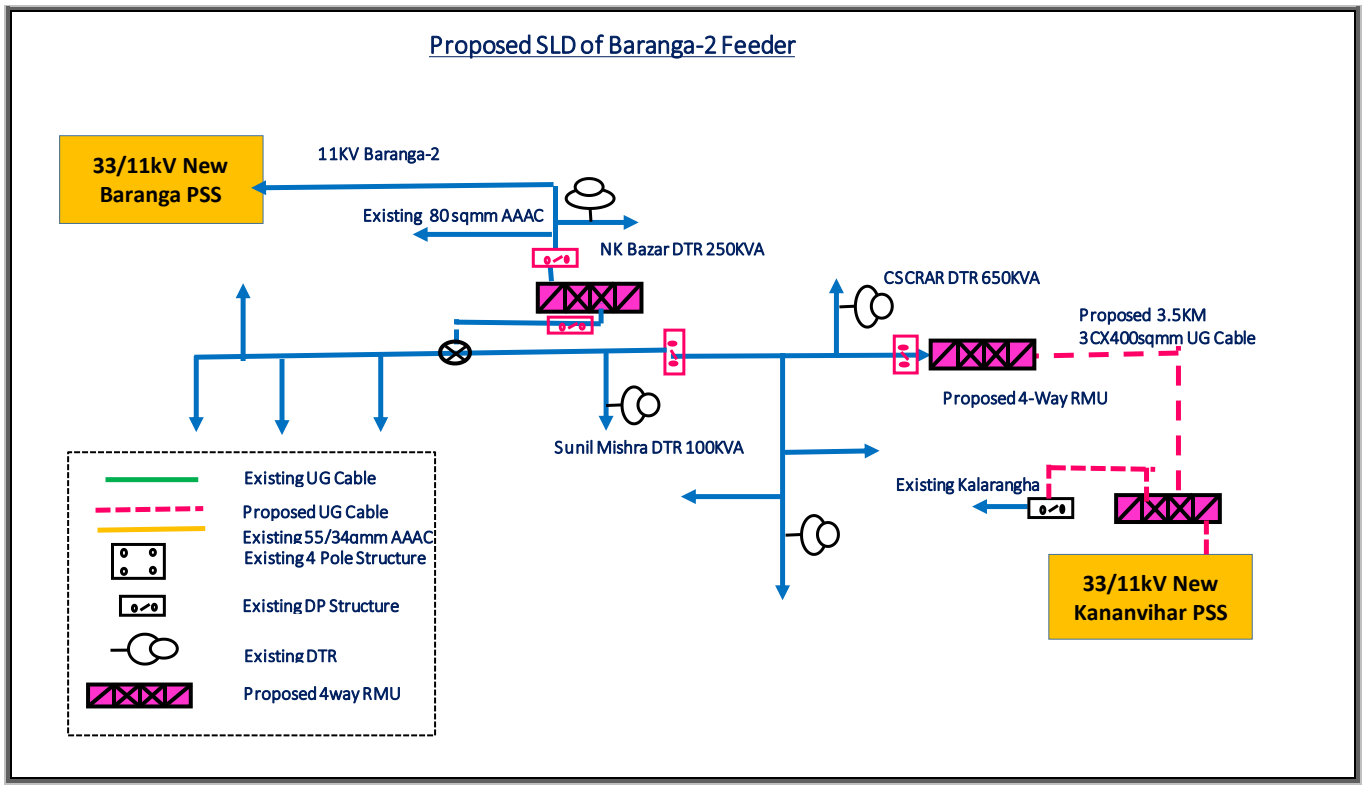
Existing SLD (summer'23):



Proposed Scenario:

Proposal for Construction of 3.5km 11KV new line emanating from Kanan Vihar PSS to Near CSCRAR DTR using 11kV 3C,400sqmm UG Cable along with 11kV RMU.

Proposed SLD (summer'25):



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
NEW BARANGA	BARANGA-2	4.52	2.10	46%	3.03	67%	OK
New Kananvihar PSS	New Feeder	5.78	2	35%	2.88	50%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	PERIPHERI
Name of the Section : -	BARANG

Name of the Work :-	Proposal for Construction of 3.5km 11KV new line eminating from Kanan Vihar PSS to Near CSCRAR DTR using 11kV 3C,400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Amount
1	PART A: Construction of 3.5KM of 3CX400SQMM UG Cable New line from Kanan Vihar PSS to CSCRAR 650KVA DTR	2,59,96,721.23
2	PART-B: Construction of 4No of 11kV RMU for new line from Kanan Vihar PSS to Kanan Vihar PSS to CSCRAR 650KVA DTR	57,66,195.70
3	PART C: 11kV Line DP with AB Switch for new line from Kanan Vihar PSS to CSCRAR 650KVA DTR	9,28,322.20
4	**Total Gross**	**3,26,91,239.14**
Total estimated cost is Rs. 3.27Cr.		

(For detailed BoQ refer Annexure 9.17)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Baranga-2 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

18.**Mitigation of Feeder Overloading issue of Baramunda Housing Board Feeder**

Proposal: Proposal for Bifurcation of existing 11 KV Baramunda HB Feeder load emanating from 33/11 KV Baramunda PSS by constructing 1 No. of new feeder from 33/11 KV Baramunda PSS through RMU and 1.5KM of 11kV 3C, 400sqmm UG Cable from Barmunda PSS to BHB Colony line AB Switch.

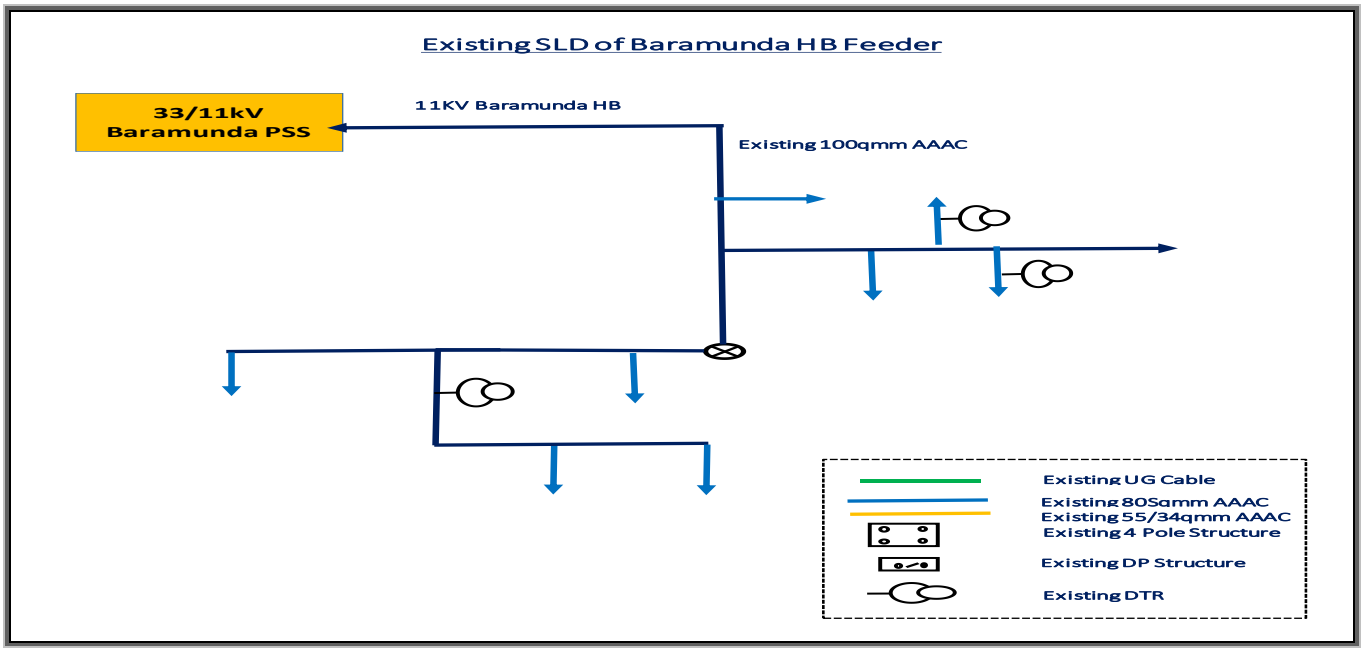
Objective: To mitigate the overloading issue of 11kV Baramunda HB Feeder.

Existing Scenario:

- At present, 11kV Baramunda HB Feeder is emanating from 33/11kV Baramunda PSS.Total length of this feeder is 5.7km and the peak load is 4.37MVA.
- In the existing scenario, conductor size of 11kV Baramunda HB Feeder is 100sqmm & the feeder is 84% loaded w.r.t the current carrying capacity of the conductor and 121% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Baramunda	BARAMUNDA HOUSING BOARD	5.19	4.37	84%	6.29	121%	Overload

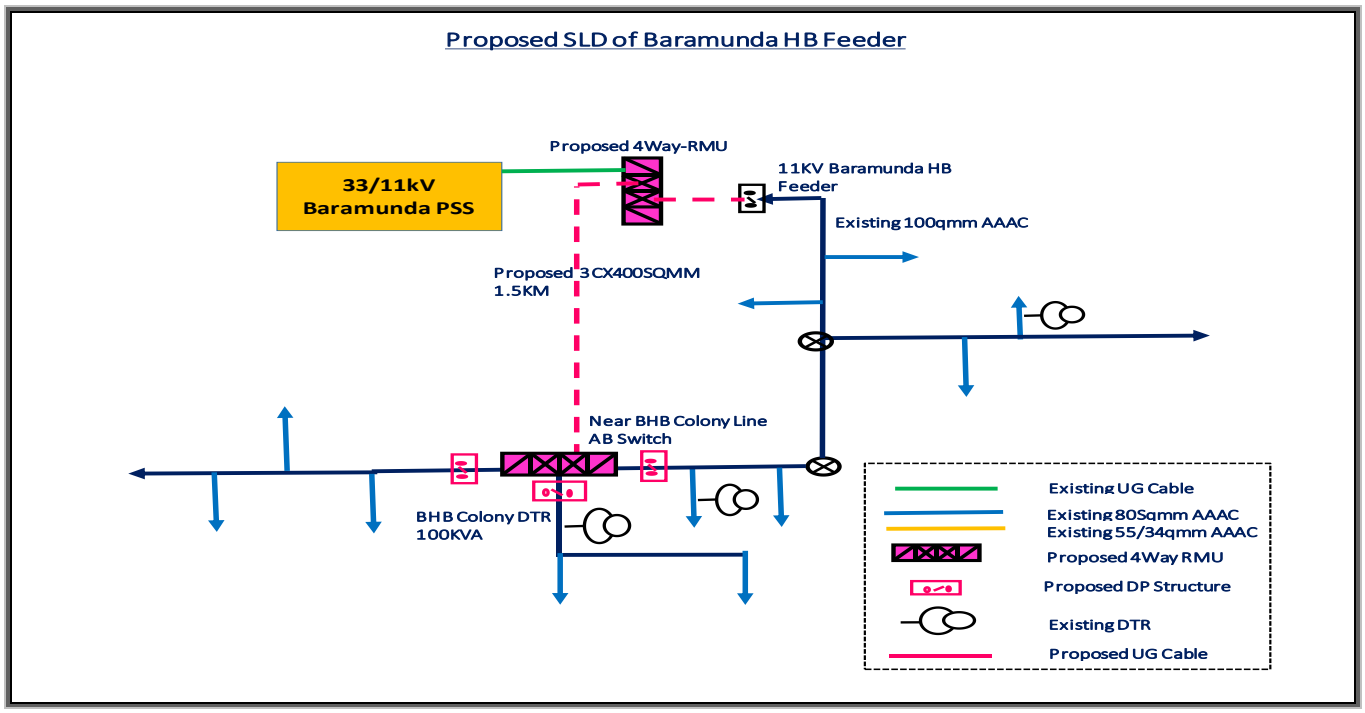
Existing SLD (summer'23):



Proposed Scenario:

Proposal for Bifurcation of existing 11 KV Baramunda HB Feeder load emanating from 33/11 KV Baramunda PSS by constructing 1 No. of new feeder from 33/11 KV Baramunda PSS through RMU and 1.5KM of 11kV 3C, 400sqmm UG Cable from Barmunda PSS to BHB Colony line AB Switch.

Proposed SLD (summer'25):



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Baramunda	BARAMUNDA HOUSING BOARD	5.19	2.37	46%	3.41	66%	OK
Baramunda	New Feeder	5.78	2	35%	2.88	50%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	NAYAPALLI
Name of the Section : -	BARAMUNDA

Name of the Work :-	Proposal for Bifurcation of existing 11 KV Baramunda HB Feeder load emanating from 33/11 KV Baramunda PSS by constructing 1 No. of new feeder from 33/11 KV Baramunda PSS through RMU and 1.5KM of 11kV 3C, 400sqmm UG Cable from Baramunda PSS to BHB Colony line AB Switch	
Names of Schemes: -		**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 1.5KM of 3CX400SQMM UG Cable New line from Baramunda PSS to BHB Colony line AB Switch	1,11,31,547.06
2	PART-B: Construction of 11kV RMU for new line from Baramunda PSS to BHB Colony line AB Switch	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Baramunda PSS to BHB Colony line AB Switch	6,96,241.65
4	**Total Gross**	**1,56,34,376.14**
Total estimated cost is Rs. 1.56Cr.		

(For detailed BoQ refer Annexure 9.18)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Baramunda Housing Board feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

19.**Mitigation of Feeder Overloading issue of Bharatpur Feeder**

Proposal: Proposal for Construction of 3KM of 11KV new line from Chandaka PSS Near Mathematics 250KVA DTRof 11Kv bharatpur feeder eminating from bharatpur PSS using 11kV 3C, 400sqmm UG Cable along with 11kV RMU

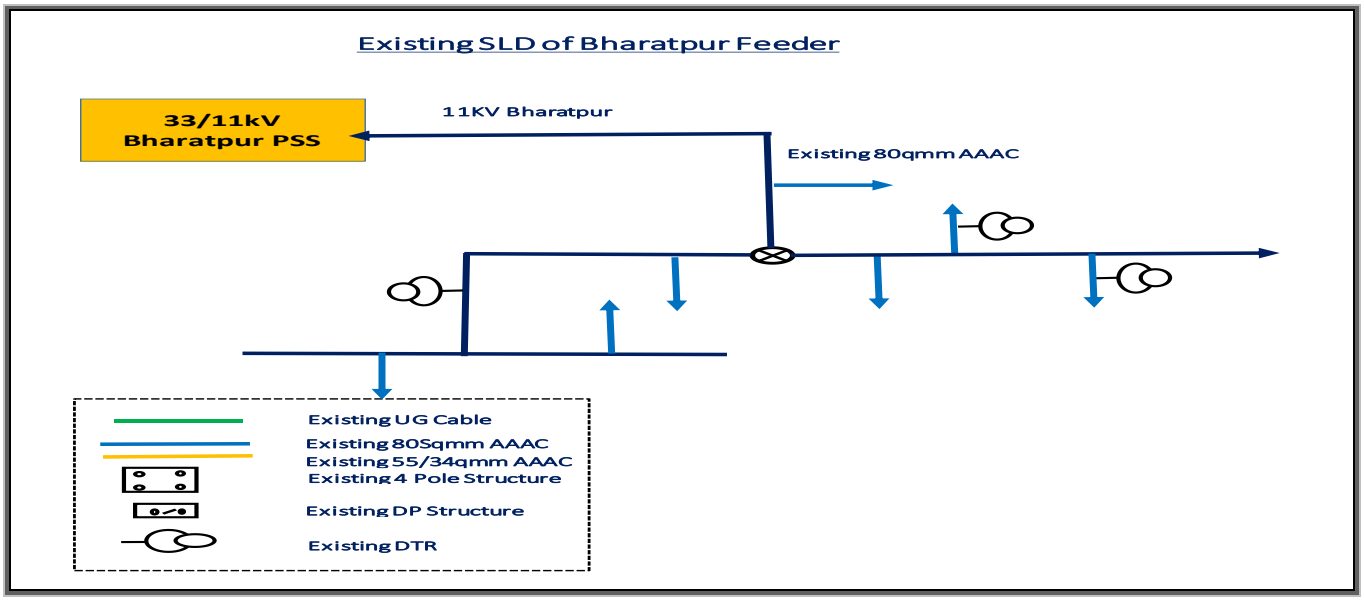
Objective: To mitigate the overloading issue of 11kV Bharatpur Feeder.

Existing Scenario:

- At present, 11kV Bharatpur Feeder is emanating from 33/11kV Bharatpur PSS.Total length of this feeder is 37.2km and the peak load is 5.71MVA.
- In the existing scenario, conductor size of 11kV Bharatpur Feeder is 80sqmm & the feeder is 126% loaded w.r.t the current carrying capacity of the conductor and 182% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
BHARATPUR	BHARATPUR	4.52	5.71	126%	8.22	182%	Overload

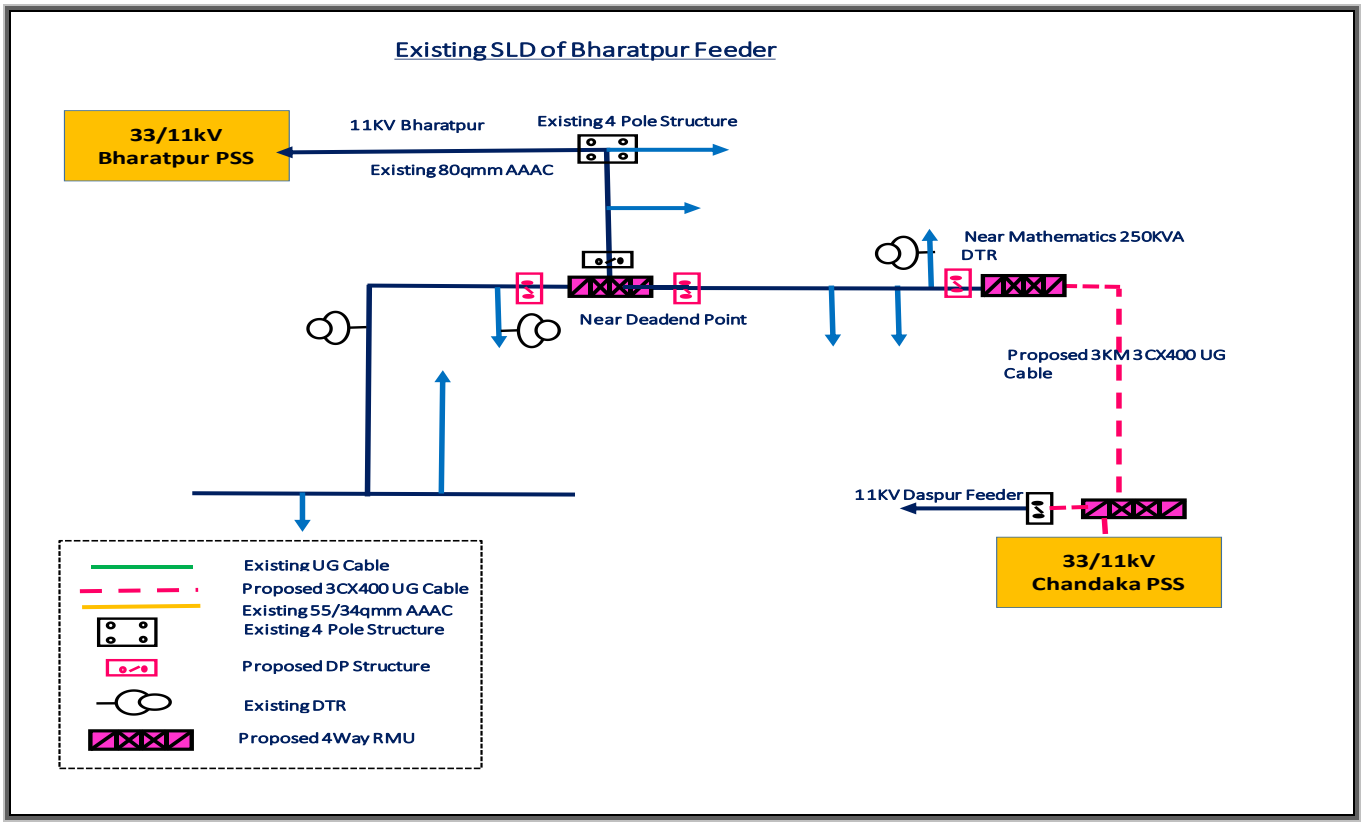
Existing SLD (summer'23):



Proposed Scenario:

Proposal for Construction of 3KM of 11KV new line from Chandaka PSS to Near Shantilata 16KVA DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU.

Proposed SLD (summer'25):



Loading Of Feeder after Proposal							
Name of the PSS	11 kV kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 20% Load Growth for 2 Years	% Loading in Summer-25	Feeder Status
BHARATPUR	BHARATPUR	4.52	2.71	60%	3.90	86%	OK
Chandaka	New Feeder	5.78	3	52%	4.32	75%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED			
Name of the Division :-	BCDD-2		
Name of the Sub-Division : -	KHANDAGIRI		
Name of the Section : -	BHARATPUR		
Name of the Work :-	Proposal for Construction of 3KM of 11KV new line from Chandaka PSS to Near Mathematics 250KVA DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU		
Names of Schemes: -	**CAPEX 24-25**		
Abstract of Estimate			
Sl. No.	**Description**		**Gross**
1	PART A: Construction of 3KM of 3CX400SQMM UG Cable New line from Chandaka PSS to Near Mathematics 250KVA DTR		2,22,80,126.62

2	PART-B: Construction of 3No of 11kV RMU for new line from Chandaka PSS to Near Mathematics 250KVA DTR	56,53,270.86
3	PART C: 11kV Line DP with AB Switch for new line from Chandaka PSS to Near Mathematics 250KVA DTR	6,96,241.65
4	**Total Gross**	**2,86,29,639.13**
Total estimated cost is Rs. 2.86Cr.		

(For detailed BoQ refer Annexure 9.19)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Bharatpur feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

20.**Mitigation of Feeder Overloading issue of DIST Centre Feeder**

Proposal: Proposal for Construction for Construction of 11KV new line from Niladrivihar PSS to near NM BASTI 100KVA DTR of DIST centre feeder eminating from CSPUR-1 PSS using 11kV 3C, 400sqmm UG Cable along with 11kV RMU

Objective: To mitigate the overloading issue of 11kV DIST centre Feeder.

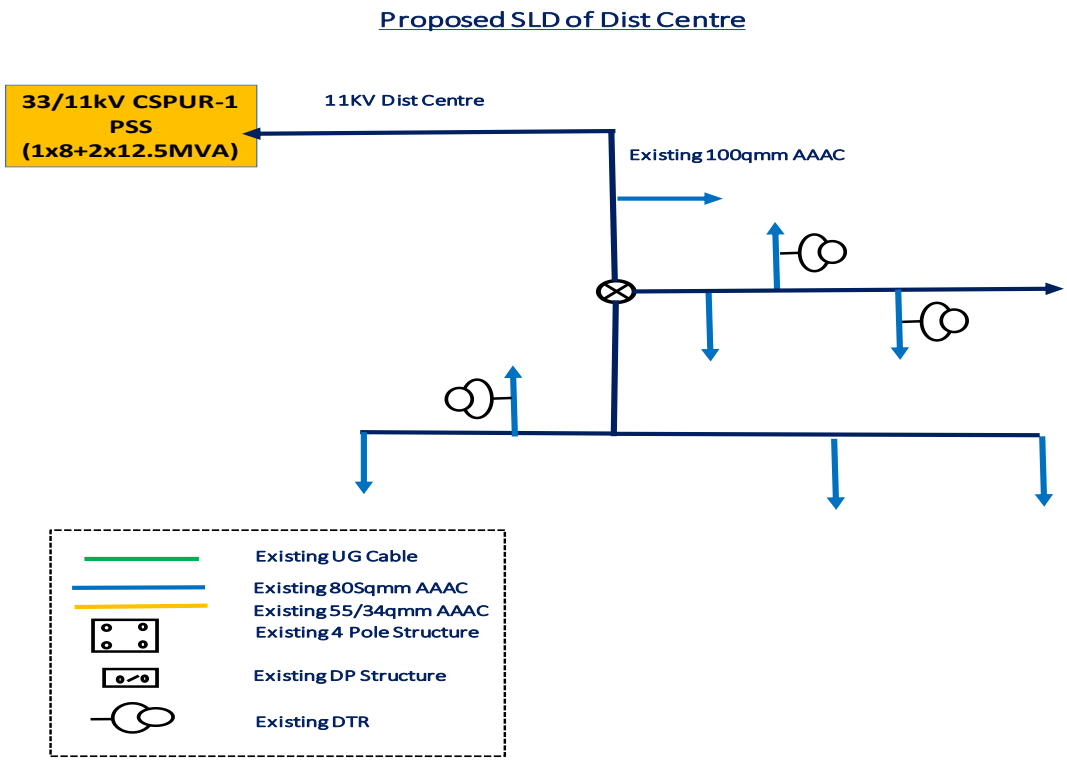
Existing Scenario:

- At present, 11kV DIST centre Feeder is emanating from 33/11kV CSPUR-1 PSS.Total length of this feeder is 5.7km and the peak load is 4.05MVA.
- In the existing scenario, conductor size of 11kV Bharatpur Feeder is 100sqmm & the feeder is 78% loaded w.r.t the current carrying capacity of the conductor and 112% loaded considering 20% load growth for Bhubaneswar city area.

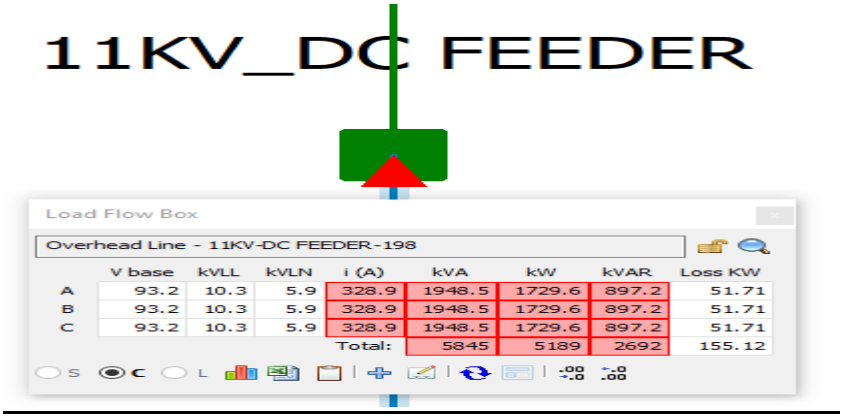
This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
CS Pur-1	DIST CENTER	5.19	4.05	78%	5.83	112%	Overload

Existing SLD (summer'23):



EXISTING CYME LOAD FLOW:-



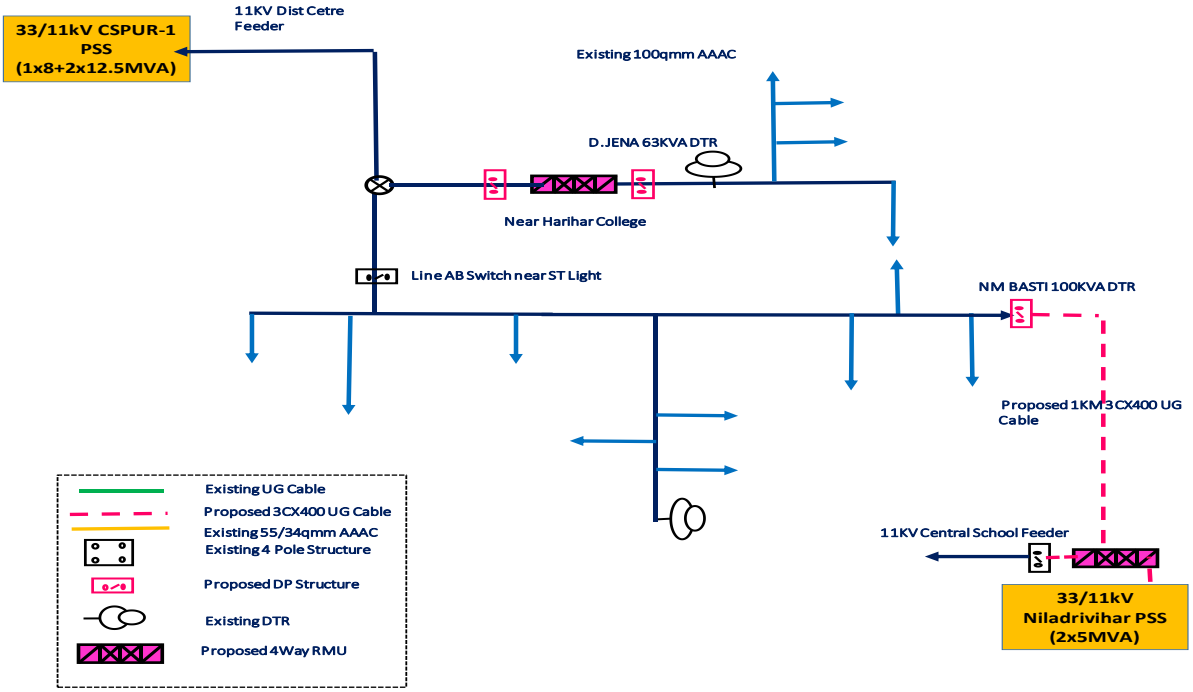
	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	93.2	10.3	5.9	328.9	1948.5	1729.6	897.2	51.71
B	93.2	10.3	5.9	328.9	1948.5	1729.6	897.2	51.71
C	93.2	10.3	5.9	328.9	1948.5	1729.6	897.2	51.71
				Total:	5845	5189	2692	155.12

Proposed Scenario:

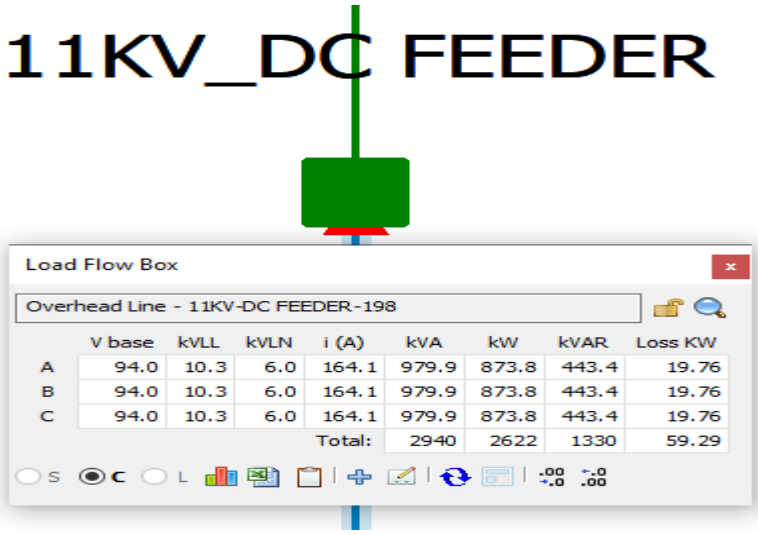
Proposal for Construction for Construction of 11KV new line from Niladrivihar PSS to near NM BASTI 100KVA DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU

Proposed SLD (summer'25):

Proposed SLD of Dist Centre Feeder



PROPOSED CYME LOAD FLOW



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
CS Pur-1	DIST CENTER	5.19	2.05	39%	2.95	57%	OK
Niladrivihar PSS	New Feeder	5.78	2	35%	2.88	50%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	PERIPHERI
Name of the Section : -	CSPUR-1
Name of the Work :-	Proposal for Construction for Construction of 11KV new line from Niladrivihar PSS to near NM BASTI 100KVA DTR using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description		Gross
1	PART A: Construction of 1KM of 3CX400SQMM UG Cable New line from Niladrivihar PSS to Near NMBASTI 100KVA DTR		74,14,952.45
2	PART-B: Construction of 2No of 11kV RMU for new line from Niladrivihar PSS to Near NMBASTI 100KVA DTR		38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Niladrivihar PSS to Near NMBASTI 100KVA DTR		6,96,241.65
4	**Total Gross**		**1,19,17,781.53**
Total estimated cost is Rs. 1.19Cr.			

(For detailed BoQ refer Annexure 9.20)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv DIST centre feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

21.**Mitigation of Feeder Overloading issue of Gandamunda Feeder**

Proposal: Proposal for Bifurcation of existing 11 KV Gandamunda Feeder load emanating from 33/11 KV Khandagiri PSS by constructing 1 No. of new feeder from 33/11 KVBaramunda PSS through RMU and 3.5KM 11KV new line from Khandagiri PSS to Hanuman Temple AB Switch using 11kV 3C, 400sqmm UG Cable along with 11kV RMU

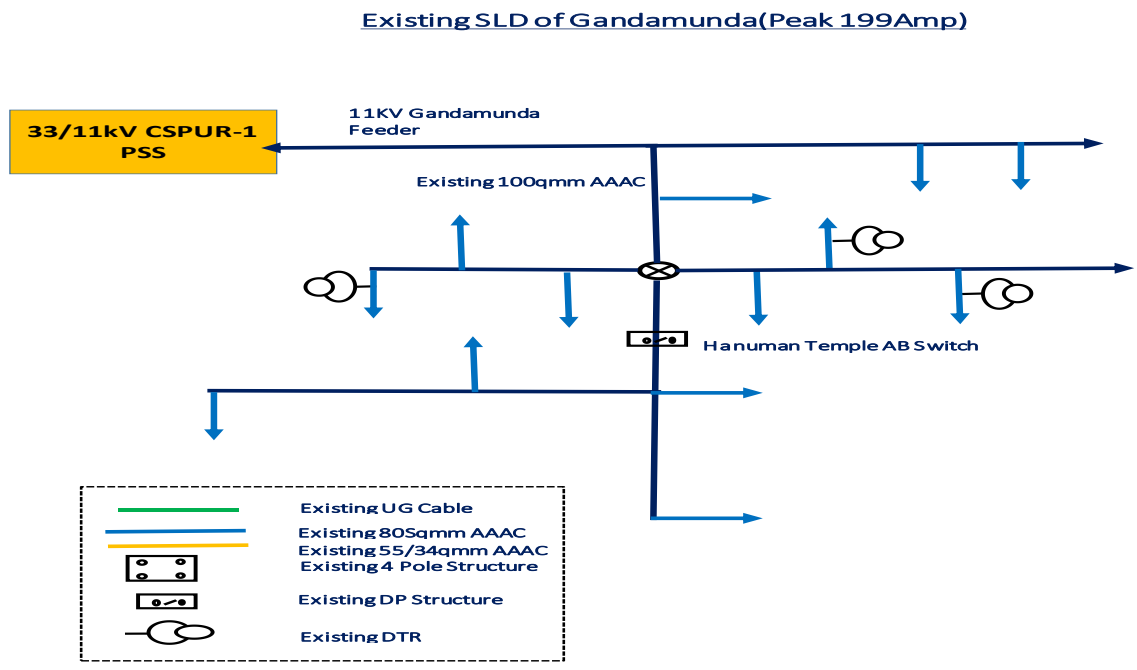
Objective: To mitigate the overloading issue of 11kV Gandamunda Feeder.

Existing Scenario:

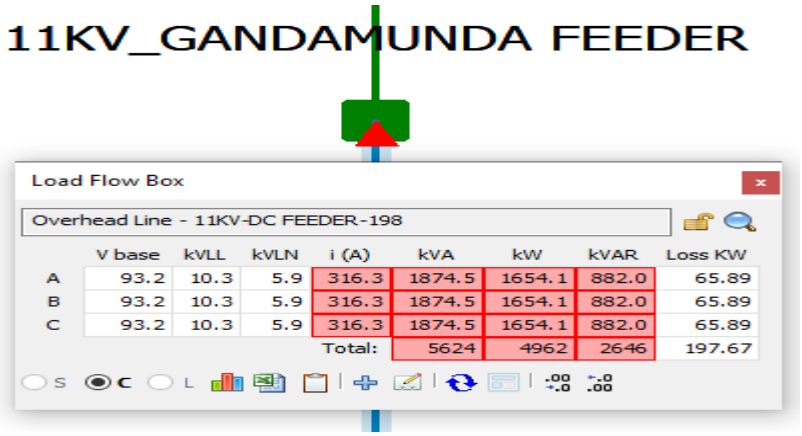
- At present, 11kV Gandamunda Feeder is emanating from 33/11kV Khandagiri PSS.Total length of this feeder is 11.4km and the peak load is 3.8MVA.
- In the existing scenario, conductor size of 11kV Gandamunda Feeder is 80sqmm & the feeder is 84% loaded w.r.t the current carrying capacity of the conductor and 121% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
KHANDAGIRI	GANDMUNDA	4.52	3.80	84%	5.47	121%	Overload

Existing SLD (summer'23):



EXISTING CYME LOAD FLOW:-

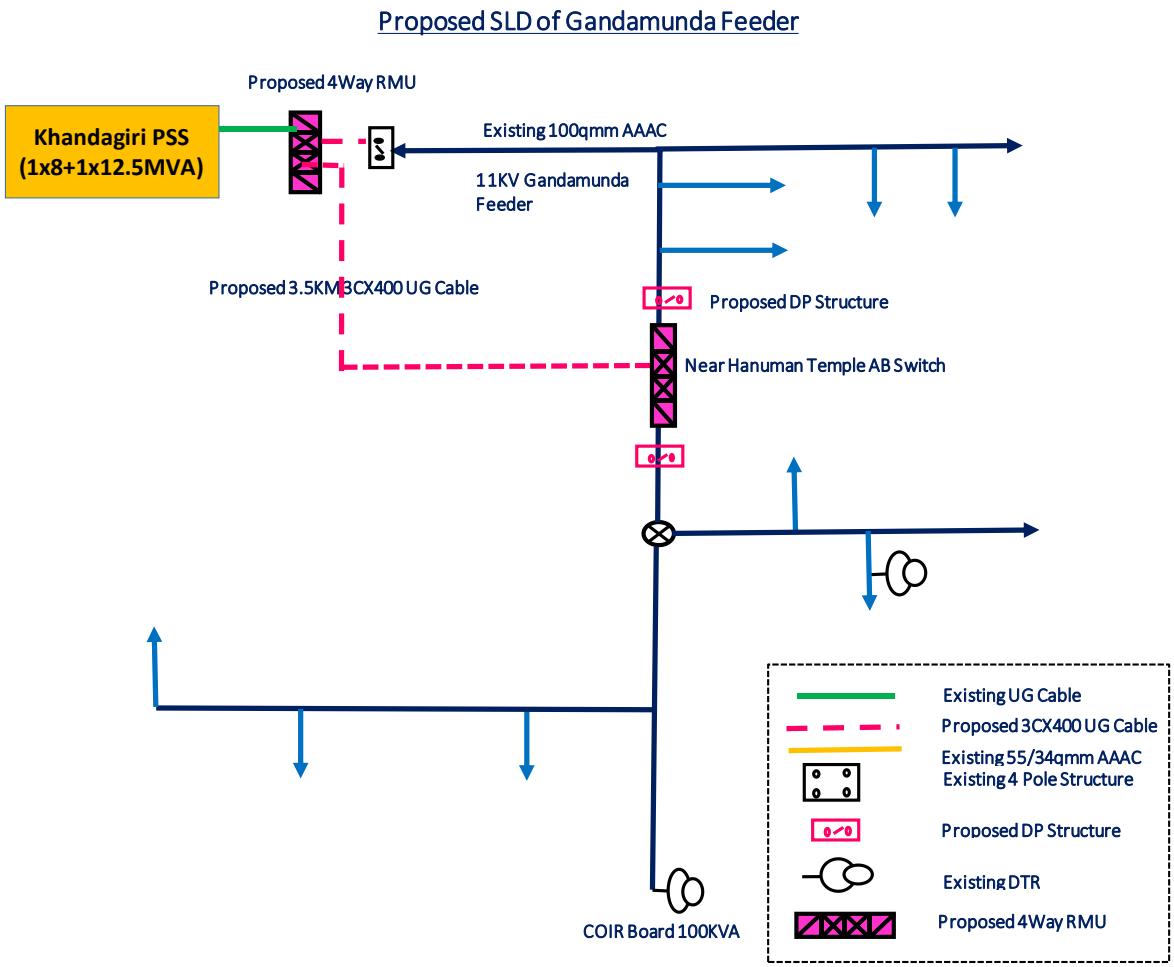


	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	93.2	10.3	5.9	316.3	1874.5	1654.1	882.0	65.89
B	93.2	10.3	5.9	316.3	1874.5	1654.1	882.0	65.89
C	93.2	10.3	5.9	316.3	1874.5	1654.1	882.0	65.89
				Total:	5624	4962	2646	197.67

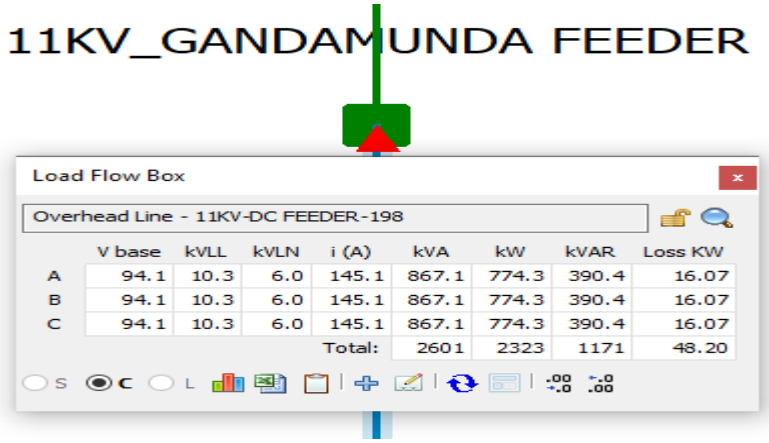
Proposed Scenario:

Proposal for Bifurcation of existing 11 KV Gandamunda Feeder load emanating from 33/11 KV Khandagiri PSS by constructing 1 No. of new feeder from 33/11 KVBaramunda PSS through RMU and 3.5KM 11KV new line from Khandagiri PSS to Hanuman Temple AB Switch.

Proposed SLD (summer'25):



PROPOSED CYME LOAD FLOW:-



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
KHANDAGIRI	GANDMUNDA	4.52	1.80	40%	2.59	57%	OK
KHANDAGIRI	GANDMUNDA New	5.78	2	35%	2.88	50%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	KHANDAGIRI
Name of the Section : -	KHANDAGIRI
Name of the Work :-	Proposal for Bifurcation of existing 11 KV Gandamunda Feeder load emanating from 33/11 KV Khandagiri PSS by constructing 1 No. of new feeder from 33/11 KV Baramunda PSS through RMU and 3.5KM 11KV new line from Khandagiri PSS to Hanuman Temple AB Switch using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Construction of 3.5KM of 3CX400SQMM UG Cable New line from Khandagiri PSS to Hanuman Temple AB Switch for Feeder Bifurcation	2,59,49,289.13
2	PART-B: Construction of 2No of 11kV RMU for new line from Khandagiri PSS to Hanuman Temple AB Switch for Feeder Bifurcation	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Khandagiri PSS to Hanuman Temple AB Switch for Feeder Bifurcation	4,64,161.10
4	**Total Gross**	**3,02,20,037.66**
Total estimated cost is Rs.3.02Cr.		

(For detailed BoQ refer Annexure 9.21)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Gandamunda feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

22.**Mitigation of Feeder Overloading issue of HB-3 Feeder**

Proposal: Proposal for Bifurcation of existing 11 KV HB-3 Feeder load emanating from 33/11 KV CSPUR-2 PSS by constructing 1 No. of new feeder from 33/11 KV CSPUR-2 PSS through RMU and 2.3KM 11KV new line from CS Pur-2 PSS to FR-7 Block using 11kV 3C, 400sqmm UG Cable along with 11kV RMU

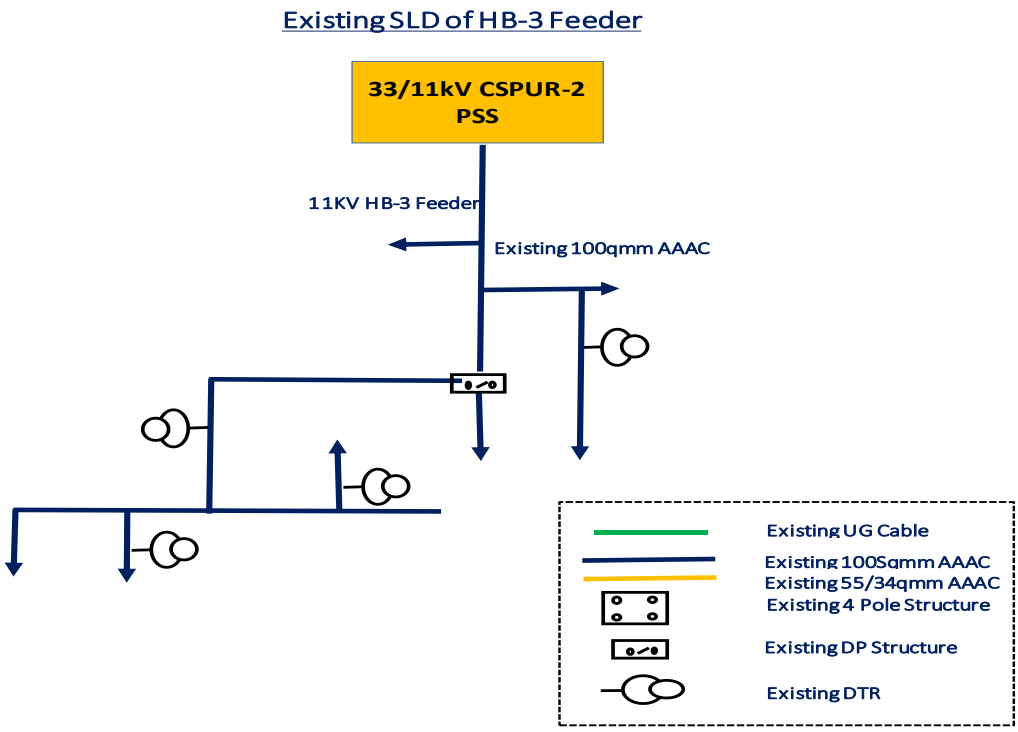
Objective: To mitigate the overloading issue of 11kV HB-3 Feeder.

Existing Scenario:

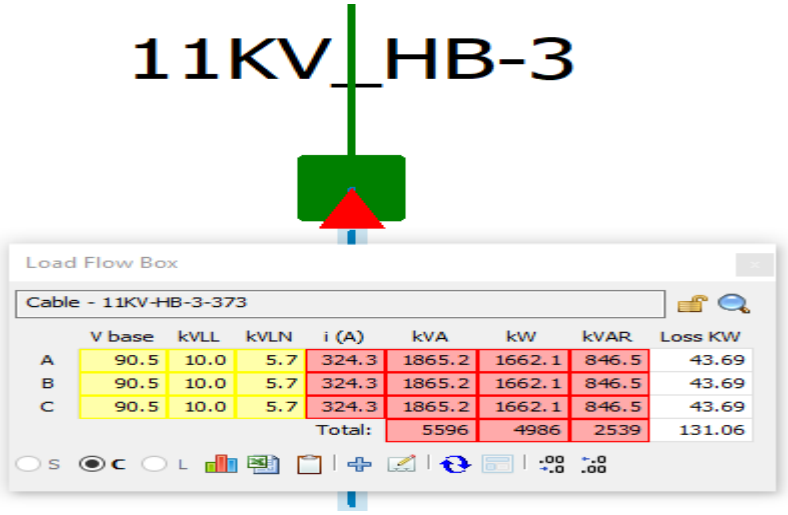
- At present, 11kV HB-3 Feeder is emanating from 33/11kV CSPUR-2 PSS.Total length of this feeder is 9.1km and the peak load is 4.01MVA.
- In the existing scenario, conductor size of 11kV HB-3 Feeder is 100sqmm & the feeder is 78% loaded w.r.t the current carrying capacity of the conductor and 112% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
CS Pur-2	HB3	5.15	4.01	78%	5.77	112%	Overload

Existing SLD (summer'23):



EXISTING CYME LOAD FLOW:-

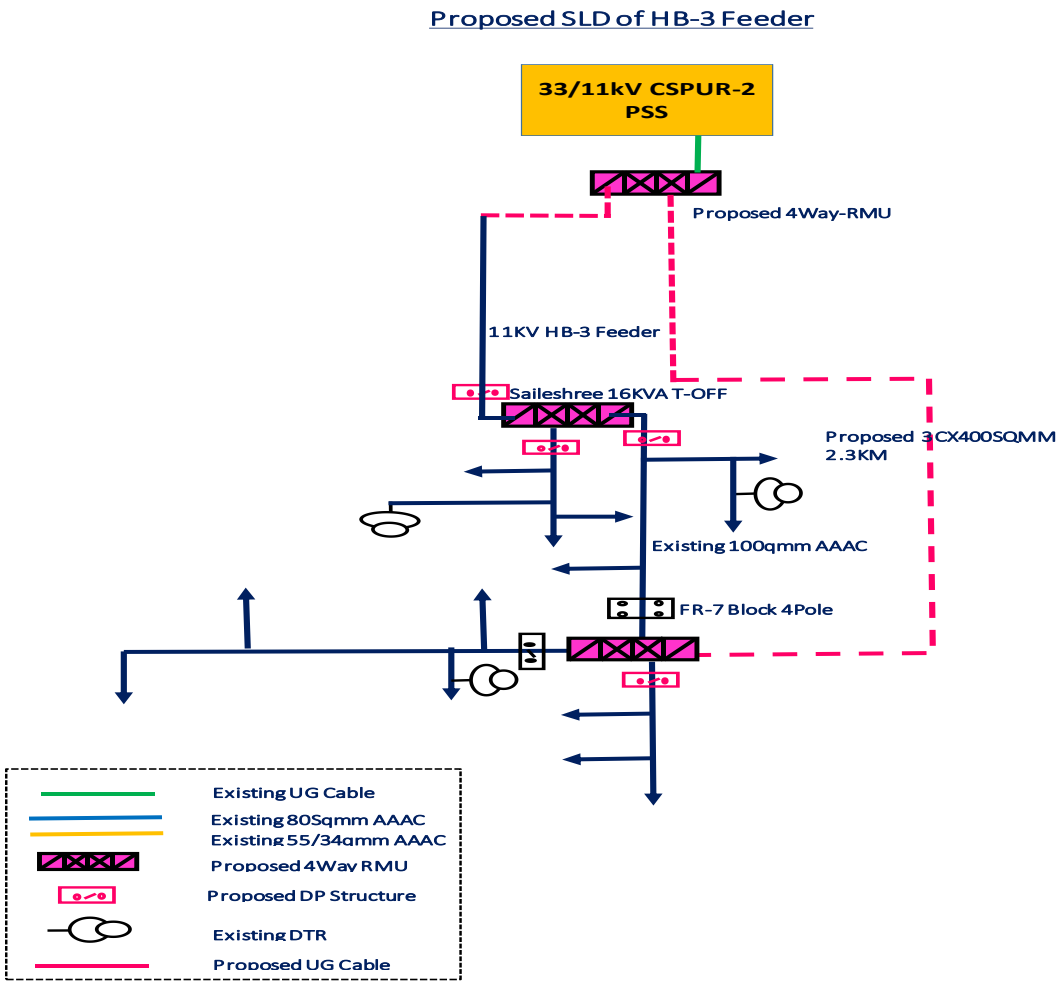


	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	90.5	10.0	5.7	324.3	1865.2	1662.1	846.5	43.69
B	90.5	10.0	5.7	324.3	1865.2	1662.1	846.5	43.69
C	90.5	10.0	5.7	324.3	1865.2	1662.1	846.5	43.69
				Total:	5596	4986	2539	131.06

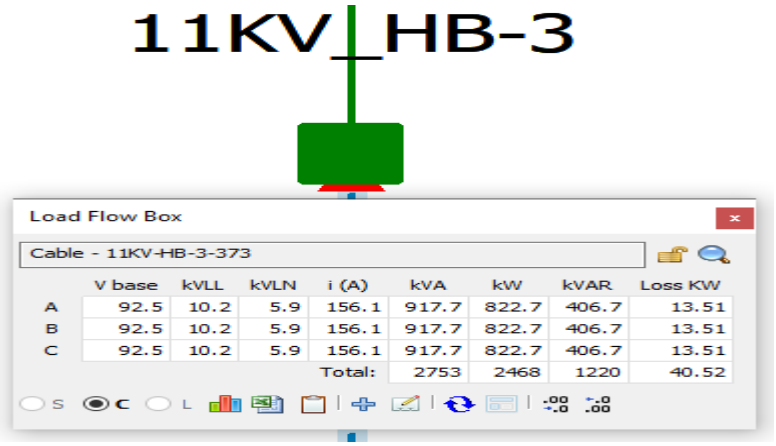
Proposed Scenario:

Bifurcation of existing 11 KV HB-3 Feeder load emanating from 33/11 KV CSPUR-2 PSS by constructing 1 No. of new feeder from 33/11 KV CSPUR-2 PSS through RMU and 2.3KM 11KV new line from CS Pur-2 PSS to FR-7 Block.

Proposed SLD:



PROPOSED CYME LOAD FLOW



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
CS Pur-2	HB3	5.15	2.01	39%	2.89	56%	OK
CS Pur-2	HB3 New	5.78	2	35%	2.88	50%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	PERIPHERI
Name of the Section : -	CSPUR-2
Name of the Work :-	Proposal for Bifurcation of existing 11 KV HB-3 Feeder load emanating from 33/11 KV CSPUR-2 PSS by constructing 1 No. of new feeder from 33/11 KV CSPUR-2 PSS through RMU and 2.3KM 11KV new line from CS Pur-2 PSS to FR-7 Block using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 2.3KM of 3CX400SQMM UG Cable New line from CS Pur-2 PSS to FR-7 Block for Feeder Bifurcation	1,70,68,371.17
2	PART-B: Construction of 3No of 11kV RMU for new line from CS Pur-2 PSS to FR-7 Block	57,09,920.78
3	PART C: 11kV Line DP with AB Switch for new line from CS Pur-2 PSS to FR-7 Block	9,28,322.20

4	**Total Gross**	**2,37,06,614.15**
Total estimated cost is Rs. 2.37Cr.		

(For detailed BoQ refer Annexure 9.22)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv HB-3 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

23.**Mitigation of Feeder Overloading issue of Housing Board Feeder**

Proposal: Proposal for Augmentation of 1Km existing 11kV Housing Board Feeder emanating from Metal Tapping to Jai bhadra and from Puri gramya bank to Sambit Babu DTR using 100sqmm AAAC conductor & UG Cable of 3Cx400sqmm of length 0.2km.

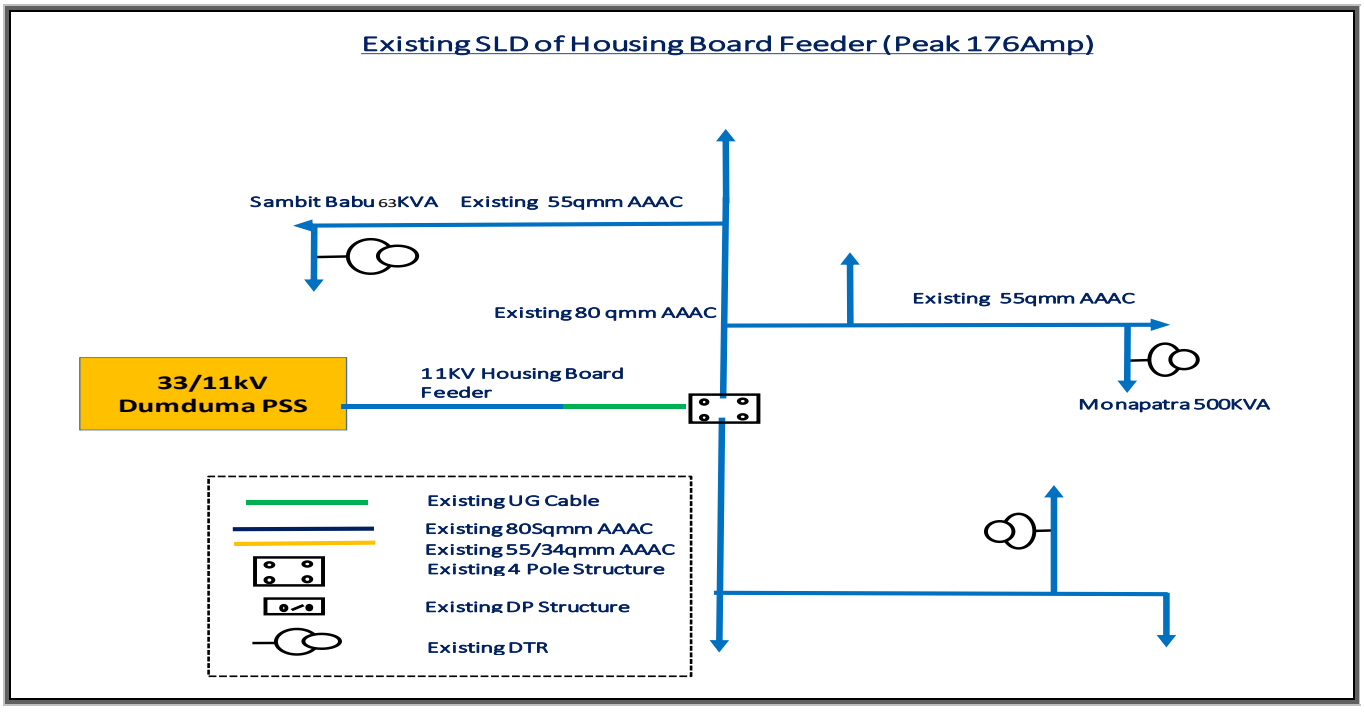
Objective: To mitigate the overloading issue of 11kV Housing board Feeder.

Existing Scenario:

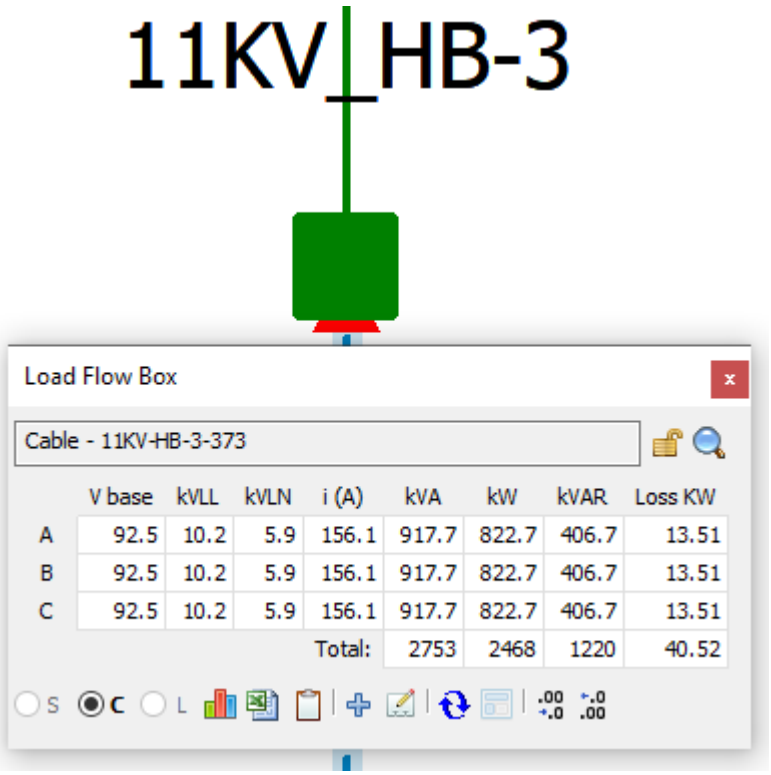
- At present, 11kV Housing Board Feeder is emanating from 33/11kV Dumduma PSS.Total length of this feeder is 5km and the peak load is 3.24MVA.
- In the existing scenario, conductor size of 11kV Housing Board Feeder is 80sqmm & the feeder is 72% loaded w.r.t the current carrying capacity of the conductor and 103% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Dumduma	HOUSING BOARD	4.52	3.24	72%	4.67	103%	Overload

Existing SLD (summer'25):



EXISTING CYME LOAD FLOW:-

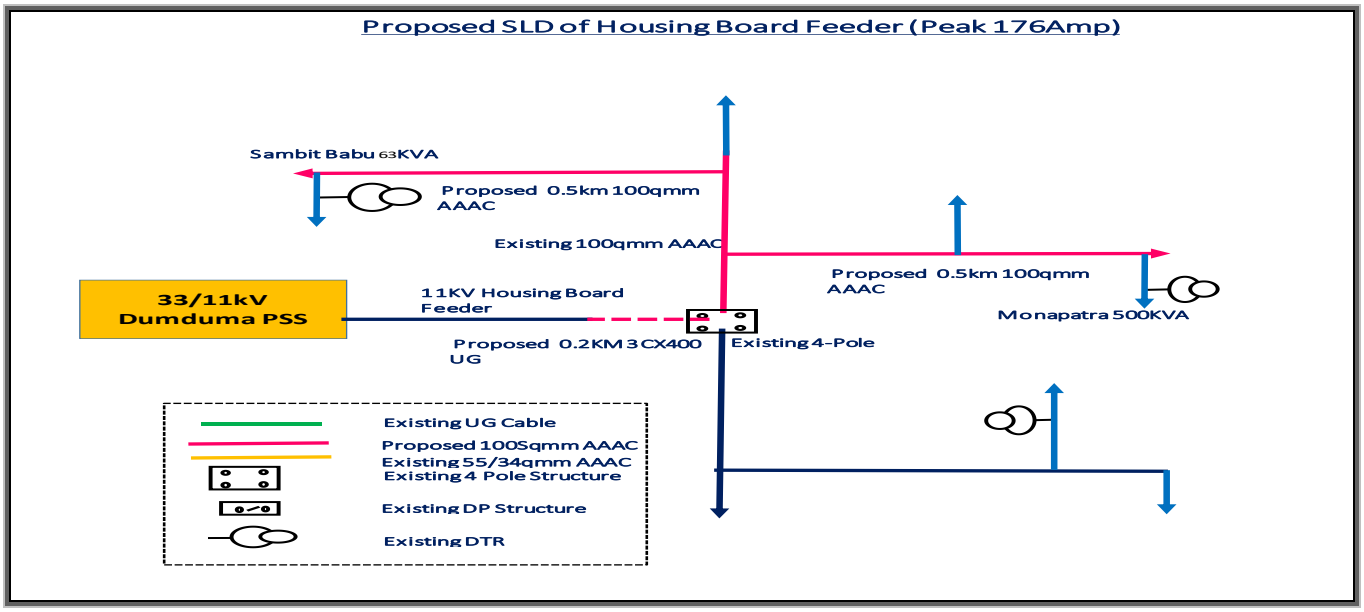


	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	92.5	10.2	5.9	156.1	917.7	822.7	406.7	13.51
B	92.5	10.2	5.9	156.1	917.7	822.7	406.7	13.51
C	92.5	10.2	5.9	156.1	917.7	822.7	406.7	13.51
				Total:	2753	2468	1220	40.52

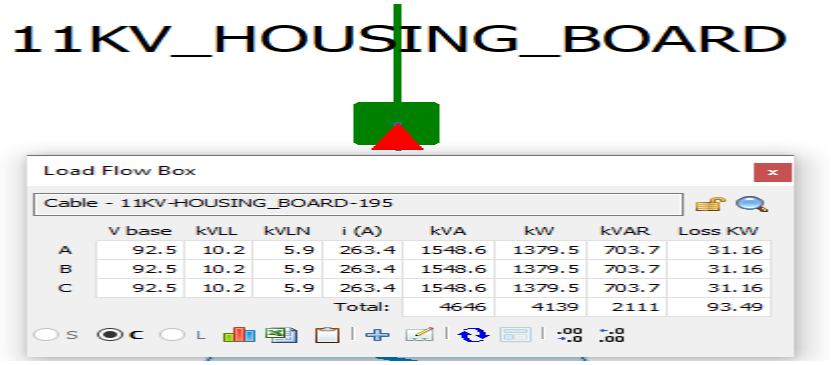
Proposed Scenario:

Proposal for Augmentation of 1Km existing 11kV Housing Board Feeder emanating from Metal Tapping to Jai bhadra and from Puri gramya bank to Sambit Babu DTR using 100sqmm AAAC conductor & UG Cable of 3Cx400sqmm of length 0.2km.

Proposed SLD (summer'25):



PROPSED CYME LOAD FLOW



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Dumduma	HOUSING BOARD	5.19	3.24	63%	4.67	90%	Ok

Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	KHANDAGIRI
Name of the Section : -	DUMDUMA
Name of the Work :-	Proposal for Augmentation of 1Km existing 11kV Housing Board Feeder emanating from Metal Tapping to Jai bhadra and from Puri gramya bank to Sambit Babu DTR using 100sqmm AAAC conductor & UG Cable of 3Cx400sqmm of length 0.2km.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of Augmentation of Line using 100 SQ.MM. -AAA Conductor from Dumduma PSS to Matha PH-2	1407468.467
2	PART B: Construction of 0.2km UG of 3CX400 sqmm of existing feeder	15,13,650.59
3	**Total Gross**	**29,21,119.06**
Total estimated cost is Rs. 0.29Cr.		

(For detailed BoQ refer Annexure 9.23)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Housing board feeder.

- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

24.**Mitigation of Feeder Overloading issue of Jagamohan Nagar Feeder**

Proposal: Proposal for Bifurcation of existing 11 KV Jagamohan Nagar Feeder load emanating from 33/11 KV Khandagiri PSS by constructing 1 No. of new feeder from 33/11 KV Khandagiri PSS through RMU and 3KM 11KV new line from Khandagiri PSS To ITER-T-off using 11kV 3C, 400sqmm UG Cable along with 11kV RMU.

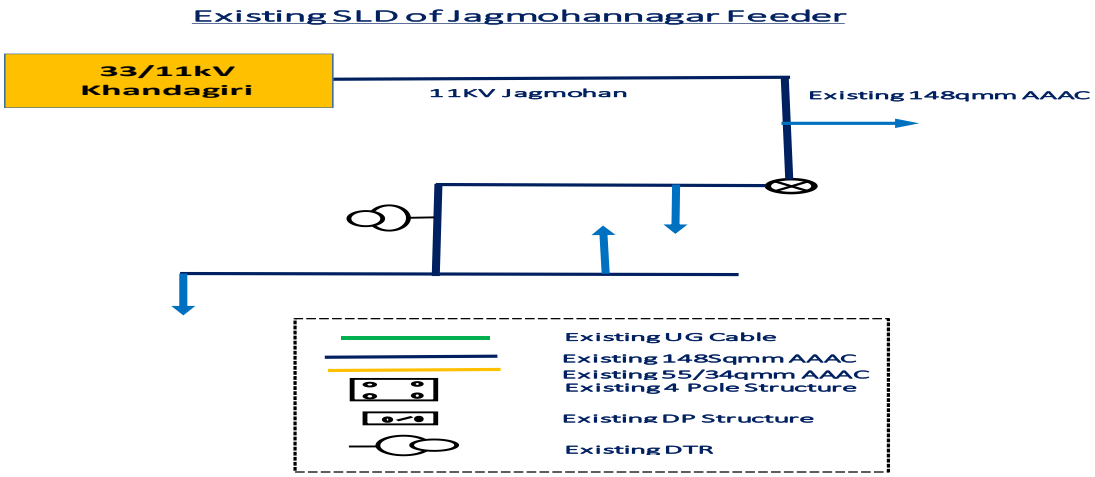
Objective: To mitigate the overloading issue of 11kV Jagamohan Nagar Feeder.

Existing Scenario:

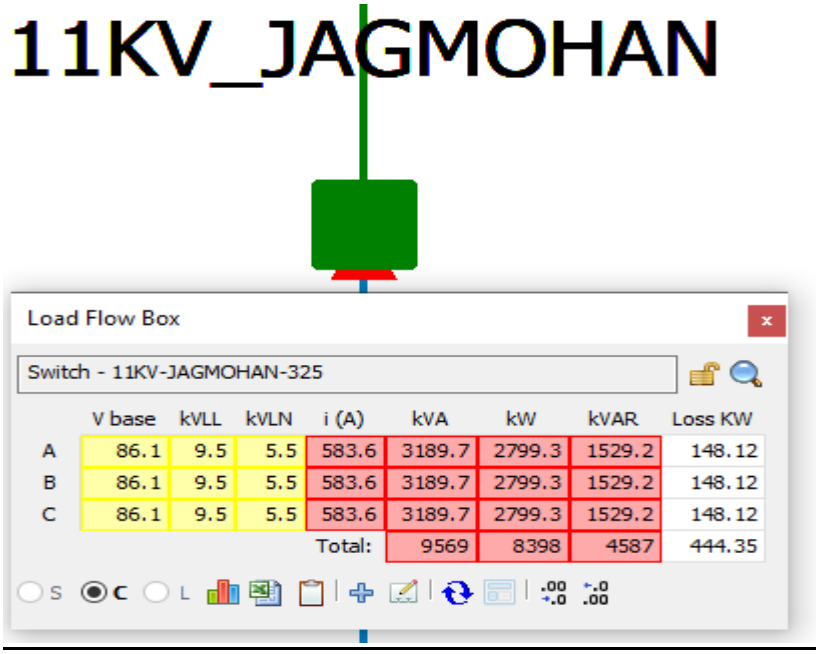
- At present, 11kV Jagamohan Nagar Feeder is emanating from 33/11kV khandagiri PSS.Total length of this feeder is 8.4km and the peak load is 6.7MVA.
- In the existing scenario, conductor size of 11kV Jagamohan Nagar Feeder is 148sqmm & the feeder is 100% loaded w.r.t the current carrying capacity of the conductor and 144% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, feeder bifurcation is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
KHANDAGIRI	JAGAMOHAN NAGAR	6.68	6.70	100%	9.65	144%	Overload

EXISTING SLD



EXISTING CYME LOAD FLOW:-

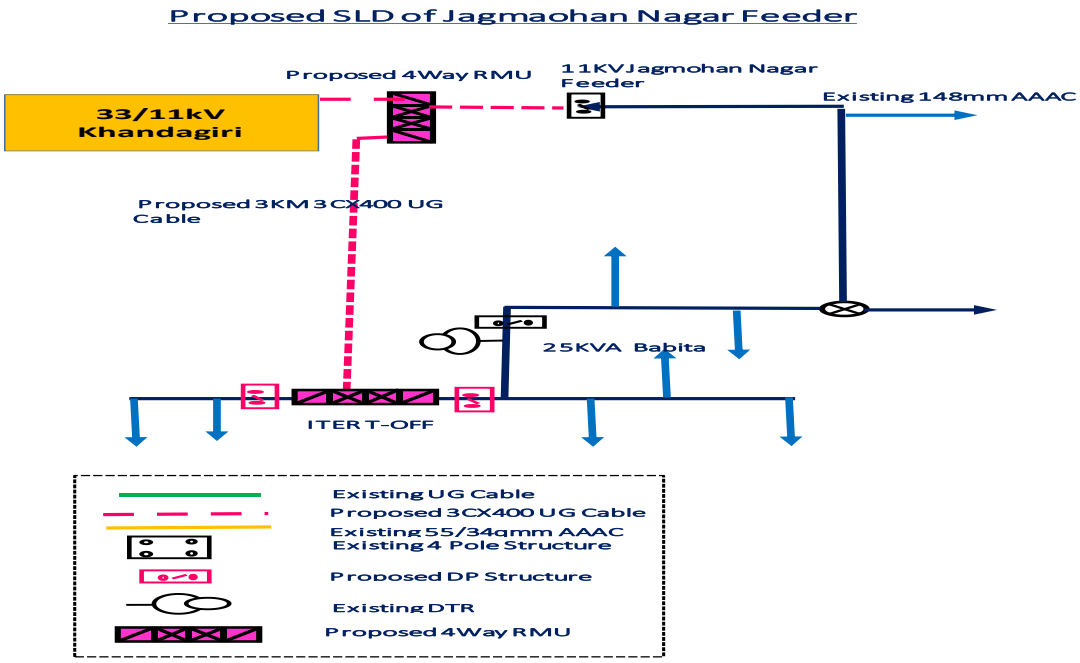


	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	86.1	9.5	5.5	583.6	3189.7	2799.3	1529.2	148.12
B	86.1	9.5	5.5	583.6	3189.7	2799.3	1529.2	148.12
C	86.1	9.5	5.5	583.6	3189.7	2799.3	1529.2	148.12
				Total:	9569	8398	4587	444.35

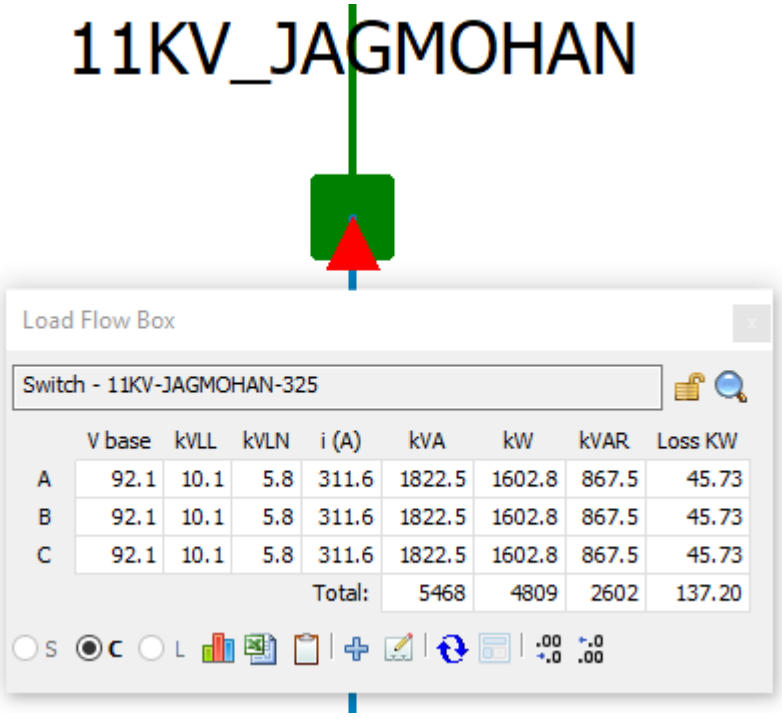
Proposed Scenario:

Bifurcation of existing 11 KV Jagamohan Nagar Feeder load emanating from 33/11 KV Khandagiri PSS by constructing 1 No. of new feeder from 33/11 KV Khandagiri PSS through RMU and 3KM 11KV new line from Khandagiri PSS To ITER-T-off.

Proposed SLD Summer-25;



PROPOSED CYME LOAD FLOW:-



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
KHANDAGIRI	JAGAMOHAN NAGAR	6.68	3.70	55%	5.33	80%	OK
KHANDAGIRI	JAGAMOHAN NAGAR New	5.78	3	52%	4.32	75%	OK

Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	KHANDAGIRI
Name of the Section : -	KHANDAGIRI
Name of the Work :-	Proposal for Bifurcation of existing 11 KV Jagamohan Nagar Feeder load emanating from 33/11 KV Khandagiri PSS by constructing 1 No. of new feeder from 33/11 KV Khandagiri PSS through RMU and 3KM 11KV new line from Khandagiri PSS To ITER-T-off using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate		
Sl. No.	**Description**	**Gross**

1	PART A: Construction of 3KM of 3CX400SQMM UG Cable New line from Khandagiri PSS To ITER-T-off for Feeder Bifurcation	2,22,80,126.62
2	PART-B: Construction of 4No of 11kV RMU for new line from Khandagiri PSS To ITER-T-off for Feeder Bifurcation	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Khandagiri PSS To ITER-T-off for Feeder Bifurcation	4,64,161.10
4	**Total Gross**	**2,65,50,875.15**
Total estimated cost is Rs. 2.66Cr.		

(For detailed BoQ refer Annexure 9.24)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Jagmohan feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

25.**Mitigation of Feeder Overloading issue of Kujimahal Feeder**

Proposal: Proposal for Bifurcation of existing 11 KV Kujimahal Feeder load emanating from 33/11 KV Chandaka PSS by constructing 1 No. of new feeder from 33/11 KV chandaka PSS through RMU and 4.2KM 11KV new line from Chandaka PSS To Chandaka chowk using 11kV 3C, 400sqmm UG Cable along with 11kV RMU.

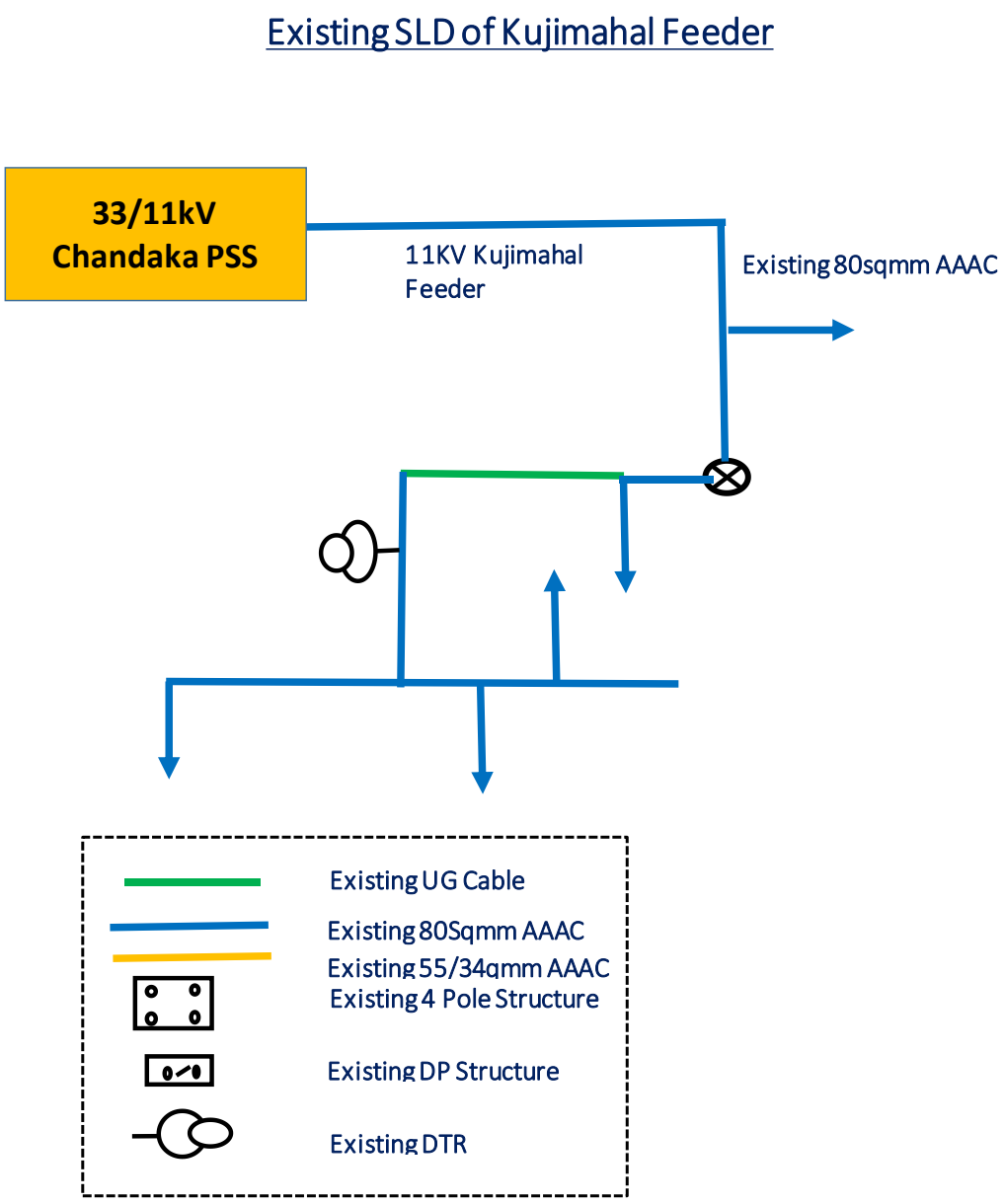
Objective: To mitigate the overloading issue of 11kV kujimahal Feeder.

Existing Scenario:

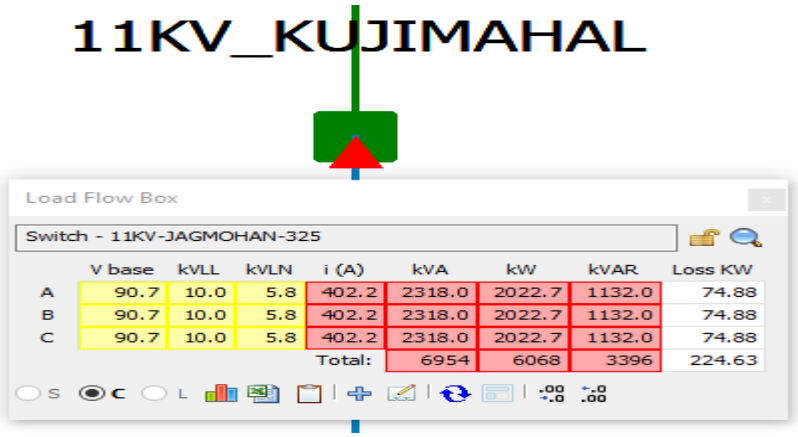
- At present, 11kV kujimahal Feeder is emanating from 33/11kV chandaka PSS.Total length of this feeder is 19.4km and the peak load is 4.85MVA.
- In the existing scenario, conductor size of 11kV kujimahal Feeder is 80sqmm & the feeder is 107% loaded w.r.t the current carrying capacity of the conductor and 154% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, feeder bifurcation with augmentation is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Chandaka	KUJIMAHAL	4.52	4.85	107%	6.98	154%	Overload

Existing SLD (summer'23):



EXISTING CYME LOAD FLOW

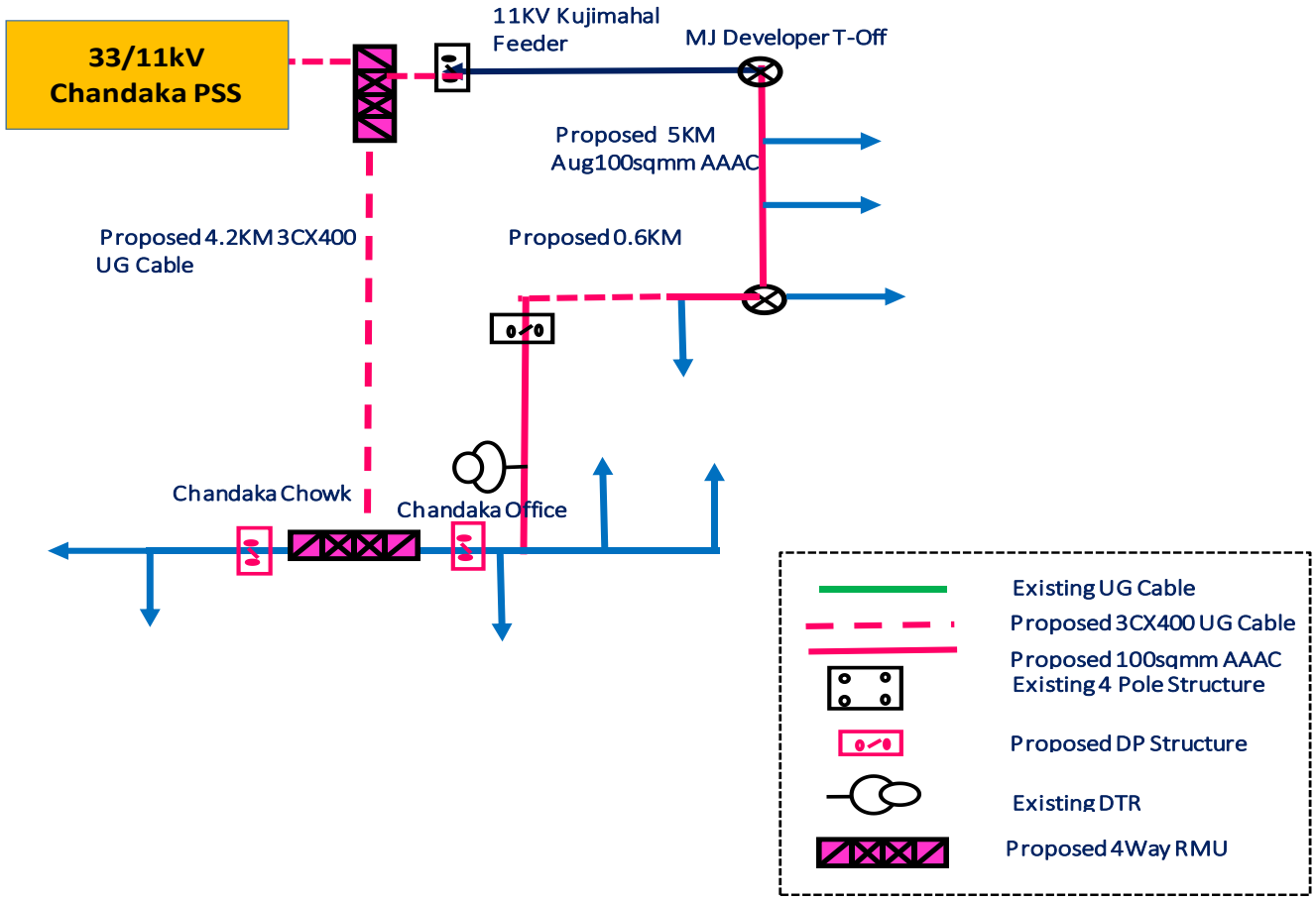


Proposed Scenario:

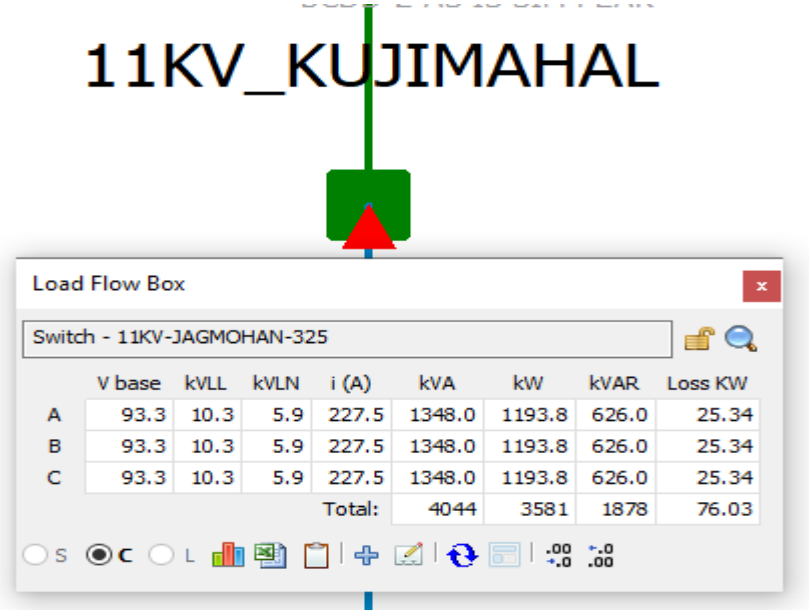
Proposal for Construction of Augmentation of 5KM Line using 99SQ.MM. -AAA Conductor from Near MJ developer T-Off to Chandaka Office and new feeder proposed from chandaka PSS to chandaka chowk.

Proposed SLD Summer-25;

Proposed SLD of Kujimahal Feeder



PROPOSED CYME LOAD FLOW:-



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Chandaka	KUJIMAHAL	5.19	2.85	55%	4.10	79%	OK
Chandaka	KUJIMAHAL New	5.78	2	35%	2.88	50%	OK

Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-	BCDD-2	
Name of the Sub-Division : -	PERIPHERI	
Name of the Section : -	BARANG	
Name of the Work :-	1-Proposal for Construction of Augmentation of 5KM Line using 99SQ.MM. -AAA Conductor from Near MJ developer T-Off to Chandaka Office 2-Construction of 4.2km UG of 3CX400 sqmm from Chandaka PSS to chandaka chowk	
Names of Schemes: -		**CAPEX 24-25**

Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Construction of Augmentation of 5KM Line using 99SQ.MM. -AAA Conductor from Near MJ developer T-Off to Chandaka Office	10282218.35
2	PART B: Construction of 4.8km UG of 3CX400 sqmm from Chandaka PSS to chandaka chowk	3,54,87,851.87

3	PART-C: Construction of 11kV RMU for new line from Chandaka PSS to first DP AB Switch	38,06,587.43
4	PART D: 11kV Line DP with AB Switch from Chandaka PSS to first DP AB Switch	4,64,161.10
5	**Total Gross**	**5,00,40,818.75**
Total estimated cost is Rs. 5.00Cr.		

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Kujimahal feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

26.**Mitigation of Feeder Overloading issue of Partharagadia Feeder**

Proposal: Proposal for Construction of Augmentation of patharagadia Feeder for 5KM Line using 99SQ.MM. -AAA Conductor from first DP near PSS to Bahada Chhaka and UG augmentation 1KM Line from 3CX120sqmm to 3CX400 sqmm from Chandaka PSS to first DP AB Switch.

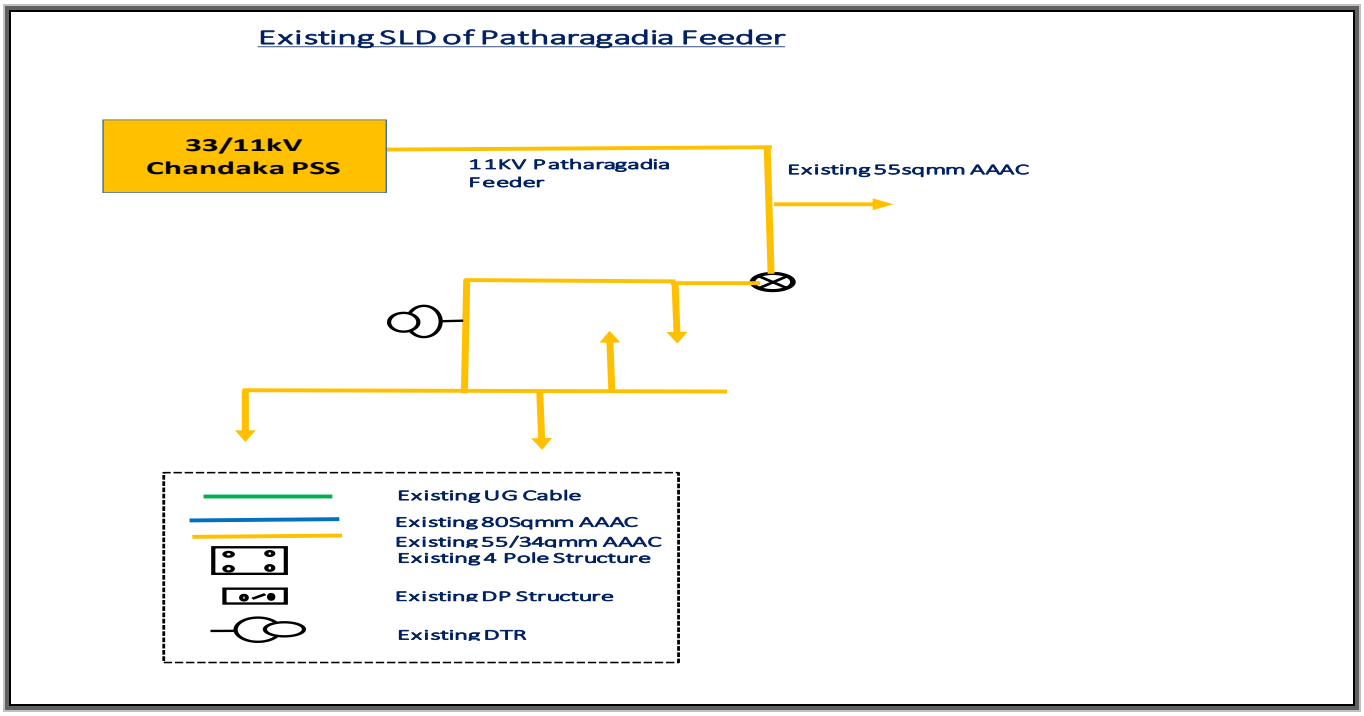
Objective: To mitigate the overloading issue of 11kV patharagadia Feeder.

Existing Scenario:

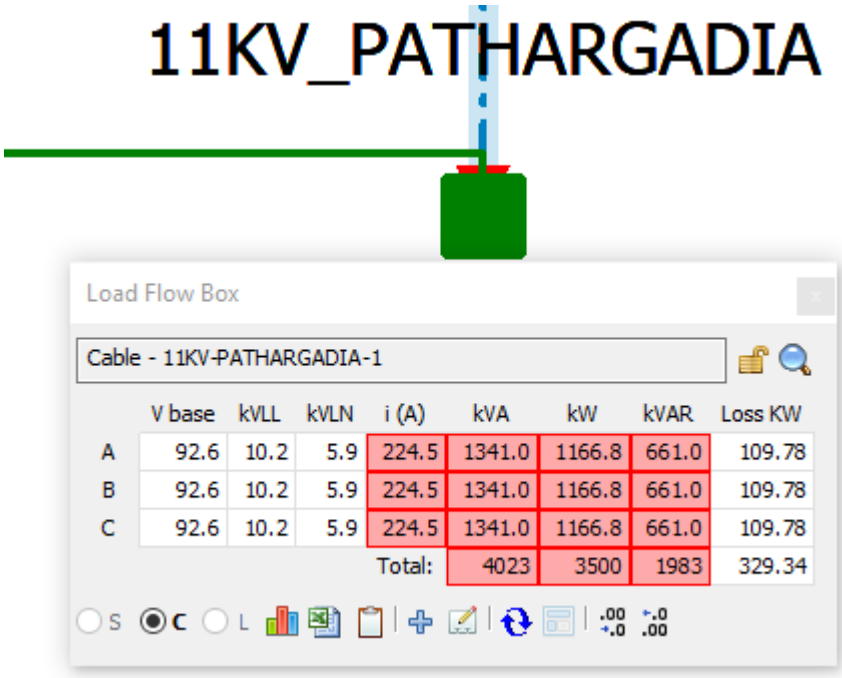
- At present, 11kV patharagadia Feeder is emanating from 33/11kV chandaka PSS.Total length of this feeder is 8.7km and the peak load is 2.79MVA.
- In the existing scenario, conductor size of 11kV patharagadia Feeder is 50sqmm & the feeder is 78% loaded w.r.t the current carrying capacity of the conductor and 113% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, so augmentation is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Chandaka	PATHARGADIA	3.55	2.79	78%	4.01	113%	Overload

Existing SLD (summer'23):



EXISTING CYME LOAD FLOW:-



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	92.6	10.2	5.9	224.5	1341.0	1166.8	661.0	109.78
B	92.6	10.2	5.9	224.5	1341.0	1166.8	661.0	109.78
C	92.6	10.2	5.9	224.5	1341.0	1166.8	661.0	109.78
				Total:	4023	3500	1983	329.34

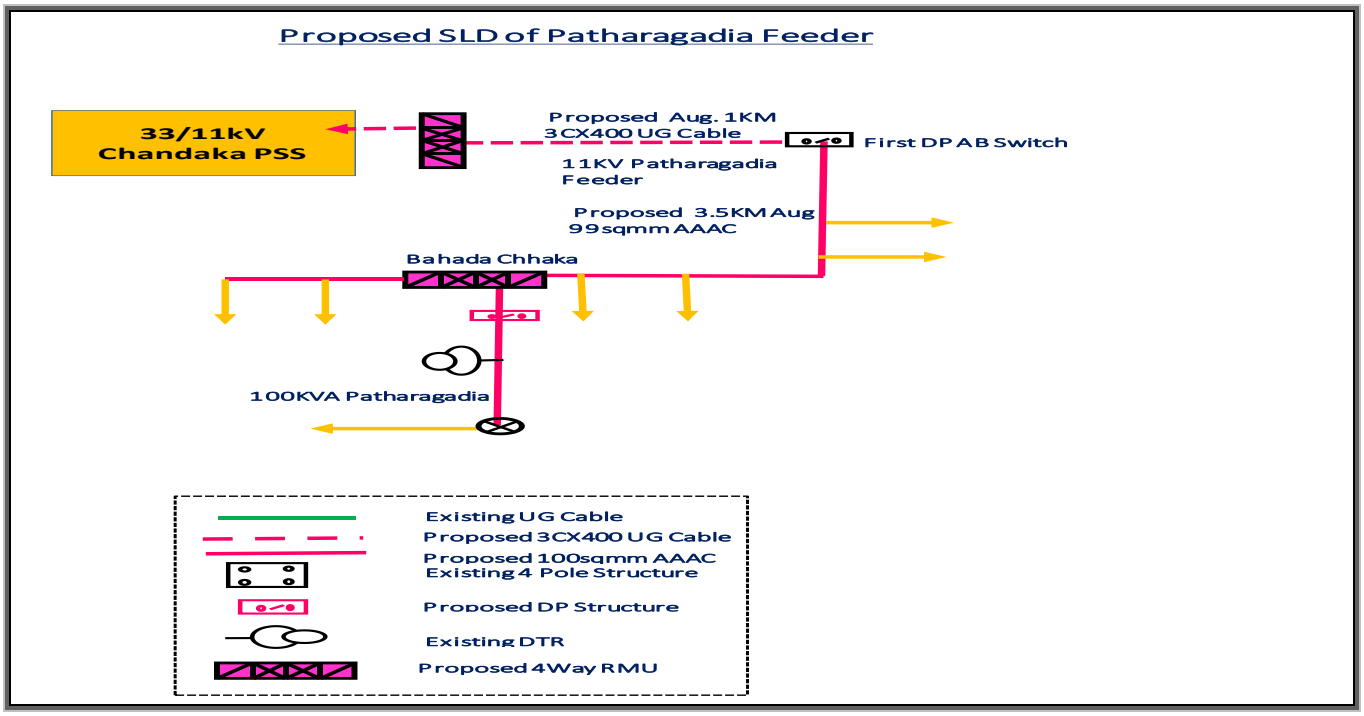
Proposed Scenario:

1-Proposal for Construction of Augmentation of 5KM Line using 99SQ.MM. -AAA Conductor from first DP near PSS to Bahada Chhaka.

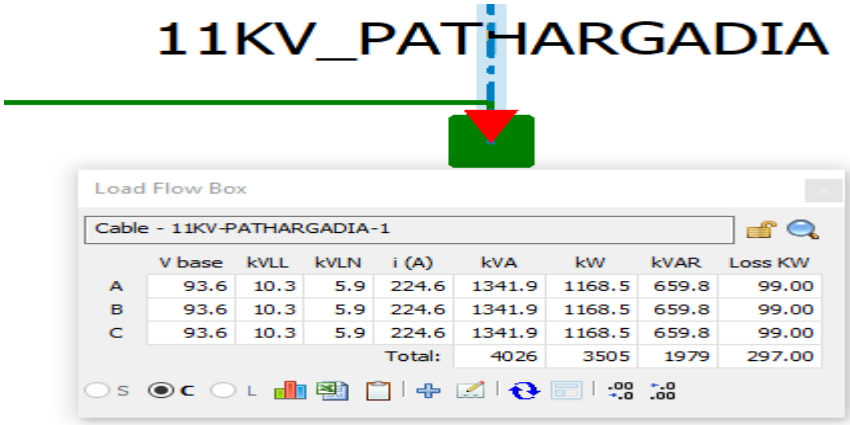
2-Construction of UG Augmentation 1KM Line from 3CX120sqmm to 3CX400 sqmm from Chandaka PSS to first DP AB Switch

Loading Of Feeder after Proposal							
Name of the PSS	11 kV kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 20% Load Growth for 2 Years	% Loading in Summer-25	Feeder Status
Chandaka	PATHARGADIA	5.19	2.79	54%	4.01	77%	OK

Proposed SLD (summer'25):



PROPOSED CYME LOAD FLOW:-



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	PERIPHERI
Name of the Section : -	BARANG
Name of the Work :-	1-Proposal for Construction of Augmentation of 5KM Line using 99SQ.MM. -AAA Conductor from first DP near PSS to Bahada Chhaka 2-Construction of UG Augmentation 1KM Line from 3CX120sqmm to 3CX400 sqmm from Chandaka PSS to first DP AB Switch
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of Augmentation of 5KM Line using 99SQ.MM. -AAA Conductor from first DP near PSS to Bahada Chhaka	10282218.35
2	PART B: Construction of UG Augmentation 1KM Line from 3CX120sqmm to 3CX400 sqmm from Chandaka PSS to first DP AB Switch	74,14,952.45
3	PART-C: Construction of 11kV RMU for new line from Chandaka PSS to first DP AB Switch	38,06,587.43
4	PART D: 11kV Line DP with AB Switch from Chandaka PSS to first DP AB Switch	4,64,161.10
5	**Total Gross**	**2,19,67,919.33**
Total estimated cost is Rs. 2.20Cr.		

(For detailed BoQ refer Annexure 9.26)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv patharagadia feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

27.**Mitigation of Feeder Overloading issue of 11KV sainik school Feeder**

Proposal: Proposal for Bifurcation of existing 11 KV Sainik School Feeder load emanating from 33/11 KV Sainik School PSS by constructing 1 No. of new feeder from 33/11 KV Sainik School PSS through RMU and 1KM 11KV new line from Sainik School PSS to FRW DSS using 11kV 3C, 400sqmm UG Cable along with 11kV RMU

Objective: To mitigate the overloading issue of 11kV Sainik School Feeder.

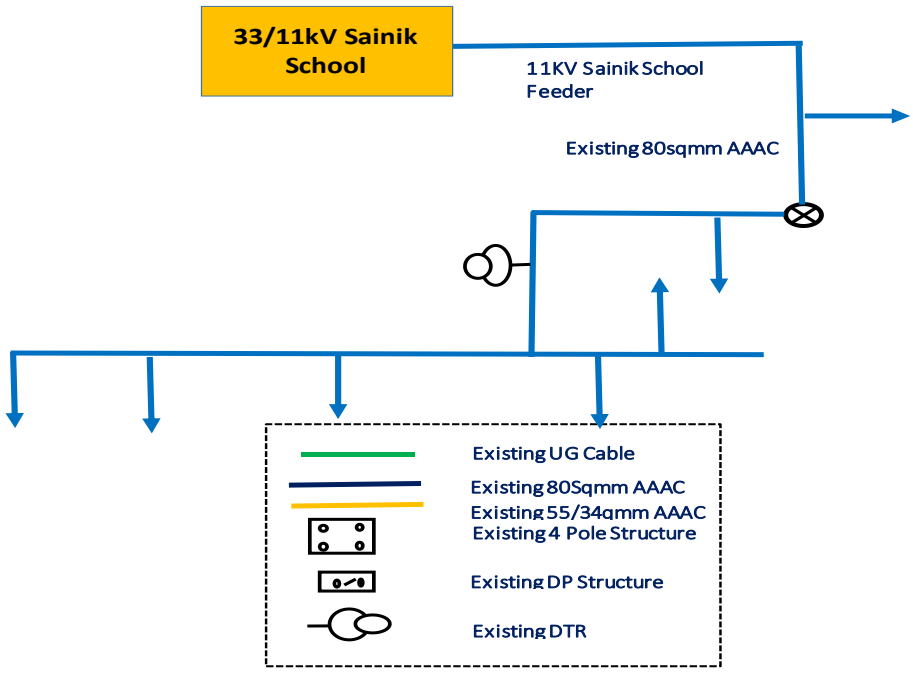
Existing Scenario:

- At present, 11kV Sainik School Feeder is emanating from 33/11kV Sainik School PSS.Total length of this feeder is 6.4km and the peak load is 4.01MVA.
- In the existing scenario, conductor size of 11kV Sainik School Feeder is 80sqmm & the feeder is 89% loaded w.r.t the current carrying capacity of the conductor and 128% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder for bifurcation of load is proposed for improving reliability and to mitigate overload condition.

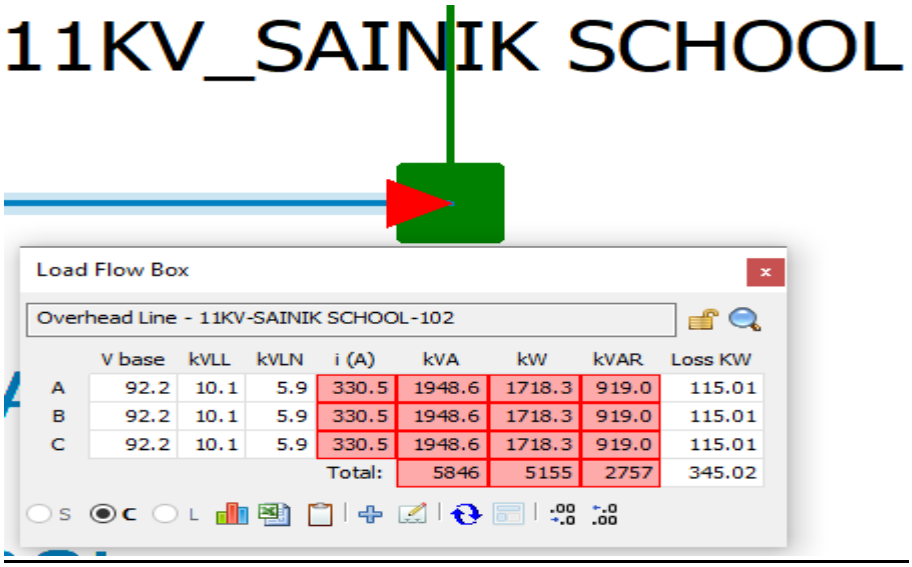
Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
SAINIK SCHOOL	SAINIK SCHOOL	4.52	4.01	89%	5.77	128%	Overload

Existing SLD (summer'23):

Existing SLD of Sainik School Feeder



EXISTING CYME LOAD FLOW:-



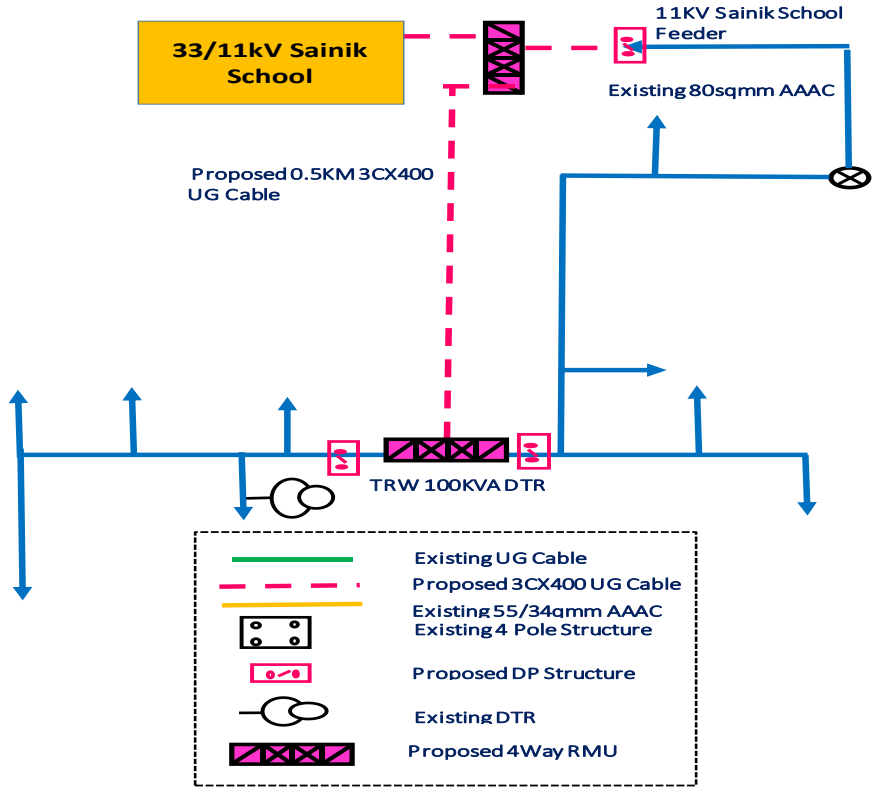
	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	92.2	10.1	5.9	330.5	1948.6	1718.3	919.0	115.01
B	92.2	10.1	5.9	330.5	1948.6	1718.3	919.0	115.01
C	92.2	10.1	5.9	330.5	1948.6	1718.3	919.0	115.01
				Total:	5846	5155	2757	345.02

Proposed Scenario:

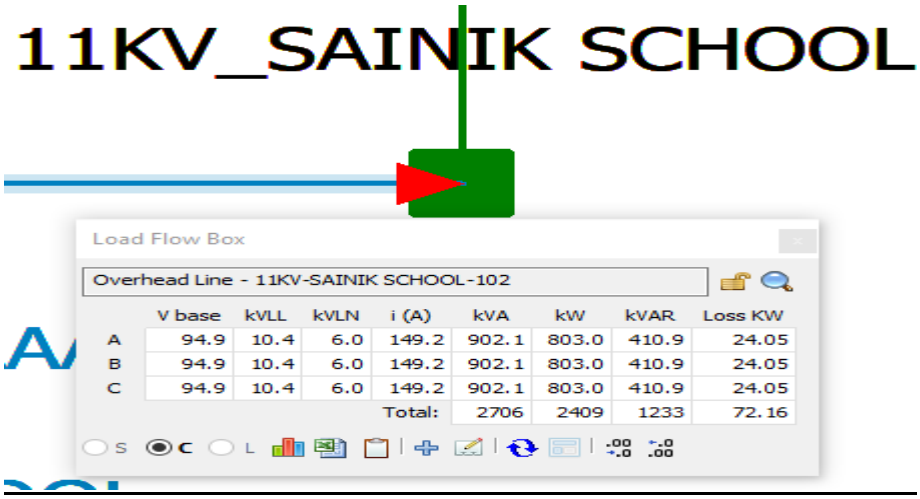
Proposal for Bifurcation of existing 11 KV Sainik School Feeder load emanating from 33/11 KV Sainik School PSS by constructing 1 No. of new feeder from 33/11 KV Sainik School PSS through RMU and 1KM 11KV new line from Sainik School PSS to FRW DSS using 11kV 3C, 400sqmm UG Cable along with 11kV RMU.

Proposed SLD (summer'25):

Proposed SLD of Sainik School Feeder



PROPOSED CYME LOAD FLOW:-



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	NAYAPALLI
Name of the Section : -	VSS NAGAR
Name of the Work :-	Proposal for Bifurcation of existing 11 KV Sainik School Feeder load emanating from 33/11 KV Sainik School PSS by constructing 1 No. of new feeder from 33/11 KV Sainik School PSS through RMU and 1KM 11KV new line from Sainik School PSS to FRW DSS using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of 0.5KM of 3CX400SQMM UG Cable New line from Sainik School PSS to FRW DSS for Feeder Bifurcation	37,00,687.12
2	PART-B: Construction of 3No of 11kV RMU for new line from Sainik School PSS to FRW DSS	38,06,587.43
3	PART C: 11kV Line DP with AB Switch for new line from Sainik School PSS to FRW DSS	4,64,161.10
4	**Total Gross**	**79,71,435.65**
Total estimated cost is Rs. 0.80Cr.		

(For detailed BoQ refer Annexure 9.27)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv sainik school feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.

- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

28.**Mitigation of Feeder Overloading issue of satellite Feeder**

Proposal: Proposal for Construction for 1.8KM Augmentaion of line for satelite feeder from Sampur Bhoi sahi to Nuagaon Backfeeding point and UG Augmentation of 2km from near SUM Hospital to Nuagaon.

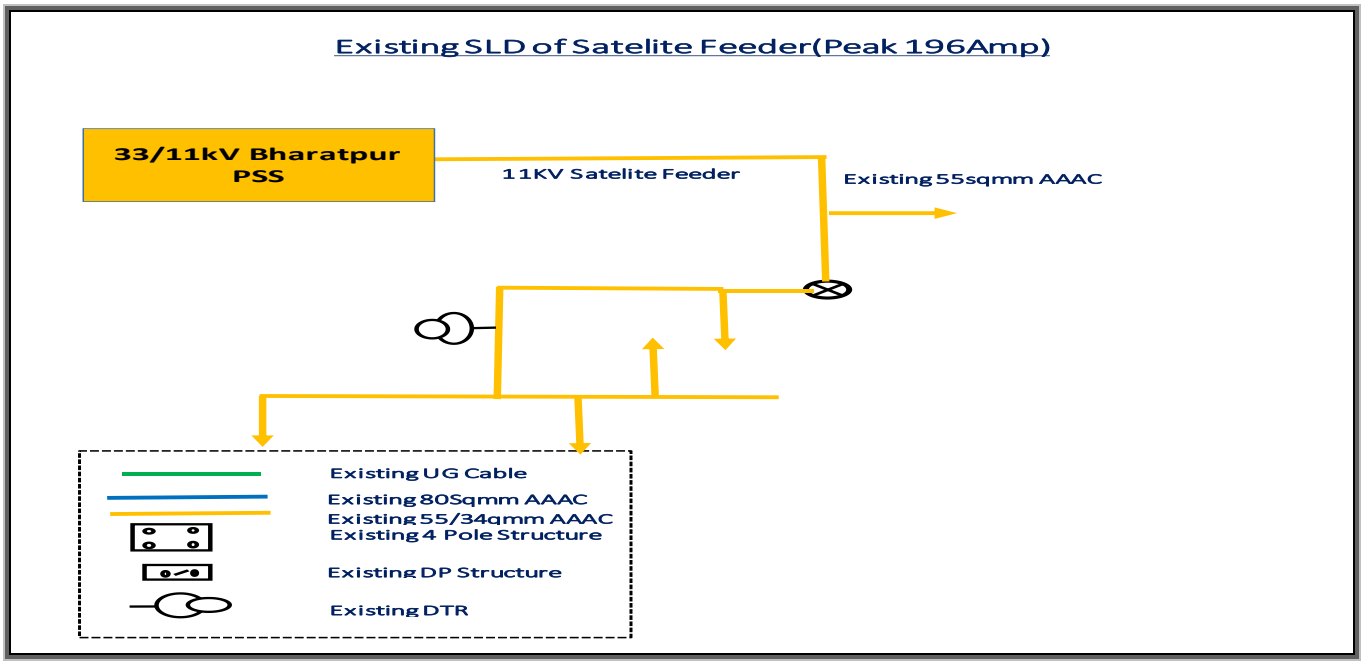
Objective: To mitigate the overloading issue of 11kV satelite Feeder.

Existing Scenario:

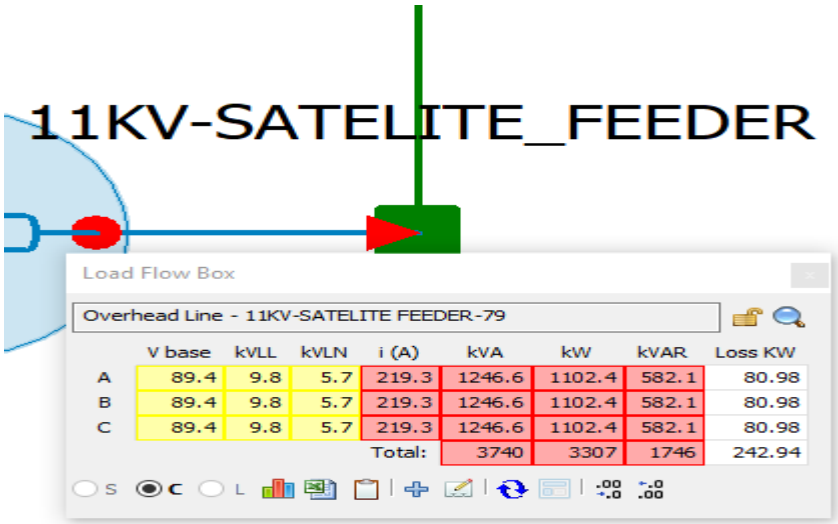
- At present, 11kV satelite Feeder is emanating from 33/11kV Bharatpur PSS.Total length of this feeder is 15.1km and the peak load is 2.63MVA.
- In the existing scenario, conductor size of 11kV satelite Feeder is 50sqmm & the feeder is 74% loaded w.r.t the current carrying capacity of the conductor and 107% loaded considering 20% load growth for Bhubaneswar city area.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new feeder for bifurcation of load is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Bharatpur	SATELITE	3.55	2.63	74%	3.79	107%	Overload

Existing SLD (summer'23):



EXISTING CYME LOAD FLOW:-



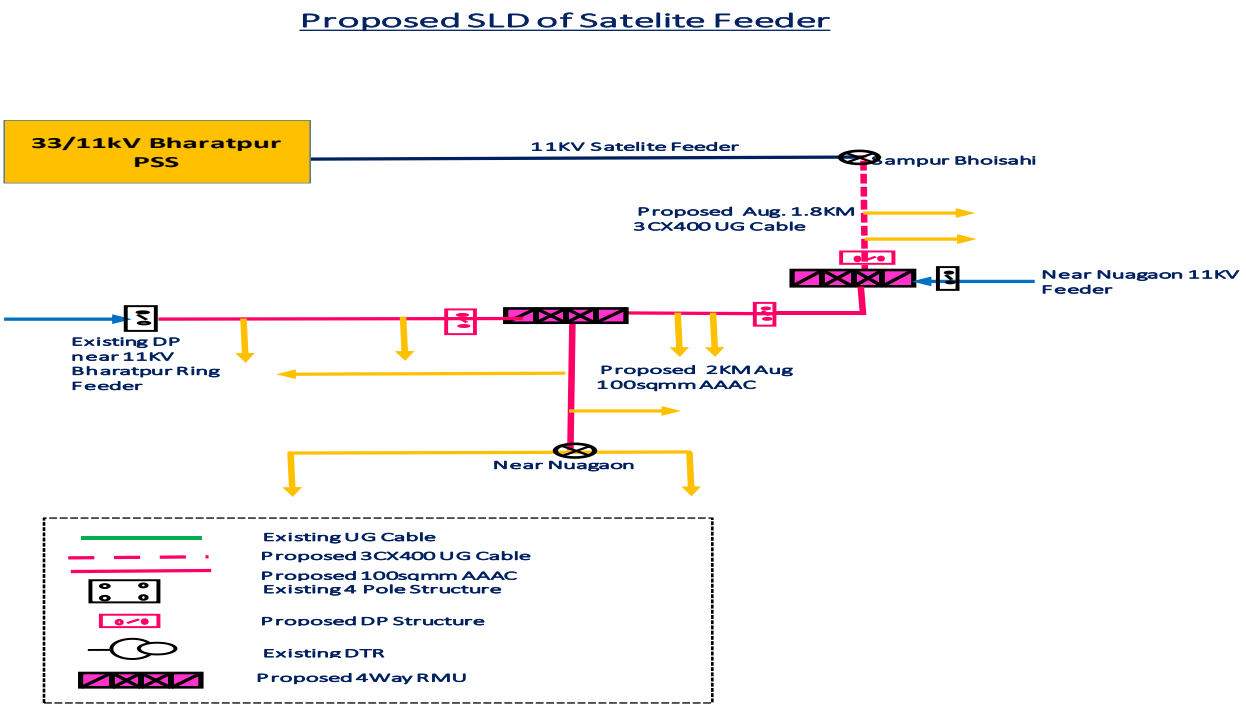
	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	89.4	9.8	5.7	219.3	1246.6	1102.4	582.1	80.98
B	89.4	9.8	5.7	219.3	1246.6	1102.4	582.1	80.98
C	89.4	9.8	5.7	219.3	1246.6	1102.4	582.1	80.98
				Total:	3740	3307	1746	242.94

Proposed Scenario:

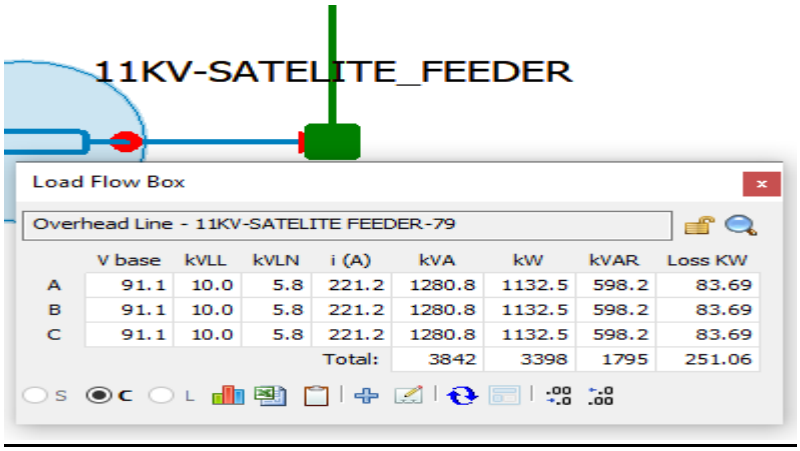
Proposal for Construction for 1.8KM Augmentation of line from Sampur Bhoi sahi to Nuagaon Backfeeding point and UG Augmentation of 2km from near SUM Hospital to Nuagaon.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20%Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Bharatpur	SATELITE	5.19	2.63	51%	3.79	73%	OK

Proposed SLD (summer'25):



PROPOSED CYME LOAD FLOW:-



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	91.1	10.0	5.8	221.2	1280.8	1132.5	598.2	83.69
B	91.1	10.0	5.8	221.2	1280.8	1132.5	598.2	83.69
C	91.1	10.0	5.8	221.2	1280.8	1132.5	598.2	83.69
				Total:	3842	3398	1795	251.06

Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-	BCDD-2	
Name of the Sub-Division : -	KHANDAGIRI	
Name of the Section : -	BHARATPUR	
Name of the Work :-	Proposal for Construction for 1.8KM Augmentaion of line from Sampur Bhoi sahi to Nuagaon Backfeeding point and UG Augmentation of 2km from near SUM Hospital to Nuagaon.	
Names of Schemes: -		**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of Augmentation of Line using 100 SQ.MM. - AAA Conductor from 2km of conductor Augmentaion from Sampur Bhoi sahi to Nuagaon Backfeeding point.	2687195.808
2	PART B: Construction of UG Augmentaion 1.8KM Line from 3CX120sqmm to 3CX400 sqmm from near SUM Hospital to Nuagaon	1,33,04,164.45
3	PART-C: Construction of 11kV RMU for new line from near SUM Hospital to Nuagaon	38,06,587.43
4	PART D: 11kV Line DP with AB Switch from near SUM Hospital to Nuagaon	6,96,241.65
5	**Total Gross**	**2,04,94,189.34**
Total estimated cost is Rs. 2.05Cr.		

(For detailed BoQ refer Annexure 9.28)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv satellite feeder.

- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

29. **N-1 Connectivity of of 11kV GODIBARI Feeder:-**

A detailed survey & analysis was carried out at Kantabada area for assessing the power supply situation where it is observed that, 11KV Godibari feeder emanating from 33/11KV Gothapatna PSS is feeding the Kantabada Area. This is a Rural Feeder having a total length of 25KM(8Km Trunk + 17Km Branch) passing through dense vegetation area.

Existing Scenario:

11Kv feeder Details:-

11KV Feeder Name:- Godibari Feeder

33/11KV PSS:- Gothapatna PSS

Feeder Load:- 1.86 MVA/98 Amp(Capacity:-6.67 MVA/350 Amp)

Conductor size:- ***Trunk :-*** 148mm2(3KM), 80+55mm2(5KM)

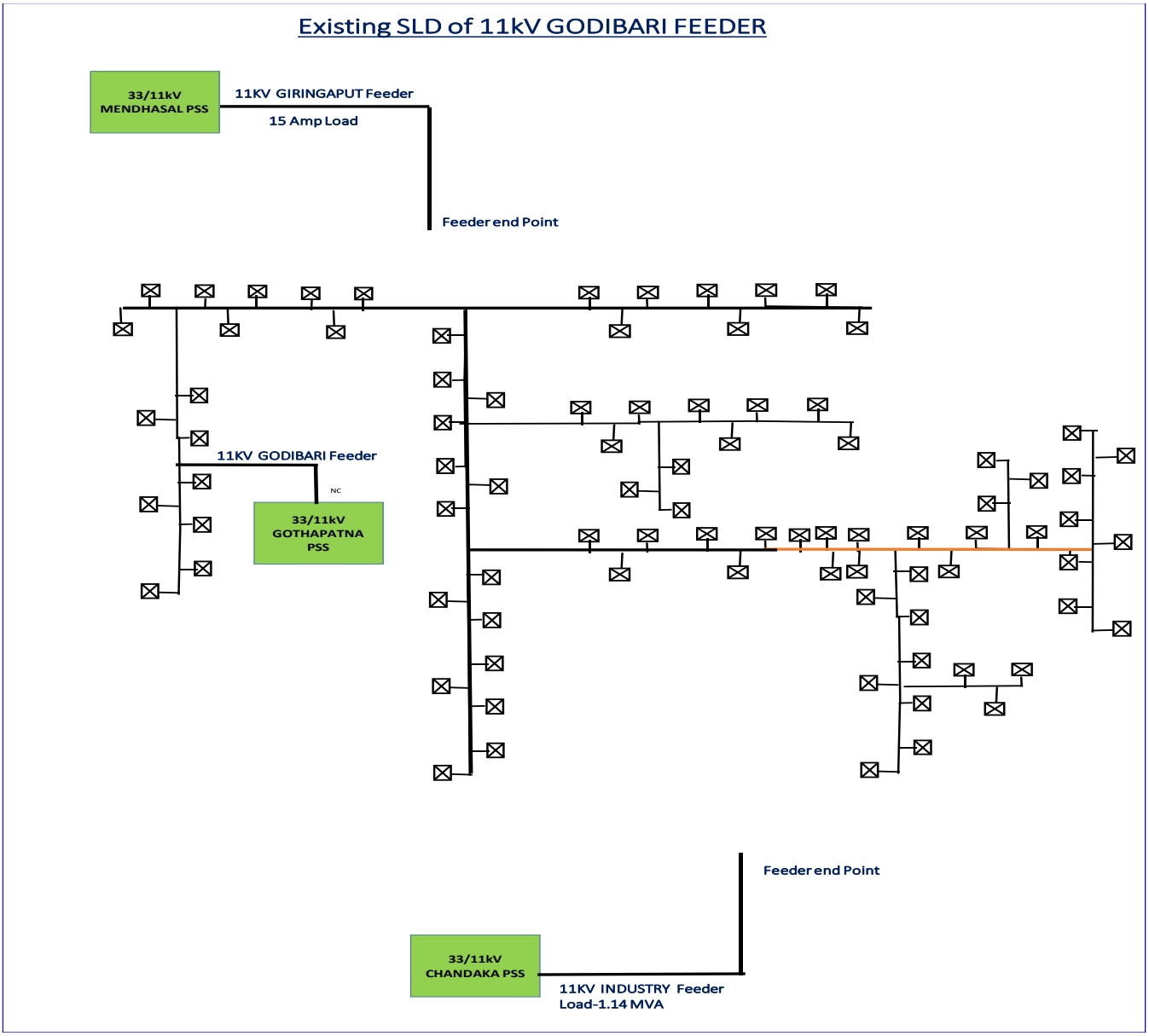
Branch:- 17 Km (55mm2+34mm2)

Feeder Type:- Radial Feeder

Absence of N-1 connectivity, through lengthy radial type rural feeder (about 25 km including branches) passing through dense vegetation area, damaged jumpers at few locations and multiple damage of source 33 kV cable while road widening work executed by R&B are the main causes of interruptions.

To mitigate the same & to ensure continuous & reliable power supply to Kantabada Area we propose following actions for N-1 Connectivity of Feeder:-

Existing SLD:-



Proposal-1

Linking of 11KV Line with Giringa Put Feeder:-

Linking of 11KV U/G Line of length 0.4KM using 11KV 3Cx400mm2 U/G Cable for N-1 Connectivity with 11KV Giringaput Feeder emanating from 33/11KV Mendhasal PSS.

11KV Giringaput Feeder Loading:- 15 Amp(Capacity:- 186 Amp)

Proposal-2:-

Linking of 11KV Line with Industry Feeder

Linking of 11KV O/H Line of length 1CKM using 11KV 3Cx400mm2 U/G Cable for N-1 Connectivity with 11KV Industry Feeder emanating from 33/11KV Chandaka PSS.

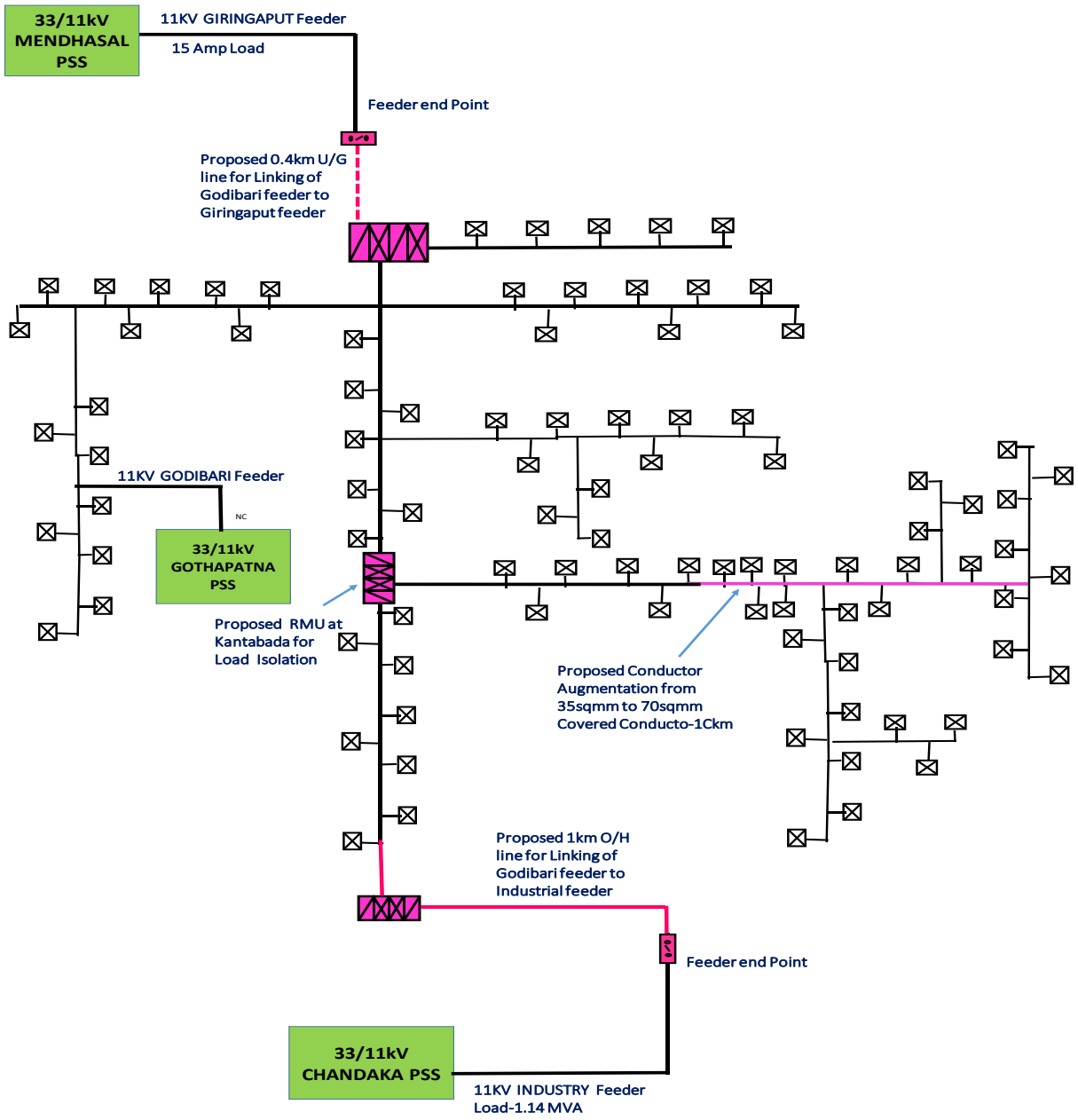
11KV Industry Feeder Loading:- 60 Amp(Capacity:- 237 Amp)

Proposal-3:-

Conductor Augmentation of length- 1CKm (From 34mm2 to 100mm2) & Installation of 1No. Of Line DP with AB switch near Vikash School

Proposed SLD-

Proposed SLD of 11kV GODIBARI FEEDER



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BCDD-2
Name of the Sub-Division : -	KHANDAGIRI
Name of the Section : -	BHARATPUR

Name of the Feeder : -	11KV GODIBARI FEEDER
Name of the Work :-	Proposal for Bifurcation of existing 11 KV IRC-1 Feeder load emanating from 33/11 KV Nayapalli PSS by constructing 1 No. of new feeder from 33/11 KV Nayapalli PSS through RMU and 1KM 11KV new line from Nayapalli PSS to IRC feeder near ID Market using 11kV 3C, 400sqmm UG Cable along with 11kV RMU
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of Proposed 0.4km U/G line for Linking of Godibari feeder to Giringaput feeder along with RMU	28,52,516.98
2	PART-B: Construction of 11kV RMU-3 nos for new Linking line at GIRINGAPUT feeder end, Industry Feeder end and at Kanta bada.	57,09,920.78
3	PART C: 11kV Line DP with AB Switch for new Linking line at Girigaput and industry feeder end.	4,64,161.10
4	PART D: 11kV new Linking line from industry feeder to Godibari feeder-1kmusing 100sqmm AAAC	20,82,333.18
5	PART E- Conductor Augmentation using 70 SQ.MM.Covered Conductor of length 1Ckm.	17,73,828.22
6	**Total Gross**	**1,28,82,760.26**

Total estimated cost is Rs. 1.29Cr.

(For detailed BoQ refer Annexure 9.29)

31. Mitigation of Feeder Overloading issue of 11kv Mangalapur-1 Feeder

Proposal: Proposal for Augmentation of 11kV Mangalapur-1 feeder ,5CKM by using 100 SQ.MM. -AAA Conductor from Pipli PSS to Nilakanthanagar.

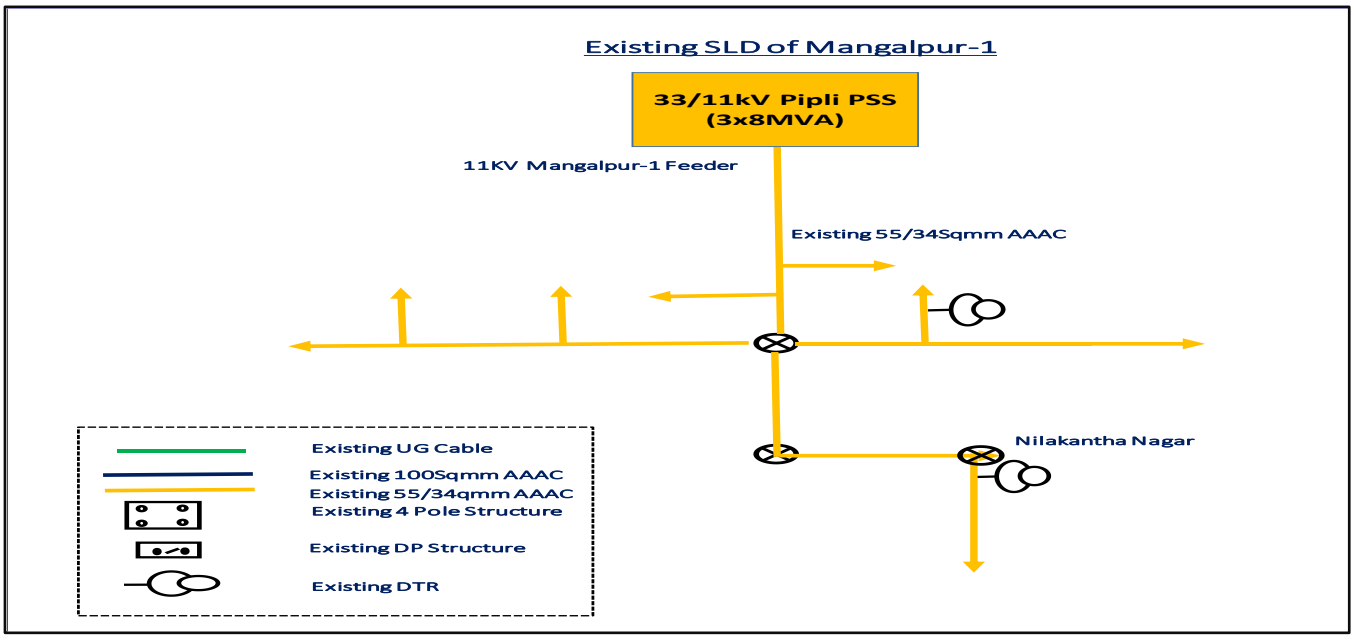
Objective: To mitigate the overloading issue of 11kV Mangalpur-1 feeder.

Existing Scenario:

- At present, 11kV Mangalapur-1 feeder is emanating from 33/11kV Pipili PSS.Total length of this feeder is 59.53 km and the peak load is 4.2 MVA.
- In the existing scenario, conductor size of 11kV Mangalapur-1 feeder is 55 sqmm & the feeder is 118% loaded w.r.t the current carrying capacity of the conductor and 138% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
PIPLI	Mangalpur-1	3.55	4.20	118%	4.90	138%	Overload

Existing SLD (summer'25):



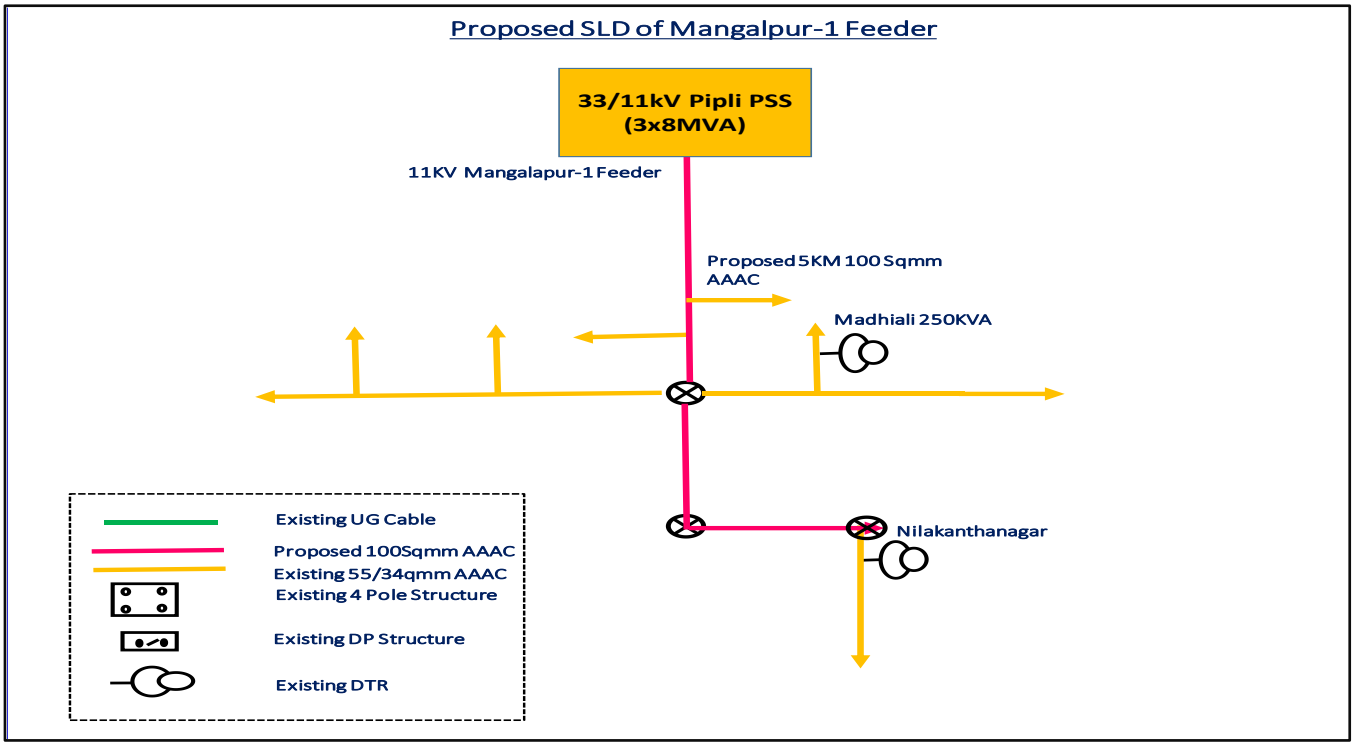
Proposed Scenario:

Proposal for augmentation of 5 CKM over existing pole 11mtr long 160x152 ,30.44KG/MTR WPB Pole by using 100 SQ.MM. -AAA Conductor from Pipili PSS to Nilakantha Nagar.

Loading Of Feeder after Proposal							
Name of the PSS	11 kV kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 8% Load Growth for 2 years	% Loading in Summer-25	Feeder Status
PIPLI	Mangalpur-1	5.19	4.20	81%	4.90	94%	Underload

Existing Loading							
Name of the PSS	11 kV kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 8% Load Growth for 2 years	% Loading in Summer-25	Feeder Status
PIPLI	Mangalpur-1	3.55	4.20	118%	4.90	138%	Overload

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		NED
Name of the Sub-Division : -		Pipili
Name of the Section : -		Pipili No.2
Name of the Work :-		Proposal for Augmentation of 11kV Mangalapur-1 feeder ,5CKM by using 100 SQ.MM. -AAA Conductor from Pipli PSS to Nilakanthanagar.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Augmentation of 5 CKM over Existing pole & 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAA Conductor.	68,33,872.09
2	**Total Gross**	**68,33,872.09**
Total estimated cost is Rs. 0.68Cr.		

(For detailed BoQ refer Annexure 9.31)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Mangalpur-1 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

32. Mitigation of Feeder Overloading issue of 11kv Satyabhamapur Feeder

Proposal: Proposal for Augmentation of 11kV Satyabhamapur feeder ,5CKM by using 100 SQ.MM. -AAA Conductor from Balakati PSS to Sai Temple DP (Back feeding DP of Baichua feeder).

Objective: To mitigate the overloading issue of 11kV Satyabhamapur feeder.

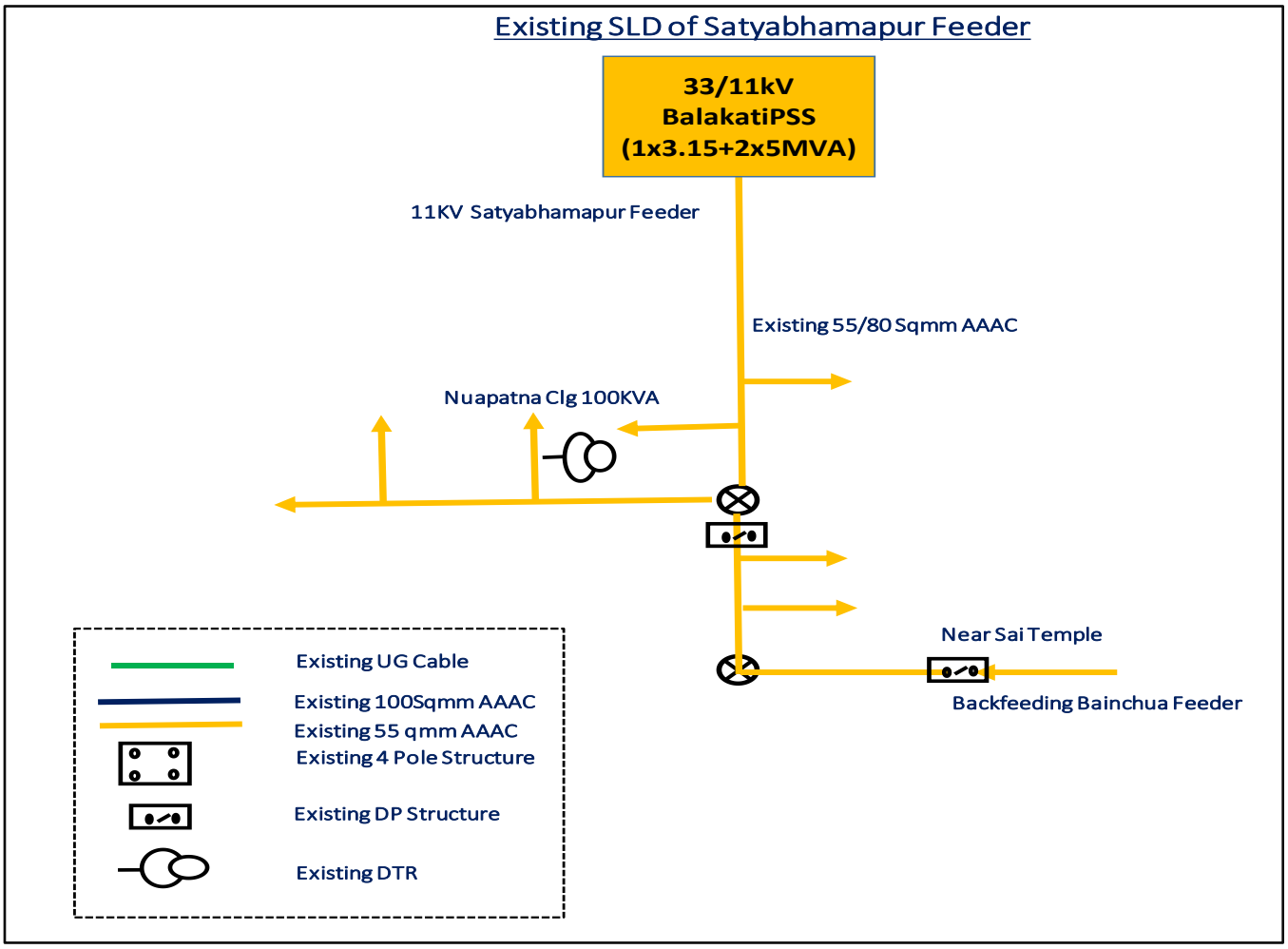
Existing Scenario:

- At present, 11kV Satyabhamapur feeder is emanating from 33/11kV Balakati PSS.Total length of this feeder is 40.96 km and the peak load is 3.63 MVA.

- In the existing scenario, conductor size of 11kV Satyabhamapur feeder is 55/80 sqmm & the feeder is 80% loaded w.r.t the current carrying capacity of the conductor and 94% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Balakati	Satyabhamapur	4.52	3.63	80%	4.23	94%	Overload

Existing SLD (summer'25):

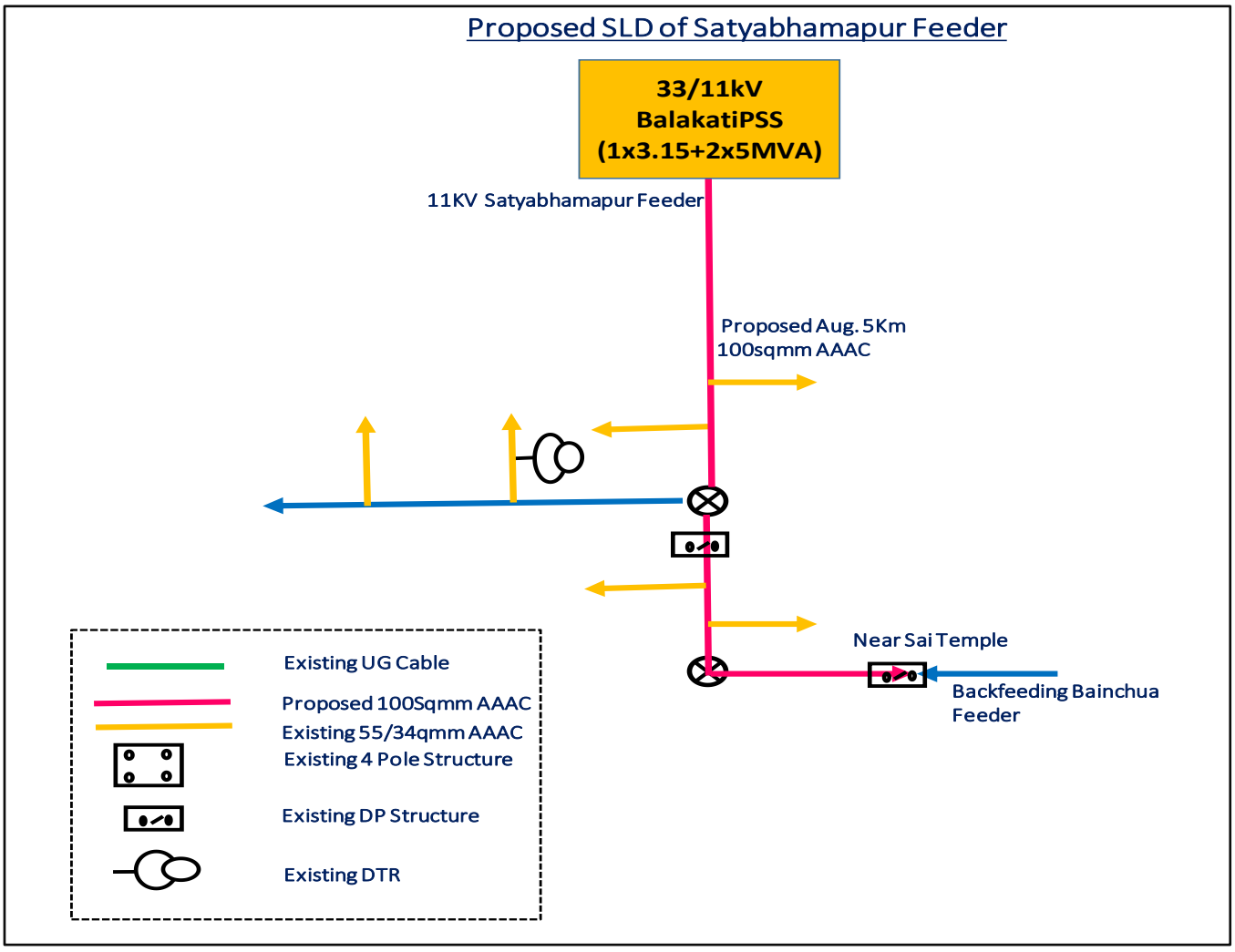


Proposed Scenario:

Proposal for augmentation of 5 CKM over existing pole 11mtr long 160x152 ,30.44KG/MTR WPB Pole by using 100 SQ.MM. -AAA Conductor from Balakati PSS to Sai Temple DP (Back feeding DP of Bainchua feeder).

Loading Of Feeder after Proposal							
Name of the PSS	11 kV kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 8% Load Growth for 2 years	% Loading in Summer-25	Feeder Status
Balakati	Satyabhamapur	5.19	3.63	70%	4.23	81%	Underload

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		NED
Name of the Sub-Division : -		Pipili
Name of the Section : -		Balakati
Name of the Work :-		Proposal for Augmentation of 11kV Satyabhamapur feeder ,5CKM by using 100 SQ.MM. -AAA Conductor from Balakati PSS to Sai temple DP (Back feeding DP point of Bainchua feeder).
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Augmentation of 5 CKM over Existing pole & 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAAC.	68,80,938.97
2	**Total Gross**	**68,80,938.97**
Total estimated cost is Rs. 0.69Cr.		

(For detailed BoQ refer Annexure 9.32)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Satyabhamapur feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

33. Mitigation of Feeder Overloading issue of 11kv OMFED Feeder

Proposal: Proposal for Augmentation of 11kV OMFED feeder ,5CKM by using 100 SQ.MM. AAA Conductor from Nimapada PSS to Andhi Sahi 63 KVA Dandipur DSS.

Objective: To mitigate the overloading issue of 11kV OMFED feeder.

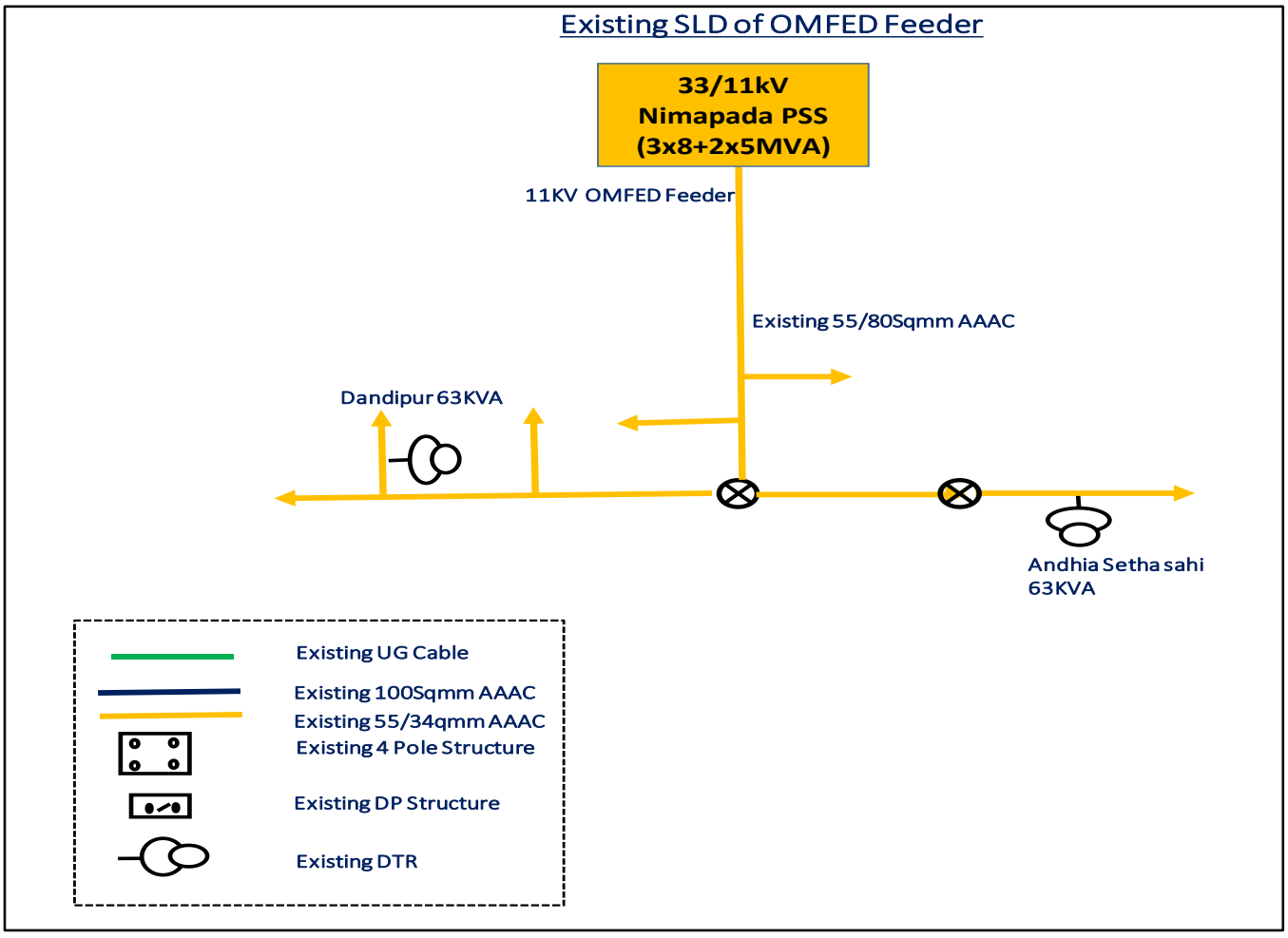
Existing Scenario:

- At present, 11kV OMFED feeder is emanating from 33/11kV Nimapada PSS.Total length of this feeder is 12.21 km and the peak load is 3.47 MVA.
- In the existing scenario, conductor size of 11kV OMFED feeder is 55/80 sqmm & the feeder is 98 % loaded w.r.t the current carrying capacity of the conductor and 141% loaded considering 20% load growth for urban feeders.

- This feeder is mainly feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Nimapada	OMFED	3.55	3.47	98%	5.00	141%	Overload

Existing SLD (summer'25):

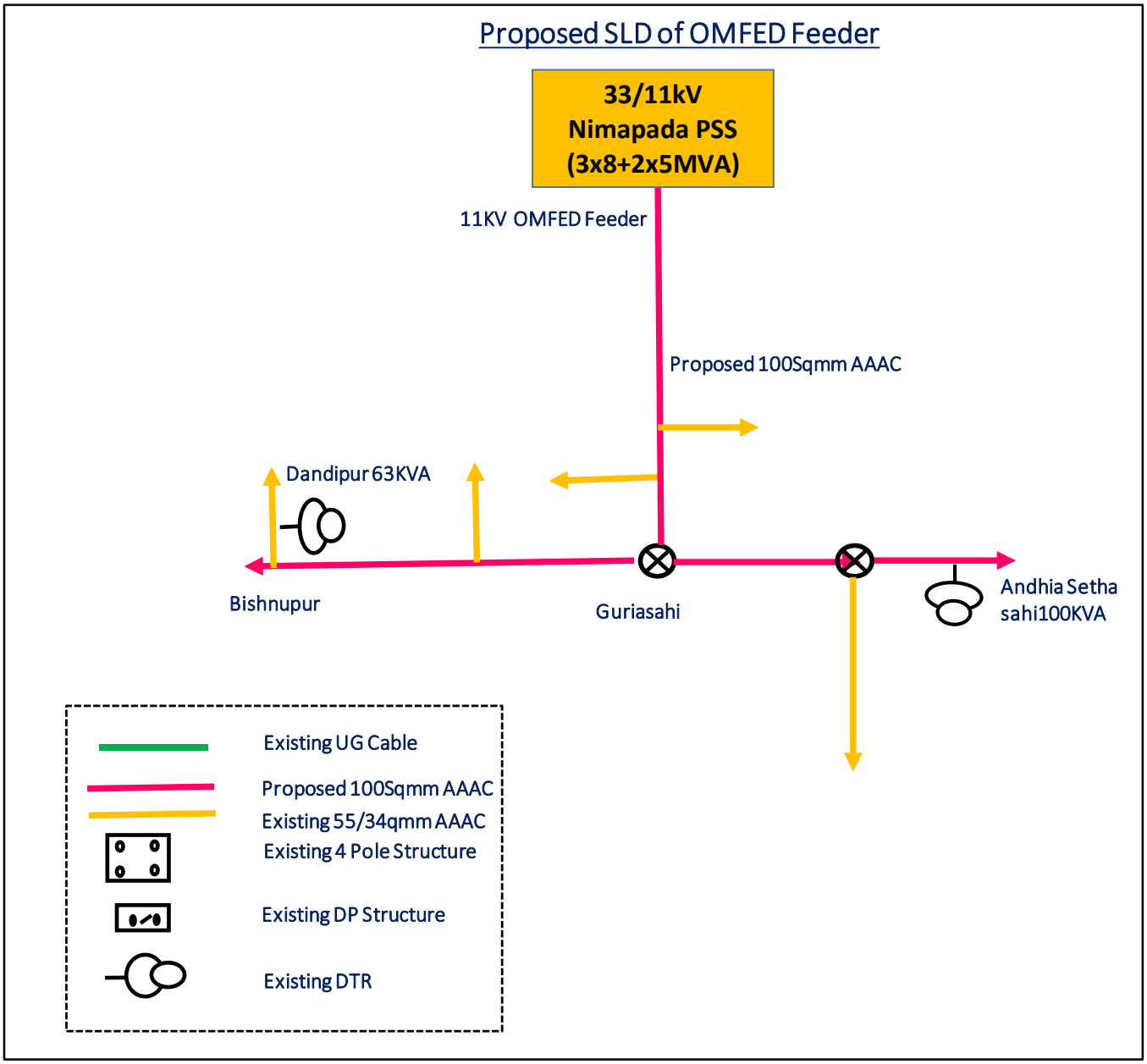


Proposed Scenario:

Proposal for augmentation of 0.9 CKM over existing pole 11mtr long 160x152 ,30.44KG/MTR WPB Pole by using 100 SQ.MM. -AAA Conductor from Nimapada PSS to Andhi Sahi 63 KVA Dandipur DSS.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 20% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Nimapada	OMFED	5.19	3.47	67%	5.00	96%	Underload

Proposed SLD (summer'25):



TPCODL		
Name of the Division :-		NED
Name of the Sub-Division : -		Nimapada
Name of the Section : -		Nimapada-1
Name of the Work :-		Proposal for Augmentation of 11kV OMFED feeder ,0.9 CKM by using 100 SQ.MM. AAA Conductor from Nimapada PSS to Andhi Sahi 63 KVA Dandipur DSS.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Augmentation of 0.9 CKM over Existing pole & 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAA Conductor.	13,28,820.06
2	**Total Gross**	**13,28,820.06**
Total estimated cost is Rs. 0.13Cr.		

(For detailed BoQ refer Annexure 9.33)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kv OMFED feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

34. Mitigation of Feeder Overloading issue of 11kv Kakatpur-2 Feeder

Proposal: Proposal for Augmentation of 11kV Kakatpur-2 feeder, 12.5 CKM of by using 100 SQ.MM. AAA Conductor from Kakatpur PSS to Pragati Milk 100 KVA DSS. Also construction of 1.5 CKM interlinking line with 11kv Kakatpur-1 feeder from Chandan Bajar to police station 100KVA of Kakatpur -1 feeder.

Objective: To mitigate the overloading issue of 11kV Kaktpur-2 feeder.

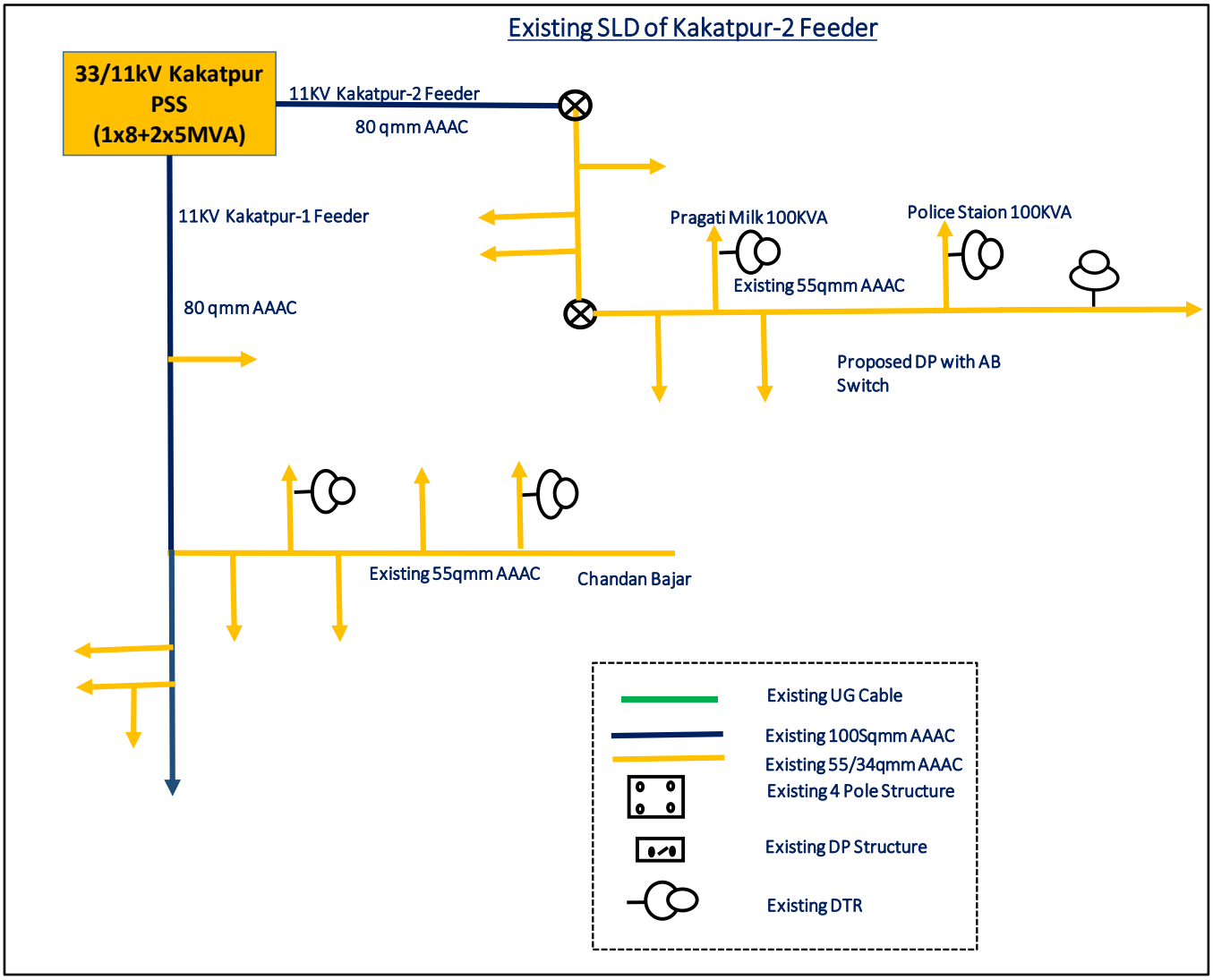
Existing Scenario:

- At present, 11kV Kakatpur-2 feeder is emanating from 33/11kV Kaktpur PSS.Total length of this feeder is 43.32 km and the peak load is 3.82 MVA.
- In the existing scenario, conductor size of 11kV Kakatpur-2 feeder is 55/80 sqmm & the feeder is 108 % loaded w.r.t the current carrying capacity of the conductor and 125% loaded considering 8% load growth for rural feeders.

- This feeder is mainly feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Kakatpur	Kakatpur 2	3.55	3.82	108%	4.45	125%	Overload

Existing SLD (summer'25):

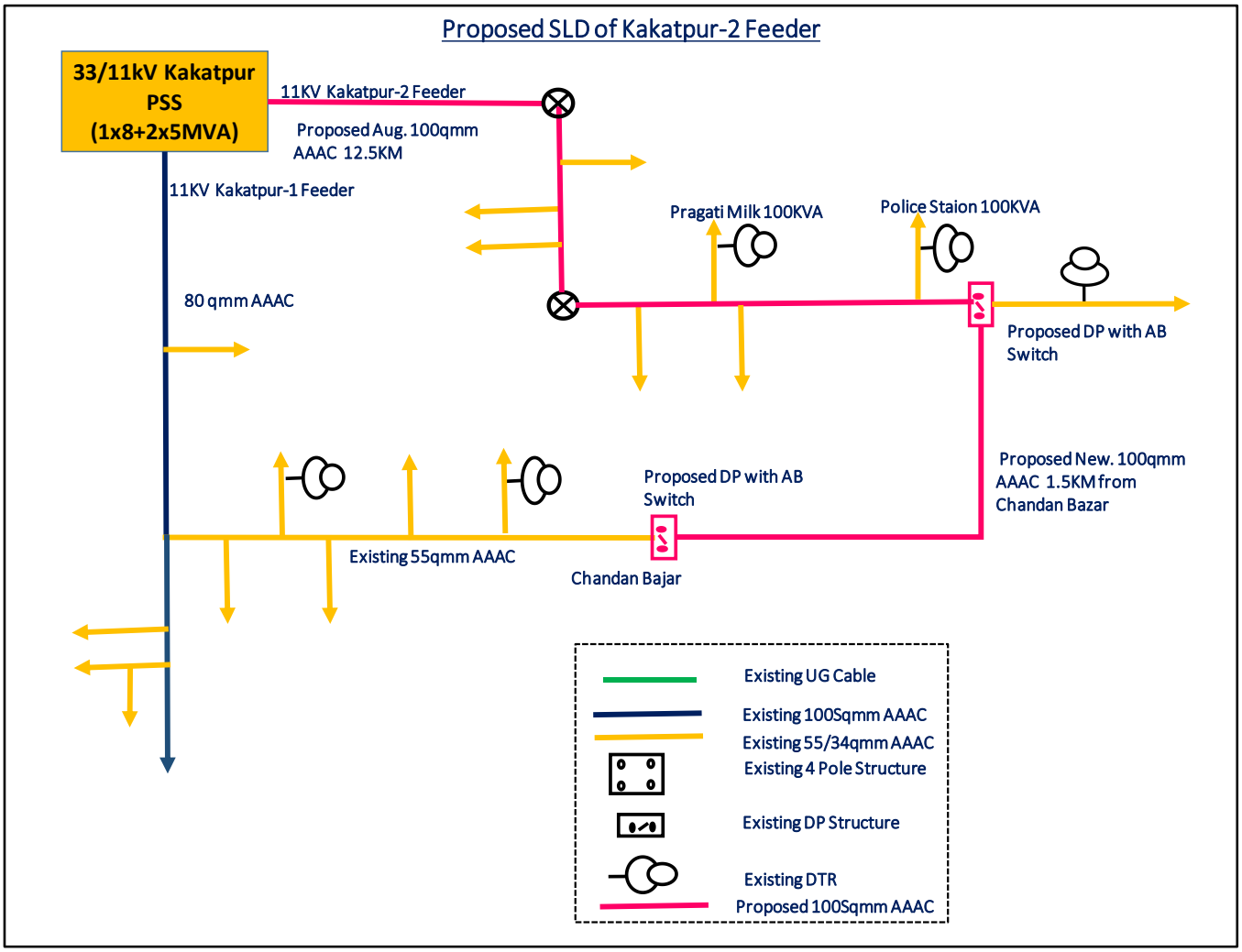


Proposed Scenario:

Proposal for augmentation of 12.5 CKM over existing pole 11mtr long 160x152, 30.44KG/MTR WPB Pole by using 100 SQ.MM. -AAA Conductor from Kaktpur PSS to Pragati Milk 100 KVA DSS. Also construction of 1.5 CKM interlinking line with 11kv Kakatpur-1 feeder from Chandan Bajar to police station 100KVA of Kakatpur -1 feeder.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Kakatpur	Kakatpur 2	5.19	3.82	74%	4.45	86%	Underload

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		NED
Name of the Sub-Division : -		Kakatpur
Name of the Section : -		Kakatpur-1
Name of the Work :-		Proposal for Augmentation of 11kV Kakatpur-2 feeder, 12.5 CKM of by using 100 SQ.MM. AAA Conductor from Kakatpur PSS to Pragati Milk 100 KVA DSS. Also construction of 1.5 CKM interlinking line with 11kv Kakatpur-1 feeder from Chandan Bajar to police station 100KVA of Kakatpur -1 feeder.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Augmentation of 12.5 CKM over Existing pole & 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAAC.	1,63,05,765.91
2	PART-B : Construction of 1.5KM of New line using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. AAA Conductor from Chandan Bazar to Police station 100KVA DTR of Kakatpur-1 feeder of kakatpur PSS	31,11,827.79
3	PART-B: Construction of Guarding for Line Protecting Guarding on Double Pole for Road Crossing	69,000.49
4	**Total Gross**	**1,94,86,594.19**
Total estimated cost is Rs. 1.95 Cr.		

(For detailed BoQ refer Annexure 9.34)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Kakatpur-2 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

35. Mitigation of Feeder Overloading issue of 11kv Charichhaka Feeder

Proposal: Proposal for Augmentation of 11kV Charichhaka feeder ,11.4KM of by using 100 SQ.MM. AAA Conductor from Nimapada PSS to Patharagadia 25 KVA DTR and Proposal for new linking line of 1.2kM from Bhodar PSS to charichhak of Nimapad PSS

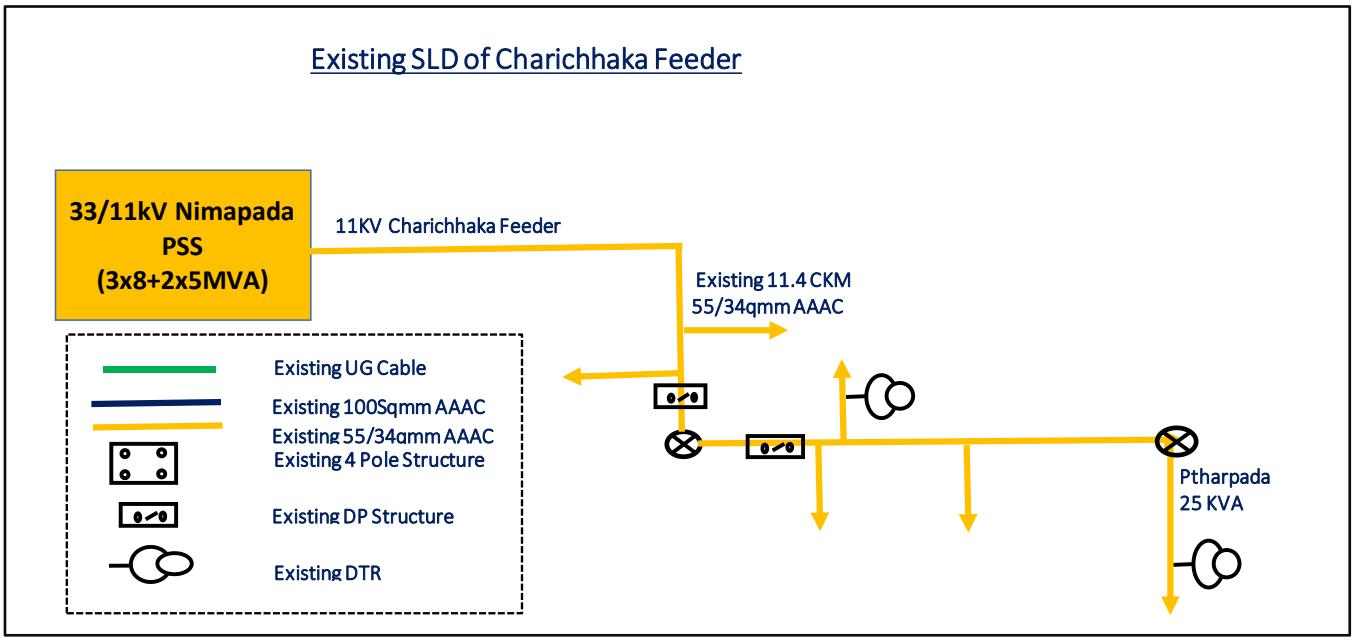
Objective: To mitigate the overloading issue of 11kV Charichhaka feeder.

Existing Scenario:

- At present, 11kV Charichhaka feeder is emanating from 33/11kV Nimapada PSS.Total length of this feeder is 89.12 km and the peak load is 4.10 MVA.
- In the existing scenario, conductor size of 11kV Charichhaka feeder is 55/34 sqmm & the feeder is 156 % loaded w.r.t the current carrying capacity of the conductor and 182% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Nimapada	Charichhaka	2.63	4.10	156%	4.79	182%	Overload

Existing SLD (summer'25):

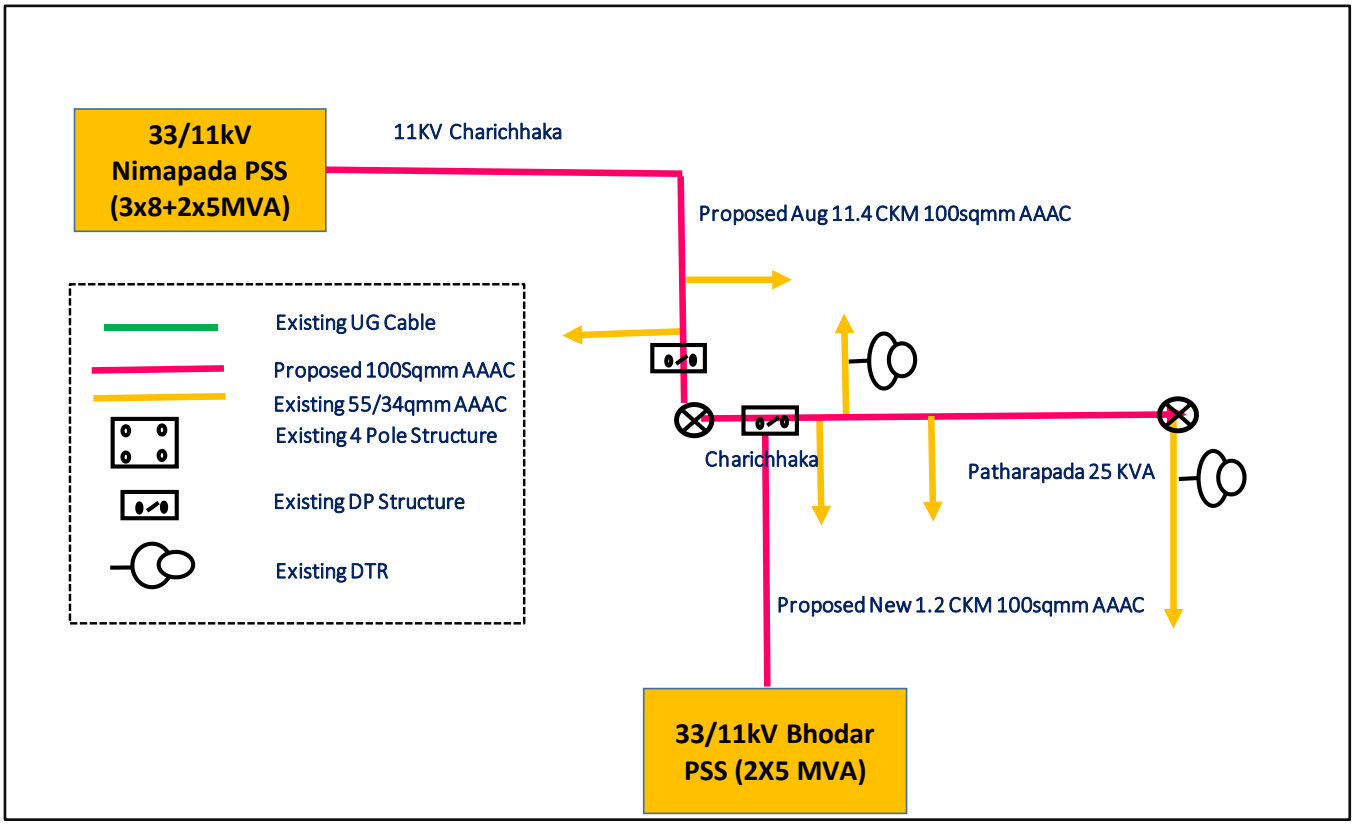


Proposed Scenario:

Proposal for Augmentation of 11kV Charichhaka feeder, 11.4KM of by using 100 SQ.MM. AAA Conductor from Nimapada PSS to Patharagadia 25 KVA DTR and Proposal for new linking line of 1.2kM from Bhodar PSS to charichhak of Nimapad PSS

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Nimapada	Charichhaka	5.19	2.10	41%	2.45	47%	Unedrload
Bhodar	New Feeder	5.19	2.00	39%	2.33	45%	Unedrload

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		NED
Name of the Sub-Division : -		Nimapada
Name of the Section : -		Nimapada-1
Name of the Work :-		Proposal for Augmentation of 11kV Charichhaka feeder, 11.4KM of by using 100 SQ.MM. AAA Conductor from Nimapada PSS to Patharagadia 25 KVA DTR and Proposal for new linking line of 1.2kM from Bhodar PSS to charichhak of Nimapad PSS
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Refurbishment & Augmentation of 11.4 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 100 mm2 AAAC.	1,54,77,085.66
2	PART B: Construction new linking line of 1.2kM from Bhodar PSS to charichhak feeder of Nimapad PSS	24,11,072.74
3	PART-B: Construction of Guarding for Line Protecting Guarding on Double Pole for Road Crossing	69,000.49
4	**Total Gross**	**1,79,57,158.89**
Total estimated cost is Rs. 1.80Cr.		

(For detailed BoQ refer Annexure 9.35)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Charichhaka feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

36. Mitigation of Feeder Overloading issue of 11kv Swargadwar-II Feeder

Proposal: Proposal for Bifurcation of existing 11 KV Swargadwar-II Feeder load emanating from 33/11 KV Kacheri PSS by constructing 1 No. of new feeder from 33/11 KV Kacheri PSS through RMU and 1.5 KM 11KV new line from Kacheri PSS to Holiday Home 4-Pole using 11kV 3Cx400sqmm UG Cable.

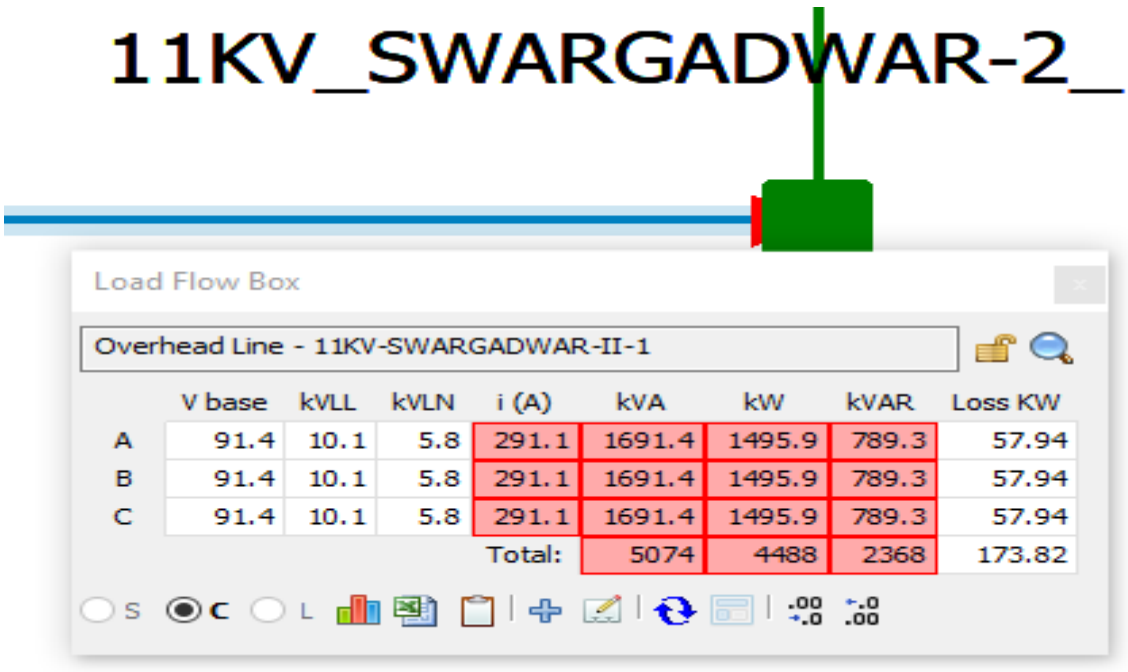
Objective: To mitigate the overloading issue of 11kV Swargadwar-II feeder.

Existing Scenario:

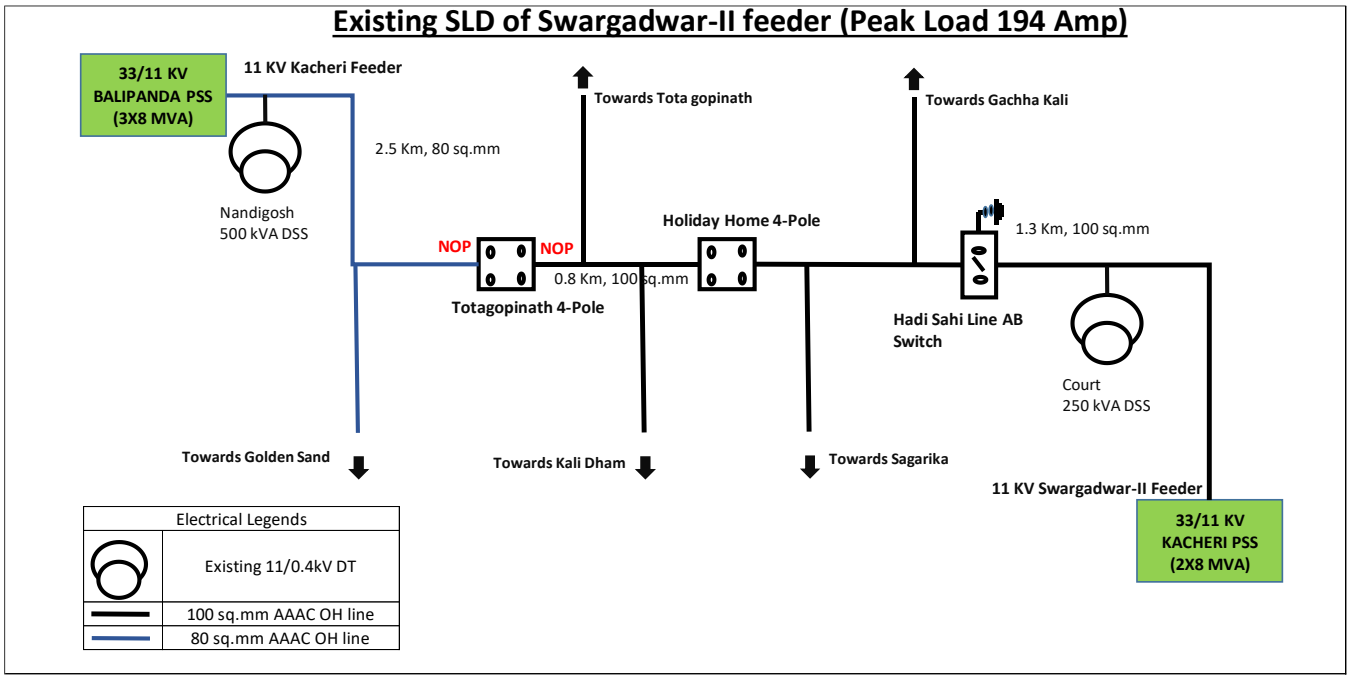
- At present, 11kV Swargadwar-II feeder is emanating from 33/11kV Kacheri PSS.Total length of this feeder is 1.89 km and the peak load is 3.7 MVA.
- In the existing scenario, conductor size of 11kV Swargadwar-II feeder is 100 sq.mm & the feeder is 71% loaded w.r.t the current carrying capacity of the conductor and 91% loaded considering 13% load growth for Puri Urban feeders.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the Puri Urban area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Kacheri	Swargadwar-II	5.19	3.70	71%	4.73	91%	Overload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

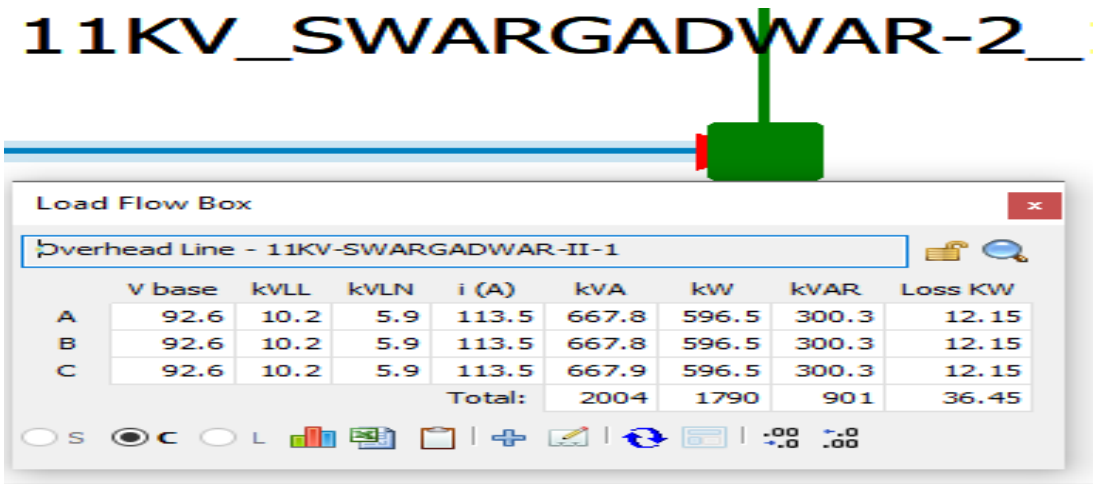


Proposed Scenario:

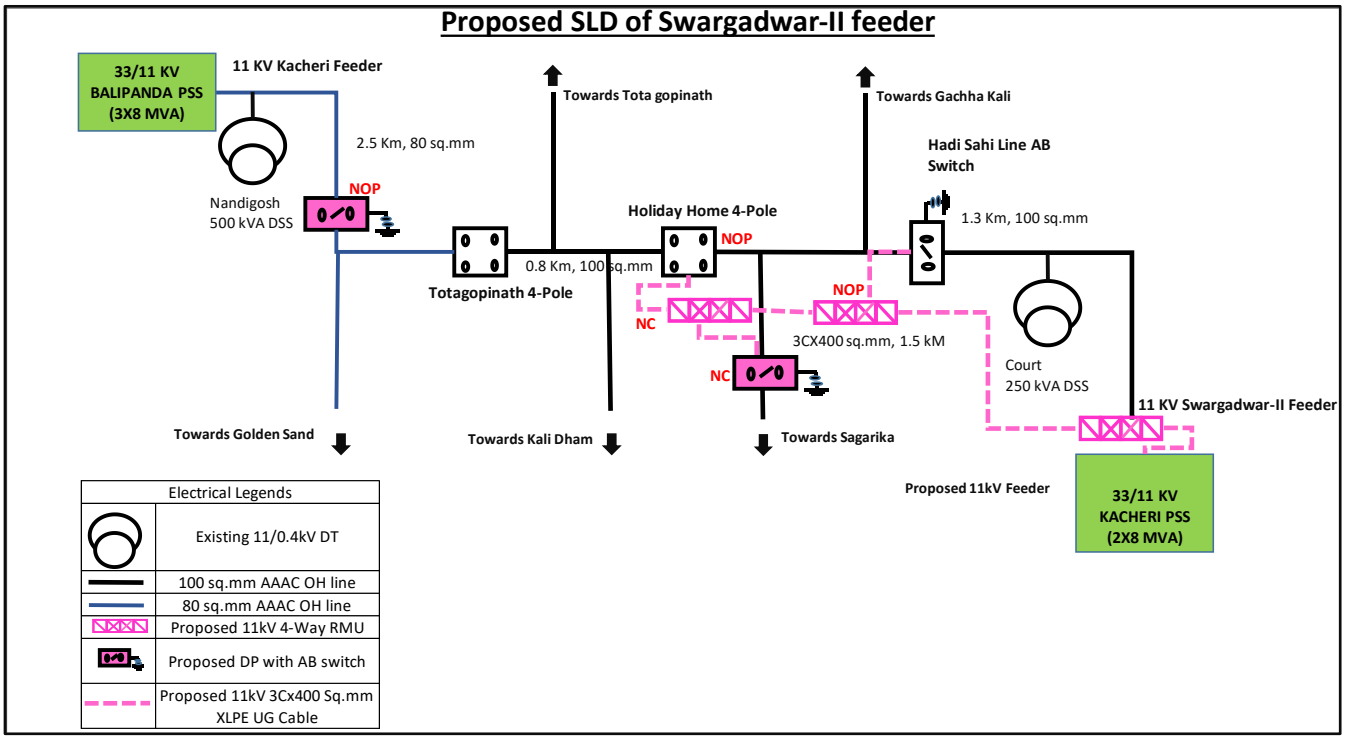
Proposal for construction of 1.5 KM U/G of New Linking line using 3CX400 sq.mm XLPE U/G cable from Kacheri PSS to Holiday Home 4-Pole.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Kacheri	Swargadwar-II	5.19	1.70	33%	2.17	42%	Underload
Kacheri	New Feeder	5.76	2.00	35%	2.55	44%	Underload

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	PED
Name of the Sub-Division : -	PURI-I
Name of the Section : -	Kacheri & Swargadwar
Name of the Work :-	Proposal for Bifurcation of existing 11 KV Swargadwar-II Feeder load emanating from 33/11 KV Kacheri PSS by constructing 1 No. of new feeder from 33/11 KV Kacheri PSS through RMU and 1.5 KM 11KV new line from Kacheri PSS to Holiday Home 4-Pole using 11kV 3Cx400sqmm UG Cable.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A : Installation of 02 No. of 11KV DP with AB Switch and LA.	4,64,161.10
2	PART B: Supply and laying of, 11 kV ,3C X 400 sqmm XLPE UG cable= Length 1.5 Km , without spare run.	1,76,35,612.25
3	**Total Gross**	**1,80,99,773.35**
Total estimated cost is Rs. 1.81Cr.		

Cost Estimate: 1.81 cr. (For detailed BoQ refer Annexure 9.36)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kv Swargadwar-II feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of puri urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

37. Mitigation of Feeder N-1 issue of 11kv Swargadwar-I Feeder

Proposal: Proposal for Construction of New interlinking line in between 11kV Swargadwar-I feeder & 11kV Seabeach U/G feeder to Mitigate N-1 issue of Swargadwar-I feeder.

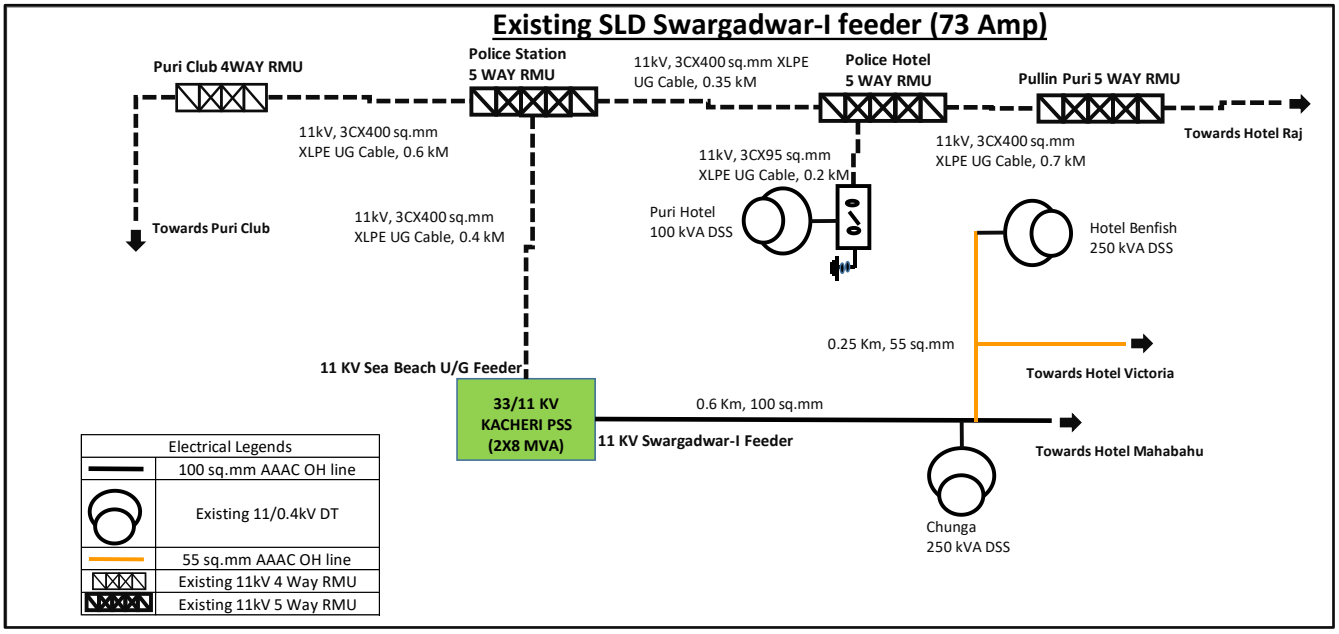
Objective: To mitigate the N-1 issue of 11kV Swargadwar-I feeder.

Existing Scenario:

- At present, 11kV Swargadwar-I feeder is emanating from 33/11kV Kacheri PSS.Total length of this feeder is 1.48 km and the peak load is 1.39 MVA. And 11kV Sea Beach U/G feeder is emanating from 33/11kV Kacheri PSS.Total length of this feeder is 2.34 km and the peak load is 1.24 MVA.
- In the existing scenario, conductor size of 11kV Swargadwar-I feeder is 100 sq.mm & the feeder is 27% loaded w.r.t the current carrying capacity of the conductor and 34% loaded considering 13% load growth for Puri Urban feeders. Cable size of 11kV Sea Beach U/G feeder is 3Cx400 sq.mm XLPE U/G cable & the feeder is 22% loaded w.r.t the current carrying capacity of the conductor and 27% loaded considering 13% load growth for Puri Urban feeders
- 11kV Swargadwar-I feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply N-1 proposal of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Kacheri	Swargadwar-I	5.19	1.39	27%	1.78	34%	N-1 Fail
Kacheri	Seabeach U/G	5.76	1.24	22%	1.58	27%	N-1 OK

Existing SLD (summer'25):

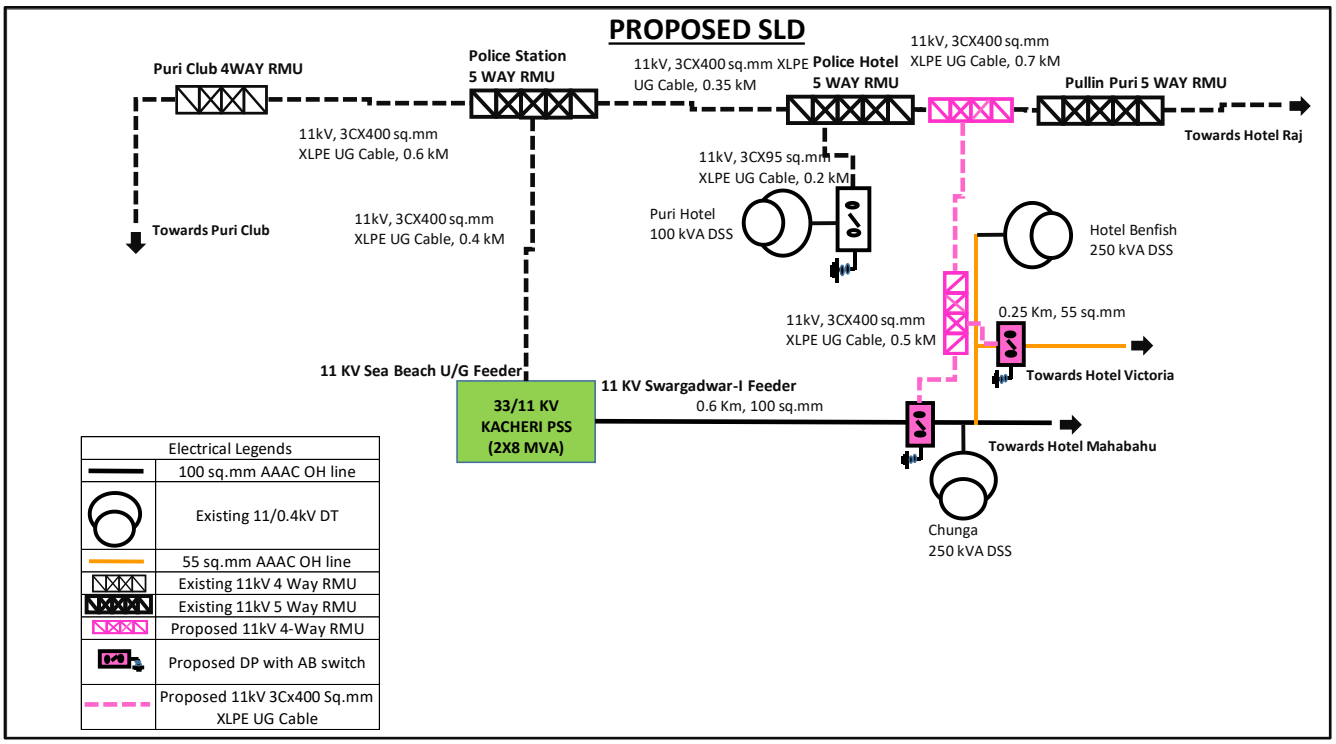


Proposed Scenario:

Proposal for construction of 0.5 KM U/G of New Linking line using 3CX400 sq.mm XLPE U/G cable from Chunga DSS to proposed 4 Way RMU near Pullin Puri Hotel.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Kacheri	Swargadwar-I	5.19	1.39	27%	1.78	34%	N-1 OK
Kacheri	Seabeach U/G	5.76	1.24	22%	1.58	27%	N-1 OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	PED
Name of the Sub-Division : -	PURI-I
Name of the Section : -	Kacheri & Swargadwar
Name of the Work :-	Proposal for Construction of New interlinking line in between 11kV Swargadwar-I feeder & 11kV Seabeach U/G feeder to Mitigate N-1 issue of Swargadwar-I feeder.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Installation of 02 No. of 11KV DP with AB Switch and LA.	4,64,161.10
2	PART B: Supply and laying of, 11 kV, 3C X 400 sq.mm XLPE UG cable= Length 0.5 Km, without spare run.	78,68,031.30
4	**Total Gross**	**83,32,192.41**
Total estimated cost is Rs. 0.83Cr.		

Cost Estimate: 0.83 cr. (For detailed BoQ refer Annexure 9.37)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of N-1 issue of 11kv Swargadwar-I feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of puri urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

38. Mitigation of Feeder Overloading issue of 11kv Banpur-II Feeder

Proposal: Proposal for Bifurcation of existing 11 KV Banpur-II Feeder load emanating from 33/11 KV Balugaon PSS by constructing 1 No. of new feeder from 33/11 KV Balugaon PSS through RMU and 5.5 KM 11KV new line from Balugaon PSS to Collage line AB switch By using 11kV 3Cx400sqmm UG Cable ,0.5 KM & 100 sq.mm AAAC OH line 5 CKM.

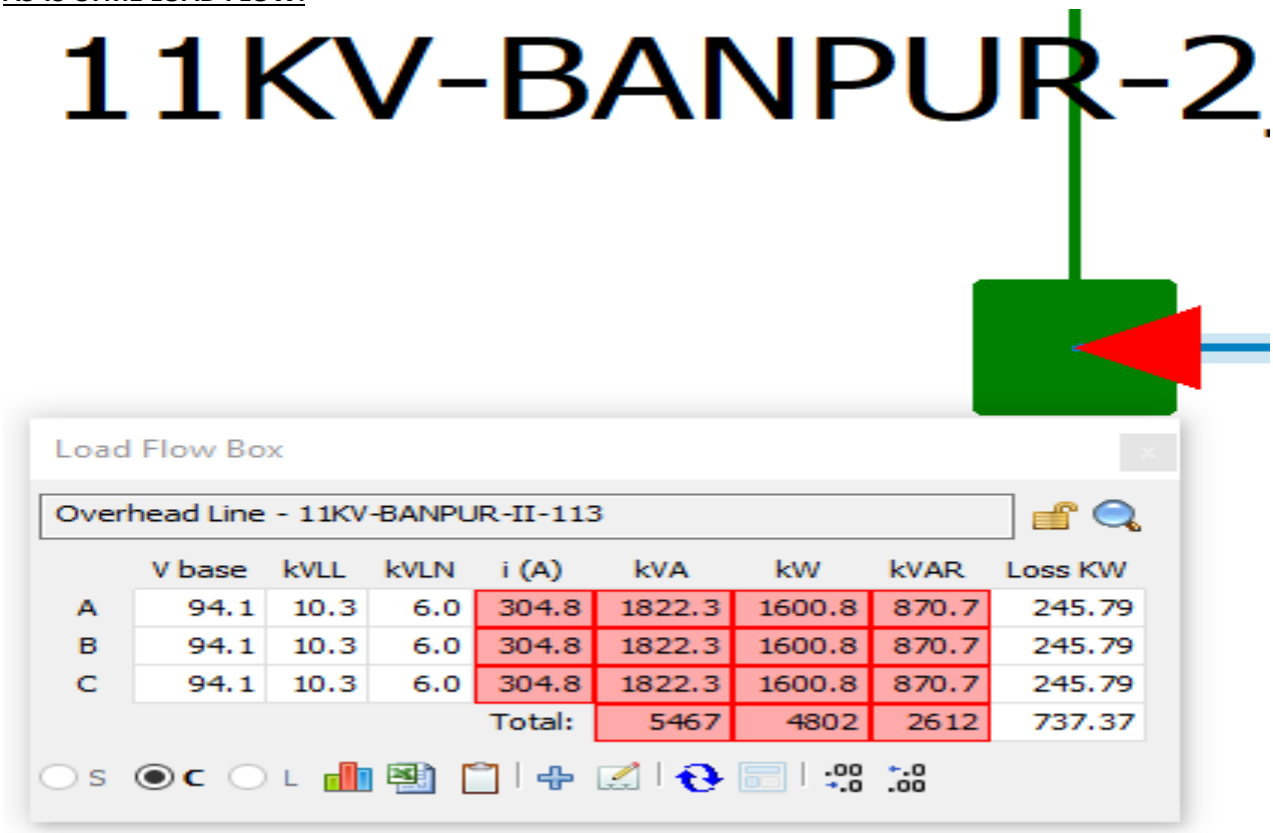
Objective: To mitigate the overloading issue of 11kV Banpur-II feeder.

Existing Scenario:

- At present, 11kV Banpur-II feeder is emanating from 33/11kV Balugaon PSS.Total length of this feeder is 63.73 km and the peak load is 4.58 MVA.
- In the existing scenario, conductor size of 11kV Banpur-II feeder is 100 sq.mm & the feeder is 88% loaded w.r.t the current carrying capacity of the conductor and 103% loaded considering 8% load growth rural feeders.
- This feeder is mainly feeding rural consumers and some part of urabn consumers , several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

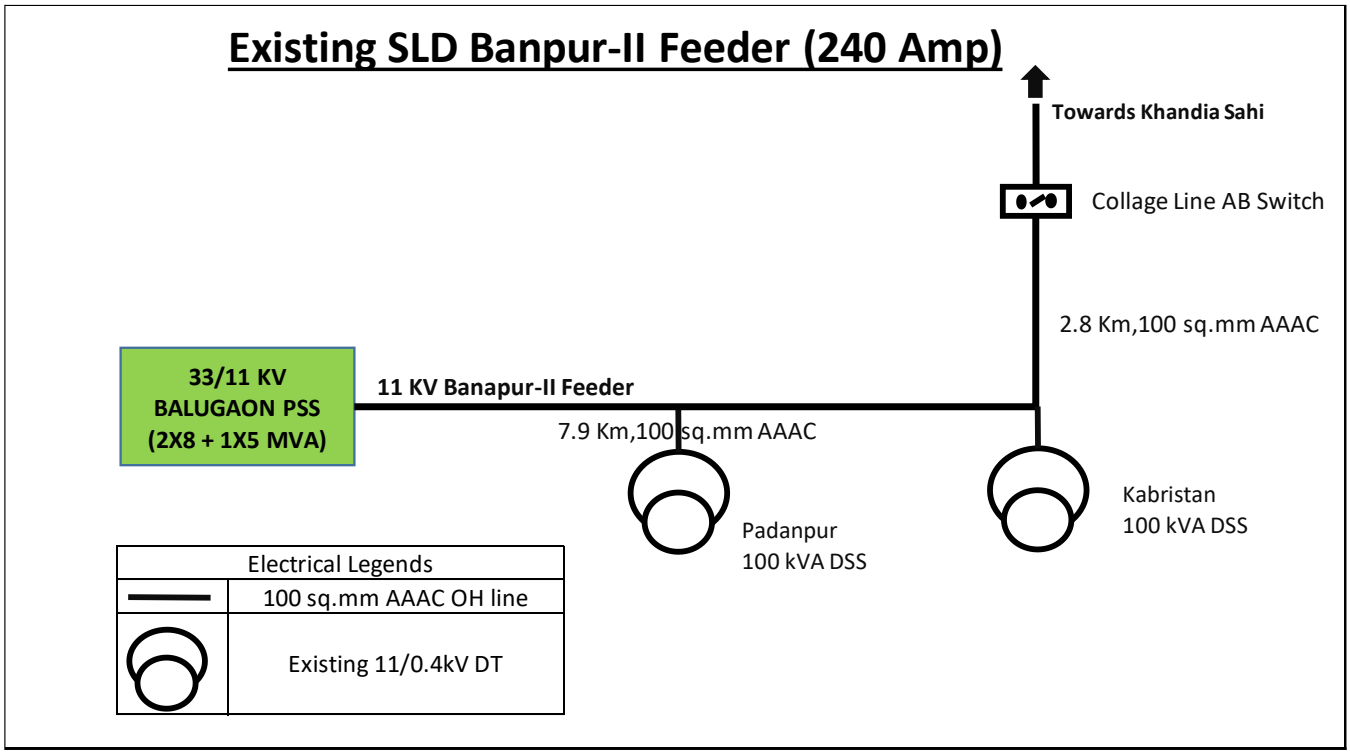
Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Balugaon	Banpur-II	5.19	4.58	88%	5.34	103%	Overload

AS-IS CYME LOAD FLOW:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	94.1	10.3	6.0	304.8	1822.3	1600.8	870.7	245.79
B	94.1	10.3	6.0	304.8	1822.3	1600.8	870.7	245.79
C	94.1	10.3	6.0	304.8	1822.3	1600.8	870.7	245.79
				Total:	5467	4802	2612	737.37

Existing SLD (summer'25):

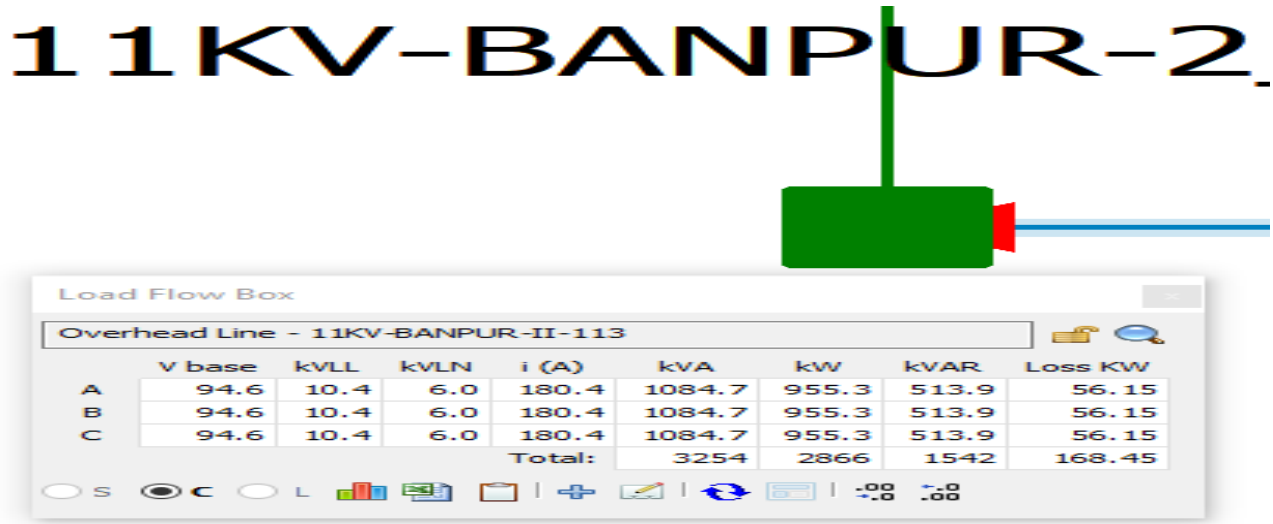


Proposed Scenario:

Proposal for construction of 0.5 KM U/G of New Linking line using 3CX400 sq.mm XLPE U/G cable & 5 CKM O/H line by using 100 sq.mm AAAC from Balugaon PSS to Collage line DP with AB Switch.

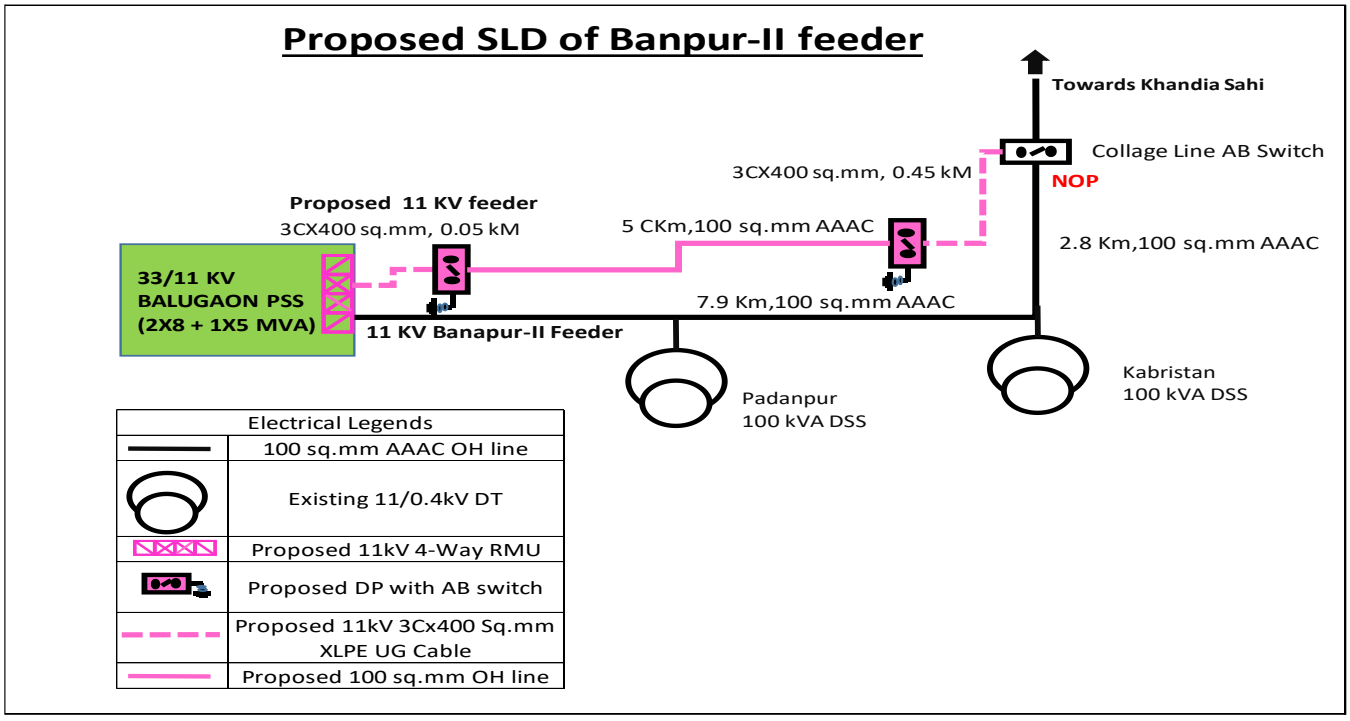
Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Balugaon	Banpur-II	5.19	2.58	50%	3.01	58%	Under Load
Balugaon	Proposed feeder	5.19	2.00	39%	2.33	45%	Under Load

Proposed CYME LOAD FLOW:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	94.6	10.4	6.0	180.4	1084.7	955.3	513.9	56.15
B	94.6	10.4	6.0	180.4	1084.7	955.3	513.9	56.15
C	94.6	10.4	6.0	180.4	1084.7	955.3	513.9	56.15
				Total:	3254	2866	1542	168.45

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	BAED
Name of the Sub-Division : -	BALUGAON
Name of the Section : -	Banpur-II
Name of the Work :-	Proposal for Bifurcation of existing 11 KV Banpur-II Feeder load emanating from 33/11 KV Balugaon PSS by constructing 1 No. of new feeder from 33/11 KV Balugaon PSS through RMU and 5.5 KM 11KV new line from Balugaon PSS to Collage line AB switch By using 11kV 3Cx400sqmm UG Cable ,0.5 KM & 100 sq.mm AAAC OH line 5 CKM.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART-A : Construction of 5 CKM 3ph 3w 11KV OH line over 11 Mtr WPB with 100 mm2 AAAC.	98,79,293.90
2	PART B: Supply and laying of, 11 kV ,3C X 400 sqmm XLPE UG cable= Length 0.5 Km , without spare run.	54,44,015.05
3	**Total Gross**	**1,53,23,308.95**
Total estimated cost is Rs. 1.53Cr.		

Cost Estimate: 1.53 cr. (For detailed BoQ refer Annexure 9.38)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Banpur-II feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of Balugaon urban & rural area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

39. Mitigation of Feeder Overloading issue of 11kv Balanga Feeder

Proposal: Proposal for Augmentation of 11KV Balanga feeder, 2 CKM line by using 100 SQ.MM. -AAA Conductor from Kumareswar PSS to Saraswatipur branch line t-off point.

Objective: To mitigate the overloading issue of 11kV Balanga feeder.

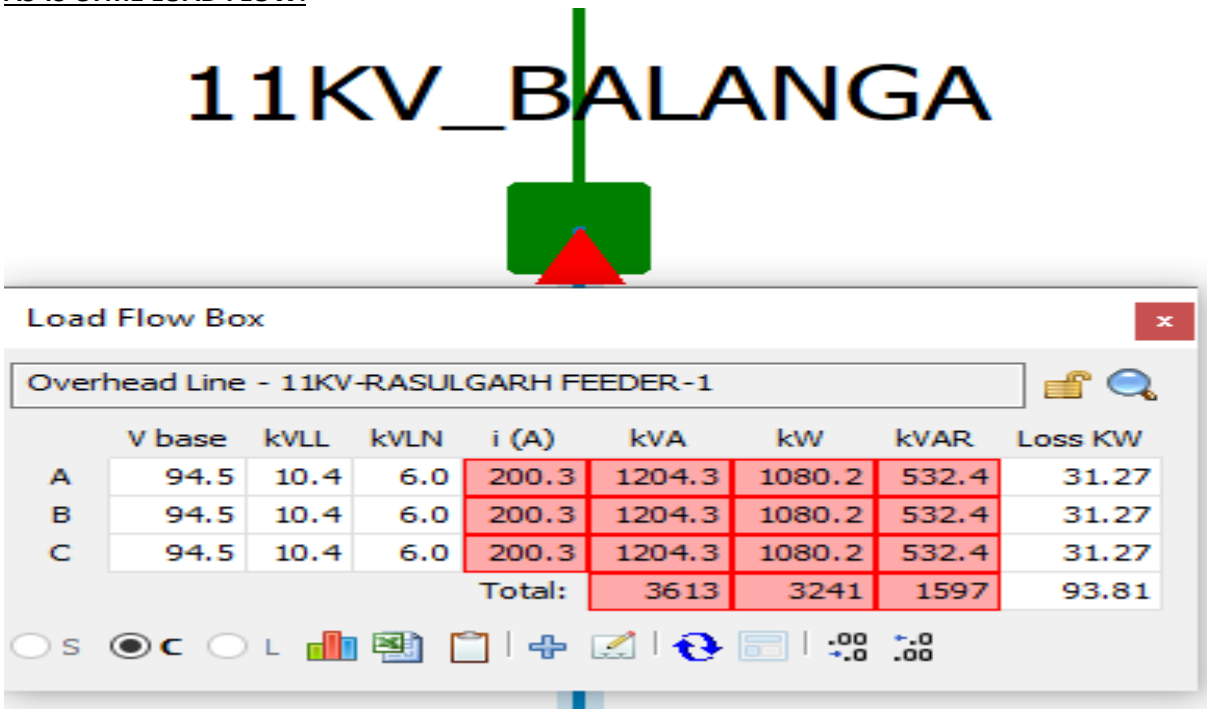
Existing Scenario:

- At present, 11kV Balanga feeder is emanating from 33/11kV Kumareswar PSS.Total length of this feeder is 42.54 km and the peak load is 3.21 MVA.

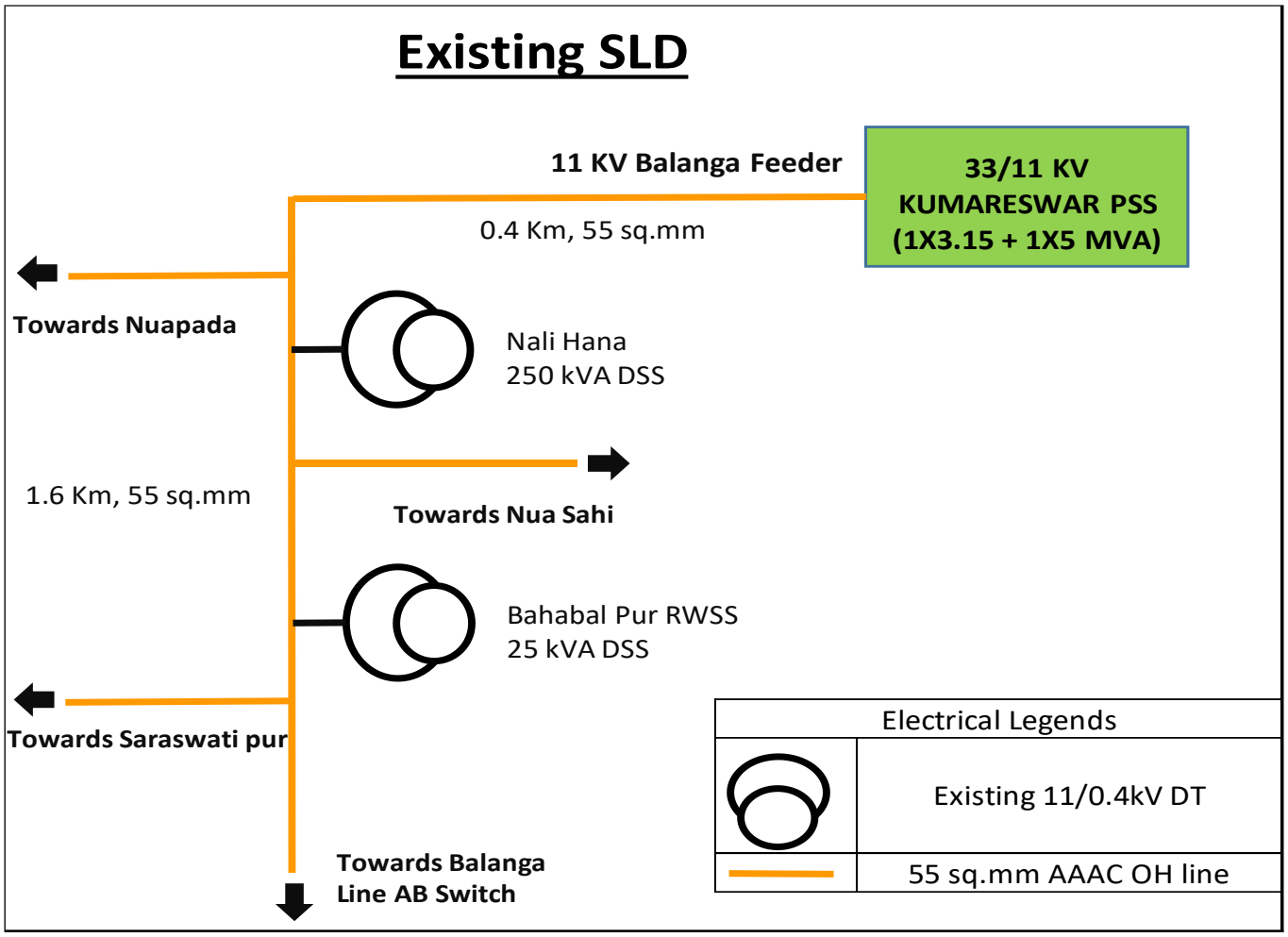
- In the existing scenario, conductor size of 11kV Balanga feeder is 55 sq.mm & the feeder is 90% loaded w.r.t the current carrying capacity of the conductor and 105% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Kuamareswar	Balanga	3.55	3.21	90%	3.74	105%	Overload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

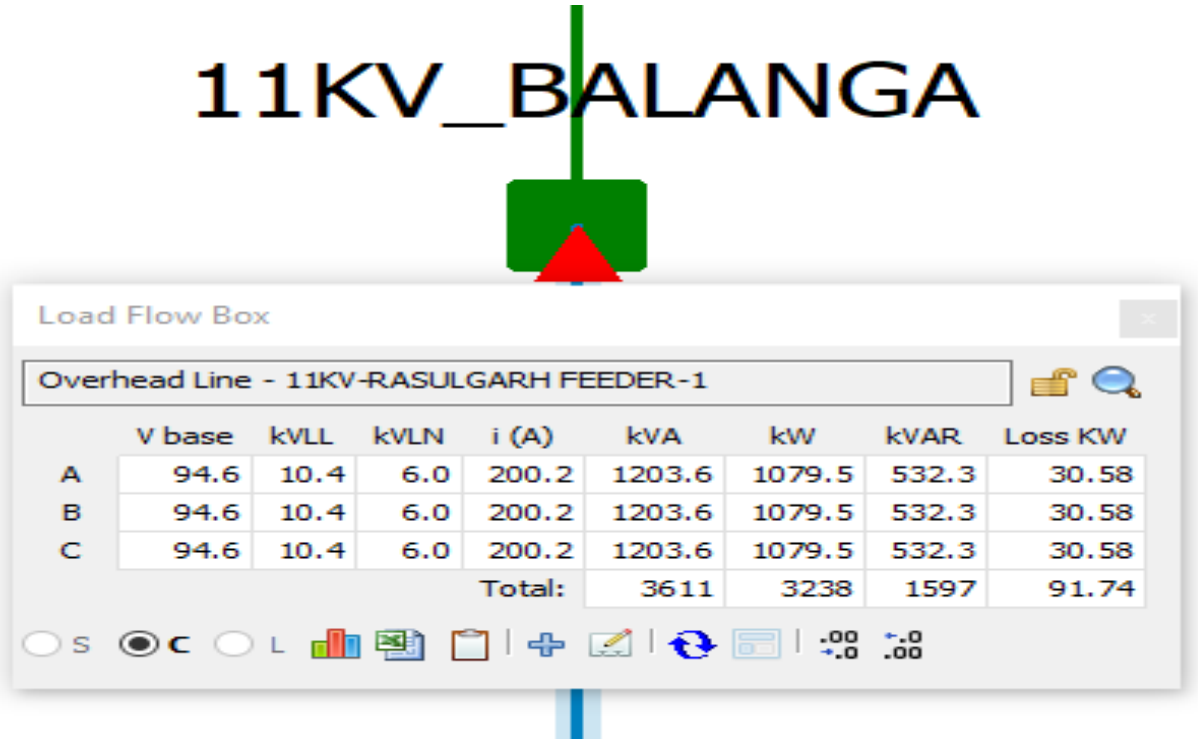


Proposed Scenario:

Proposal for Augmentation of 2 CKM line using 100 sq.mm AAAC from Kumareswar PSS to Saraswatipur Branch line T-off point.

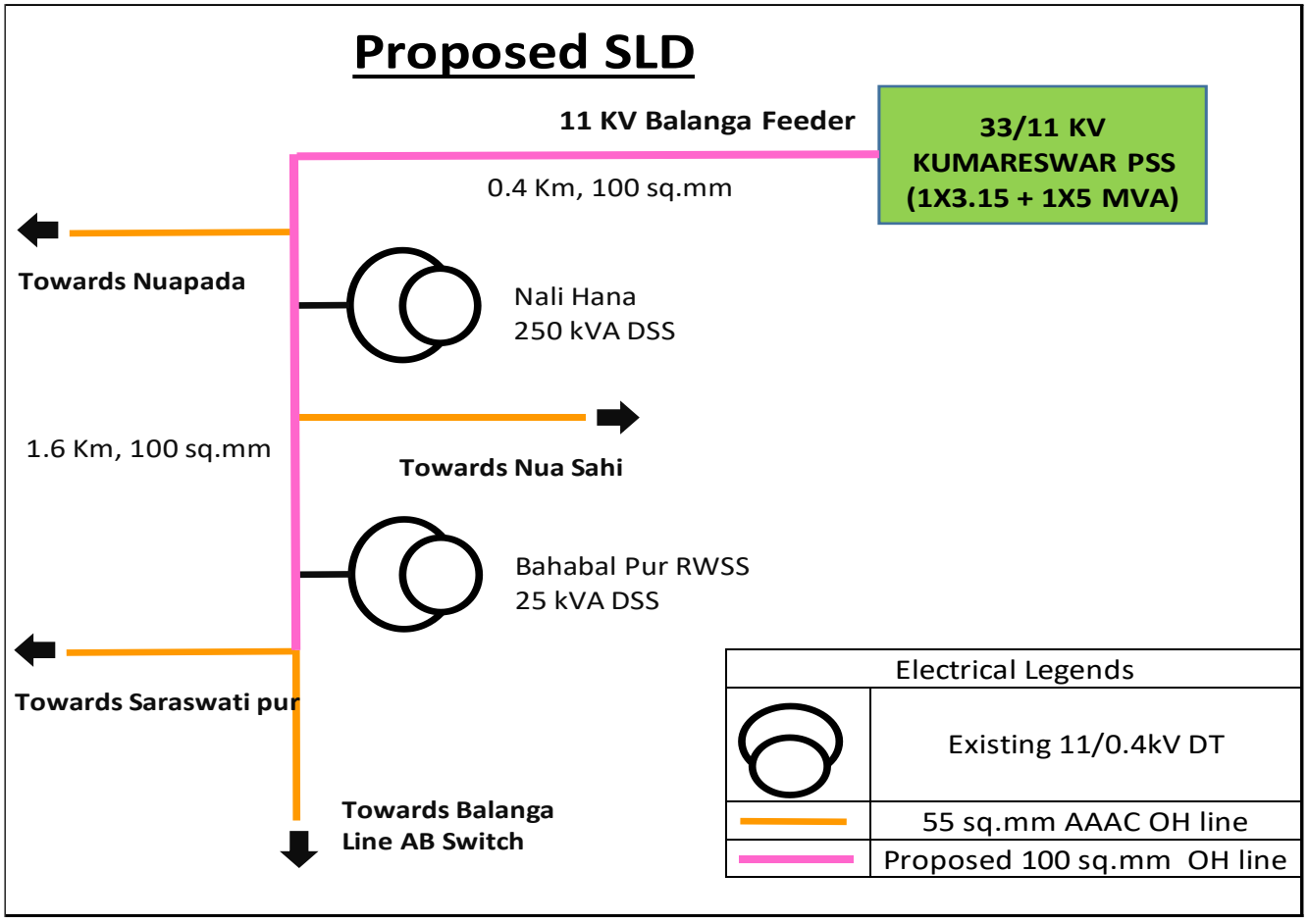
Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Kuamareswar	Balanga	5.19	3.21	62%	3.74	72%	Underload

Proposed CYME LOAD FLOW:



	V base	kVLL	kVLN	i (A)	kVA	kW	kVAR	Loss KW
A	94.6	10.4	6.0	200.2	1203.6	1079.5	532.3	30.58
B	94.6	10.4	6.0	200.2	1203.6	1079.5	532.3	30.58
C	94.6	10.4	6.0	200.2	1203.6	1079.5	532.3	30.58
				Total:	3611	3238	1597	91.74

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		PED
Name of the Sub-Division : -		SAKHIGOPAL
Name of the Section : -		Satasankha
Name of the Work :-		Proposal for Augmentation of 11KV Balanga feeder, 2 CKM line by using 100 SQ.MM. -AAA Conductor from Kumareswar PSS to Saraswatipur branch line t-off point.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Refurbishment & Augmentation of 2 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 100 mm2 AAAC.	27,25,537.22
2	**Total Gross**	**27,25,537.22**
Total estimated cost is Rs. 0.27Cr.		

Cost Estimate: 0.27 cr. (For detailed BoQ refer Annexure 9.39)

Benefit:

- To maintain reliable Power Supply to Rural consumers by strengthening the line & mitigation of overloading issue of 11kv Balanga feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of rural urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

40. Mitigation of Feeder Overloading issue of 11kV Rajabajar Feeder

Proposal: Proposal for Augmentation of 11kV Rajabajar feeder ,1.5 CKM by using 100 SQ.MM. -AAA Conductor from Jatani PSS to Rajabazar Fandi..

Objective: To mitigate the overloading issue of 11kV Rajabajar feeder.

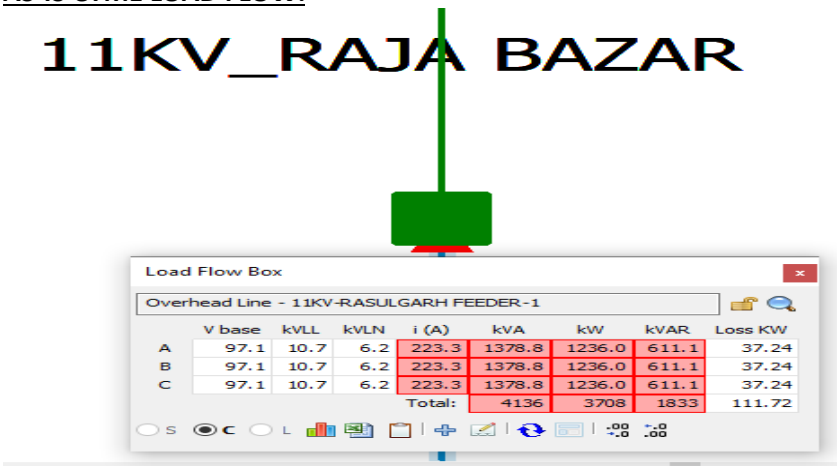
Existing Scenario:

- At present, 11kV Rajabajar feeder is emanating from 33/11kV Jatani PSS.Total length of this feeder is 4.16 km and the peak load is 3.28 MVA.
- In the existing scenario, conductor size of 11kV Rajabajar feeder is 55 sq.mm & the feeder is 92% loaded w.r.t the current carrying capacity of the conductor and 118% loaded considering 13% load growth for Urban feeders.

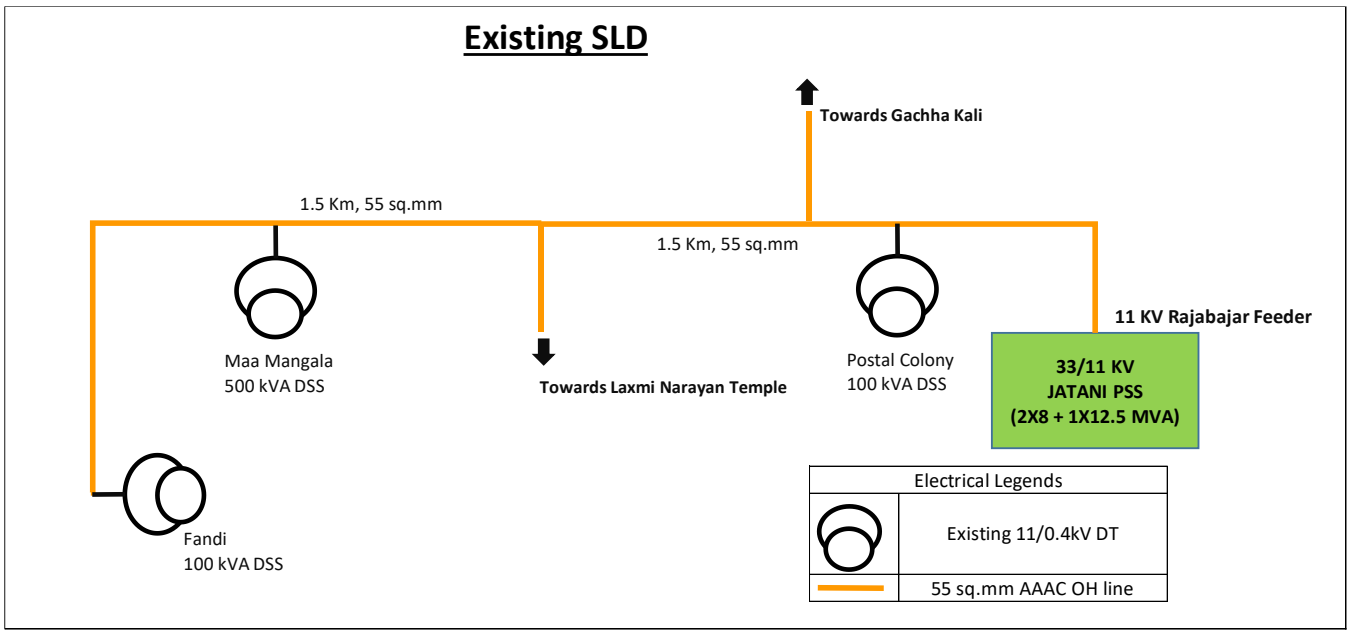
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the Urban area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Jatani	Rajabajar	3.55	3.28	92%	4.23	118%	Overload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

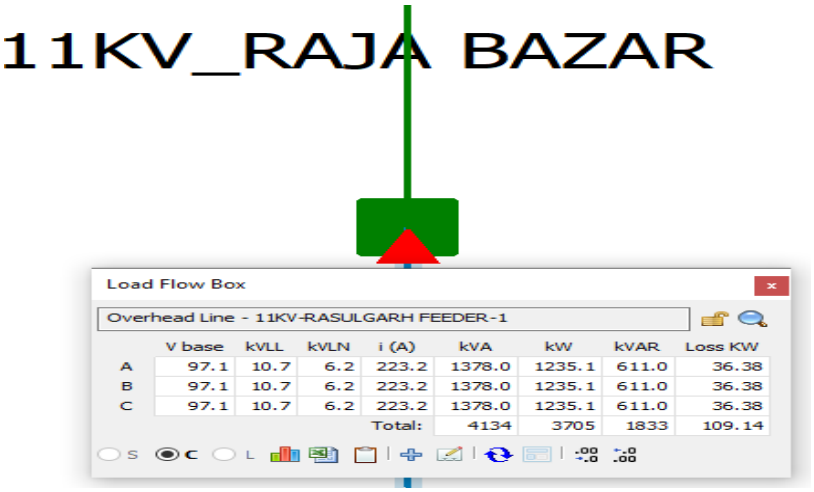


Proposed Scenario:

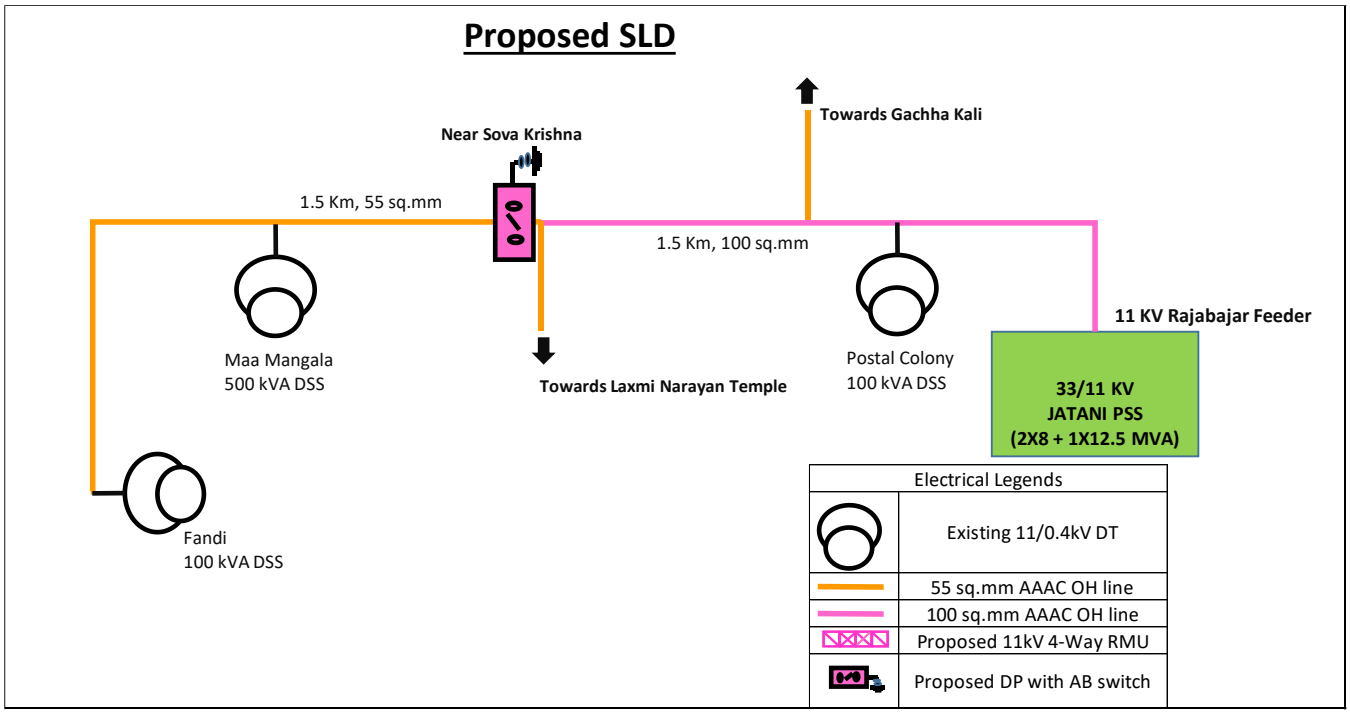
Proposal for Augmentation of 1.5 KM line using 100 sq.mm AAAC from Jatani PSS to Rajabajar Fandi (sova Krishna) .

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Jatani	Rajabajar	5.19	3.28	63%	4.23	81%	Under Load

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		KHD
Name of the Sub-Division : -		Jatani
Name of the Section : -		Jatani-I
Name of the Work :-		Proposal for Augmentation of 11kV Rajabajar feeder, 1.5 CKM by using 100 SQ.MM. -AAA Conductor from Jatani PSS to Rajabazar Fandi.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Refurbishment & Augmentation of 1.5 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 100 mm2 AAAC.	24,12,287.88
2	**Total Gross**	**24,12,287.88**
Total estimated cost is Rs. 0.24Cr.		

Cost Estimate: 0.24 cr. (For detailed BoQ refer Annexure 9.40)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kv Rajabajar feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

41. Mitigation of Feeder Overloading issue of 11kV Town Feeder

Proposal: Proposal for Augmentation of 11kV Town feeder, 1 CKM by using 100 SQ.MM. -AAA Conductor from Jatani PSS to Kali Rice Mill.

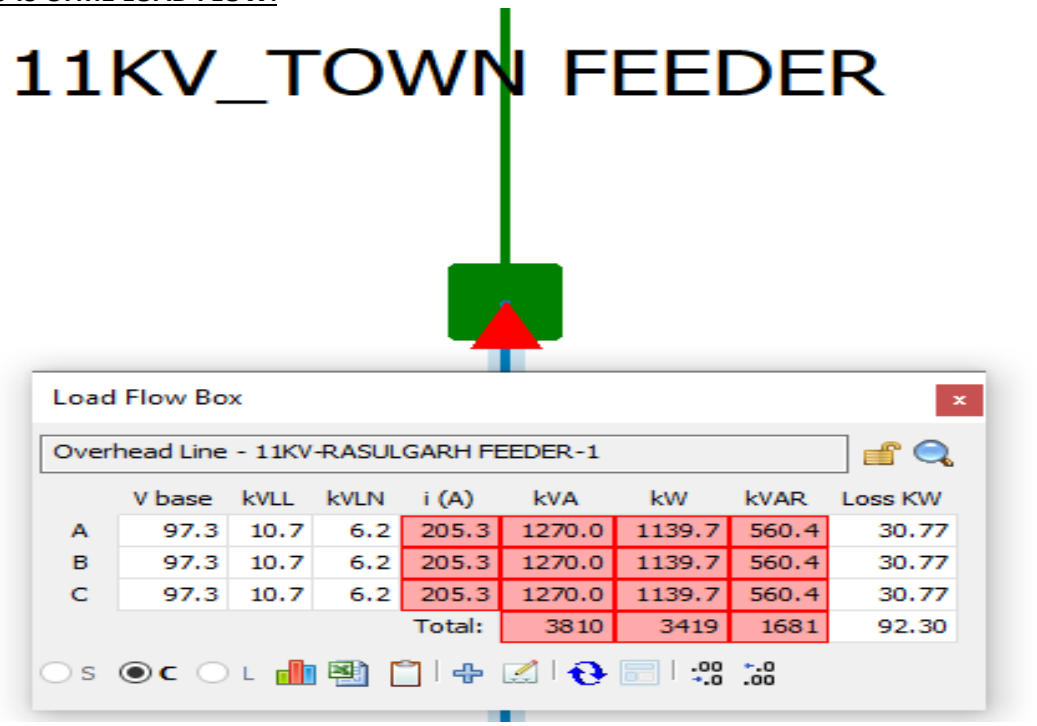
Objective: To mitigate the overloading issue of 11kV Town feeder.

Existing Scenario:

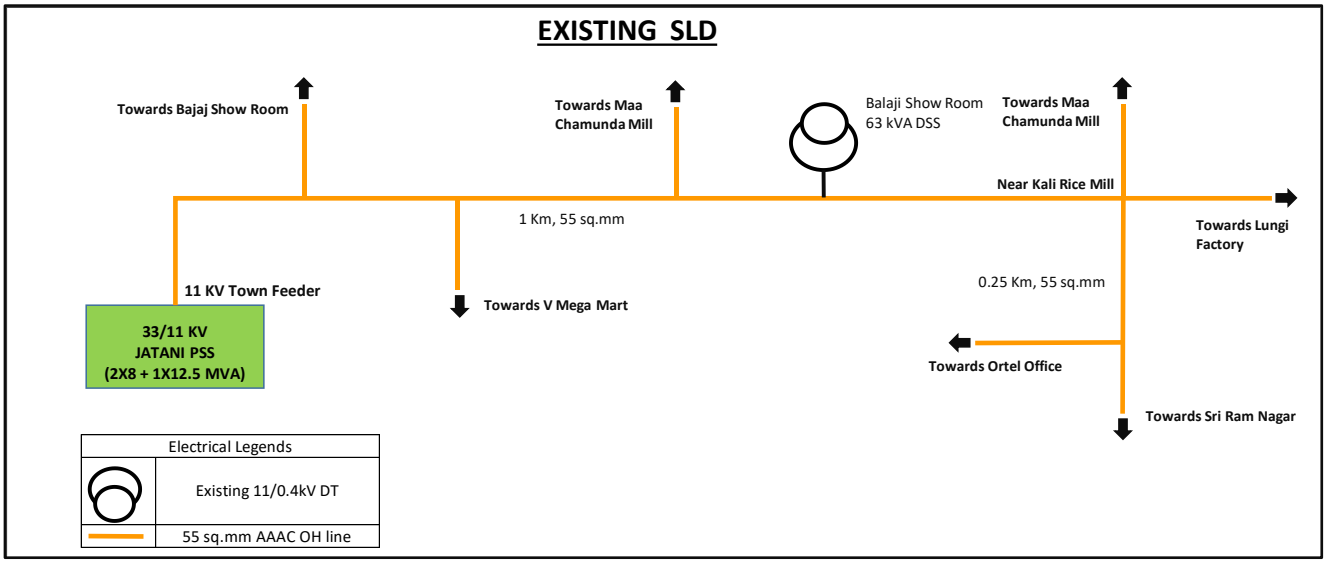
- At present, 11kV Town feeder is emanating from 33/11kV Jatani PSS.Total length of this feeder is 5.19 km and the peak load is 3.13 MVA.
- In the existing scenario, conductor size of 11kV Rajabajar feeder is 55 sq.mm & the feeder is 88% loaded w.r.t the current carrying capacity of the conductor and 113% loaded considering 13% load growth for Urban feeders.
- This feeder is mainly feeding Urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the Urban area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Jatani	Town	3.55	3.13	88%	4	113%	Overload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

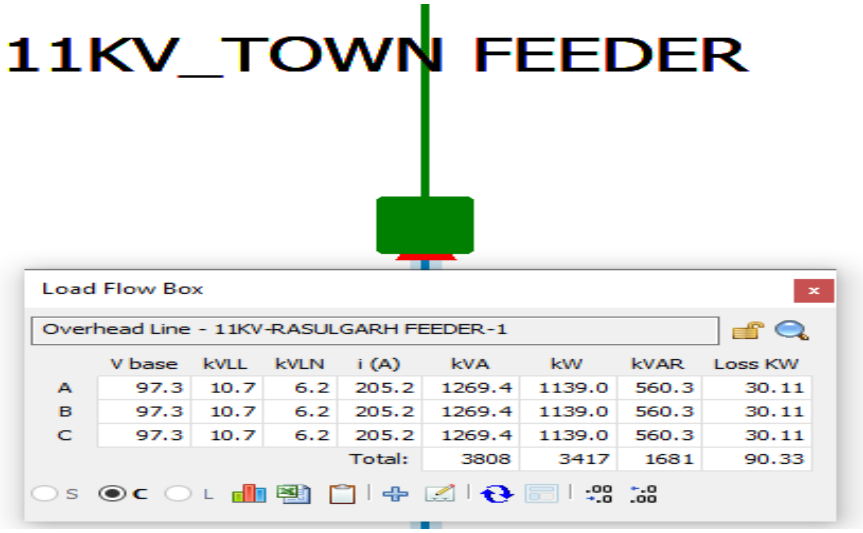


Proposed Scenario:

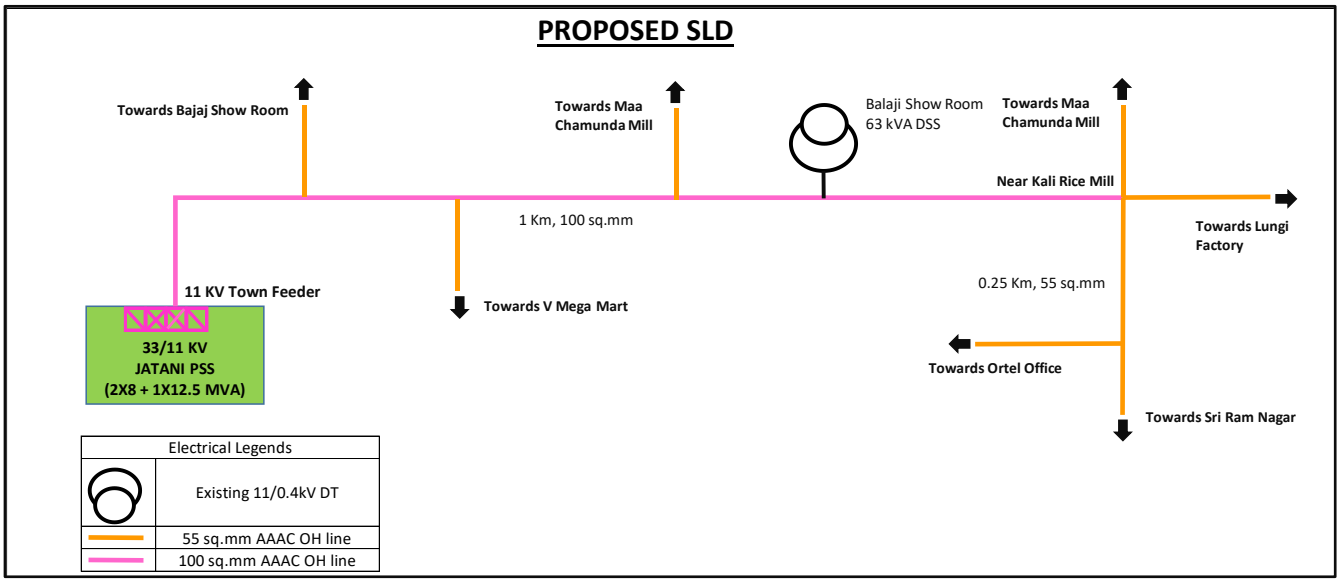
Proposal for Augmentation of 1 CKM line using 100 sq.mm AAAC from Jatani PSS to Kali Rice Mill .

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Jatani	Town	5.19	3.13	60%	4	77%	Underload

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		KHD
Name of the Sub-Division : -		Jatani
Name of the Section : -		Jatani-I
Name of the Work :-		Proposal for Augmentation of 11kV Town feeder, 1 CKM by using 100 SQ.MM. -AAA Conductor from Jatani PSS to Kali Rice Mill.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Refurbishment & Augmentation of 1 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 100 mm2 AAAC.	15,07,842.97
2	PART B: 1. Supply and laying of, 11 kV ,3C X 400 sqmm XLPE UG cable= Length 0.04 Km without spare run. 2. Installation of 1 nos. 11kV 4Way RMU at Jatani PSS.	18,78,179.91
3	**Total Gross**	**33,86,022.88**
Total estimated cost is Rs. 0.34Cr.		

Cost Estimate: 0.33 cr. (For detailed BoQ refer Annexure 9.41)

Benefit:

- To maintain reliable Power Supply to Urban consumers by strengthening the line & mitigation of overloading issue of 11kv Town feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

42. Mitigation of Feeder Overloading issue of 11kV Kudiary Feeder

Proposal: Proposal for Augmentation of 11kV Kudiary feeder, 3 CKM by using 100 SQ.MM. -AAA Conductor from Harirajpur PSS to Kudiary Bajar.

Objective: To mitigate the overloading issue of 11kV Kudiary feeder.

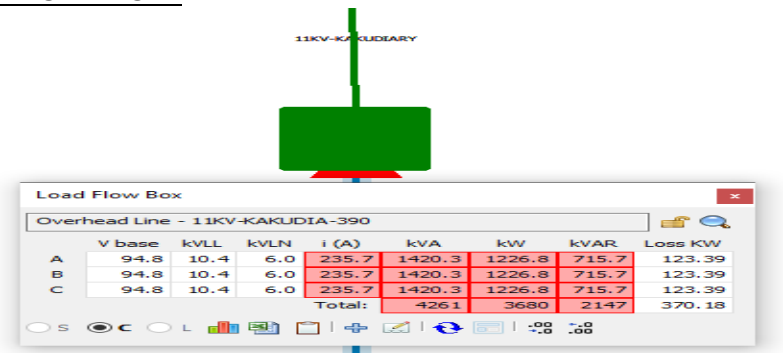
Existing Scenario:

- At present, 11kV Kudiary feeder is emanating from 33/11kV Harirajpur PSS.Total length of this feeder is 9.74 km and the peak load is 3.63 MVA.

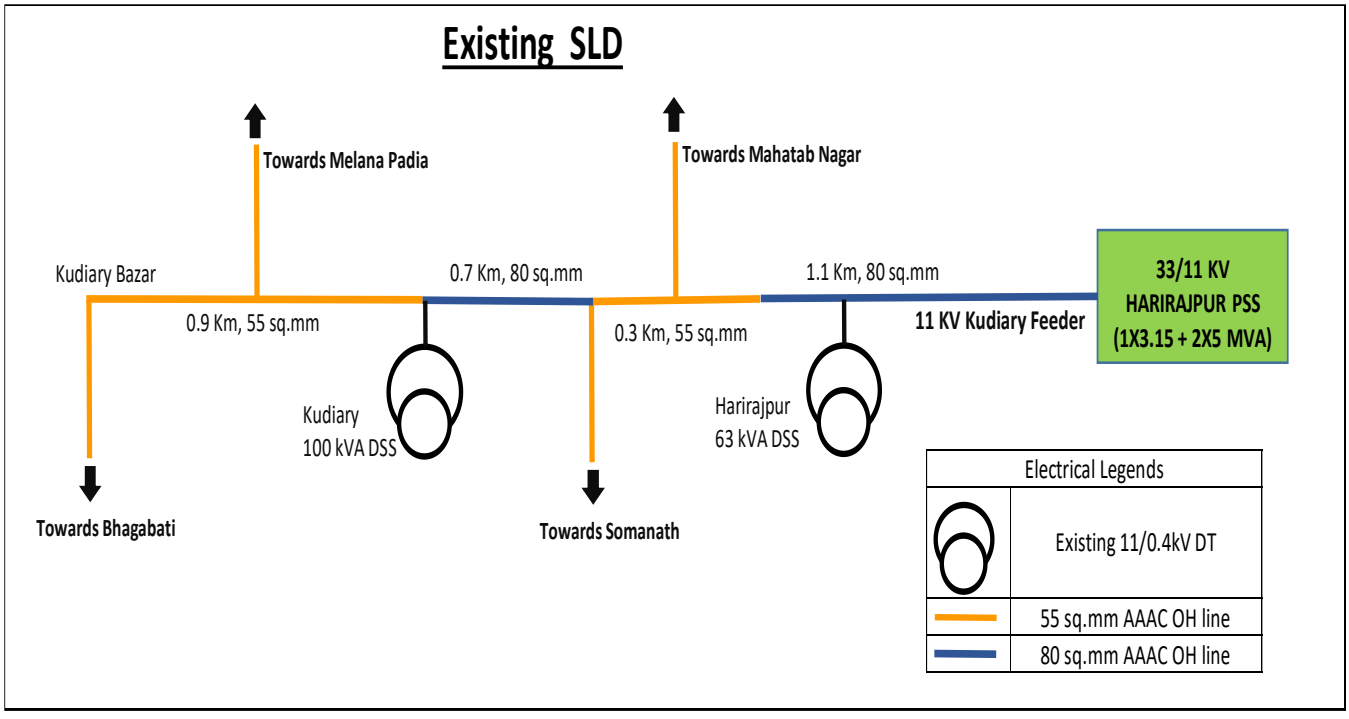
- In the existing scenario, conductor size of 11kV Rajabajar feeder is 55/80 sq.mm & the feeder is 102% loaded w.r.t the current carrying capacity of the conductor and 119% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding Rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Harirajpur	Kudiary	3.55	3.63	102%	4.23	119%	Overload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

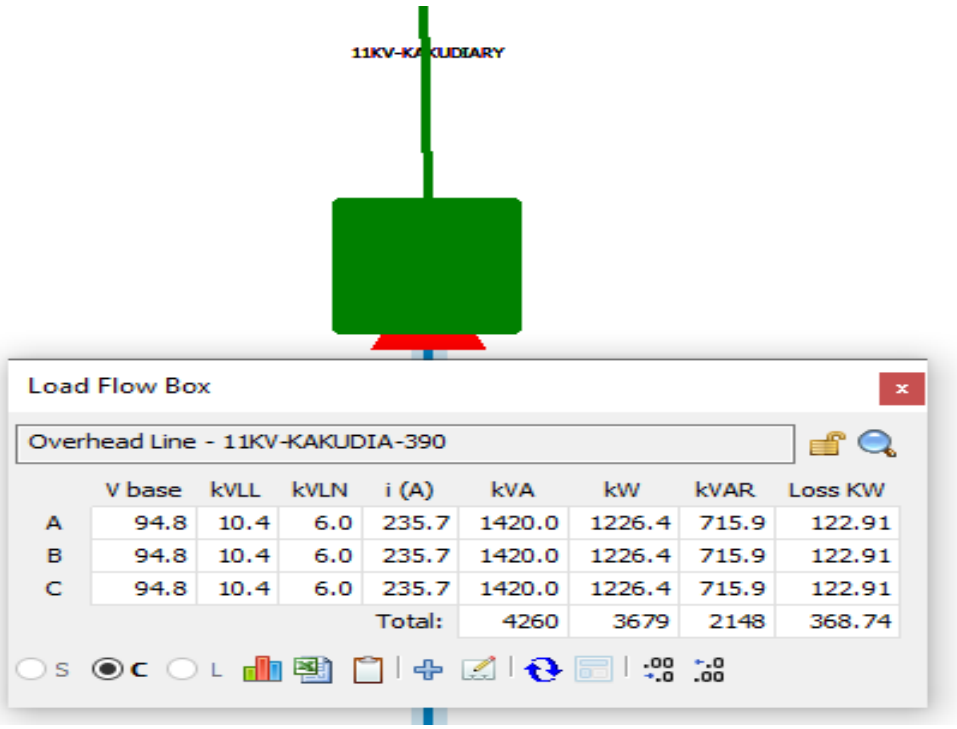


Proposed Scenario:

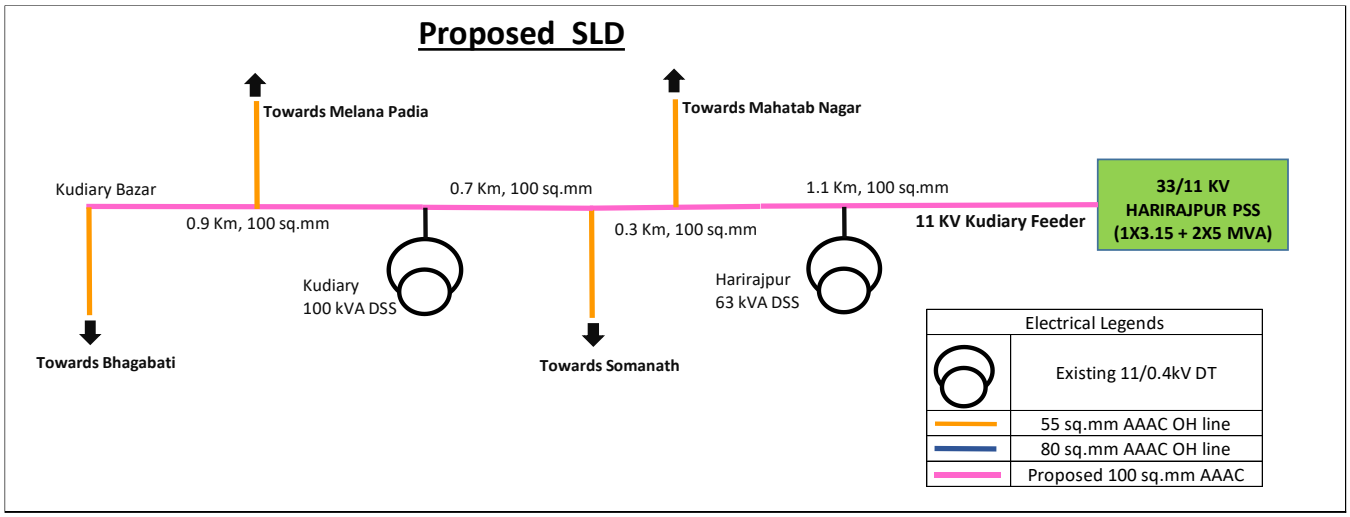
Proposal for Augmentation of 3 CKM line using 100 sq.mm AAAC from Harirajpur PSS to Kudiary Bajar .

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Harirajpur	Kudiary	5.19	3.63	70%	4.23	81%	Uneder Load

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		KHD
Name of the Sub-Division : -		Jatani
Name of the Section : -		Harirajpur
Name of the Work :-		Proposal for Augmentation of 11kV Kudiary feeder 3 CKM by using 100 SQ.MM. -AAA Conductor from Harirajpur PSS to Kudiary Bajar.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Refurbishment & Augmentation of 3 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 100 mm2 AAAC.	41,79,526.32
2	**Total Gross**	**41,79,526.32**
Total estimated cost is Rs. 0.42Cr.		

Cost Estimate: 0.42 cr. (For detailed BoQ refer Annexure 9.42)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Kudiary feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of rural area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

43. Mitigation of Feeder Overloading issue of 11kV Mangalaghat Feeder

Proposal: Proposal for Augmentation of 11kV Mangalaghat feeder, 0.85 CKM by using 99 SQ.MM. XLPE Insulated AAA Conductor from Masani Chandi Chowk to Sri Mandira Water Tank.

Objective: To mitigate the overloading issue of 11kV Mangala Ghat feeder.

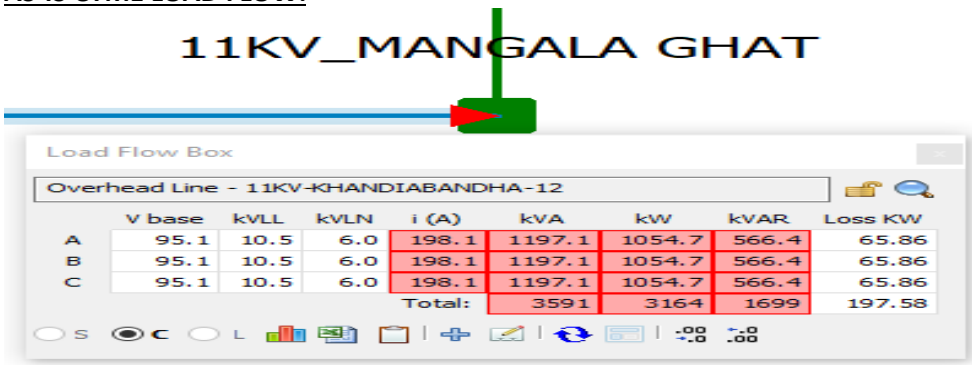
Existing Scenario:

- At present, 11kV Mangalaghat feeder is emanating from 33/11kV Samanga PSS.Total length of this feeder is 8 km and the peak load is 2.86 MVA.

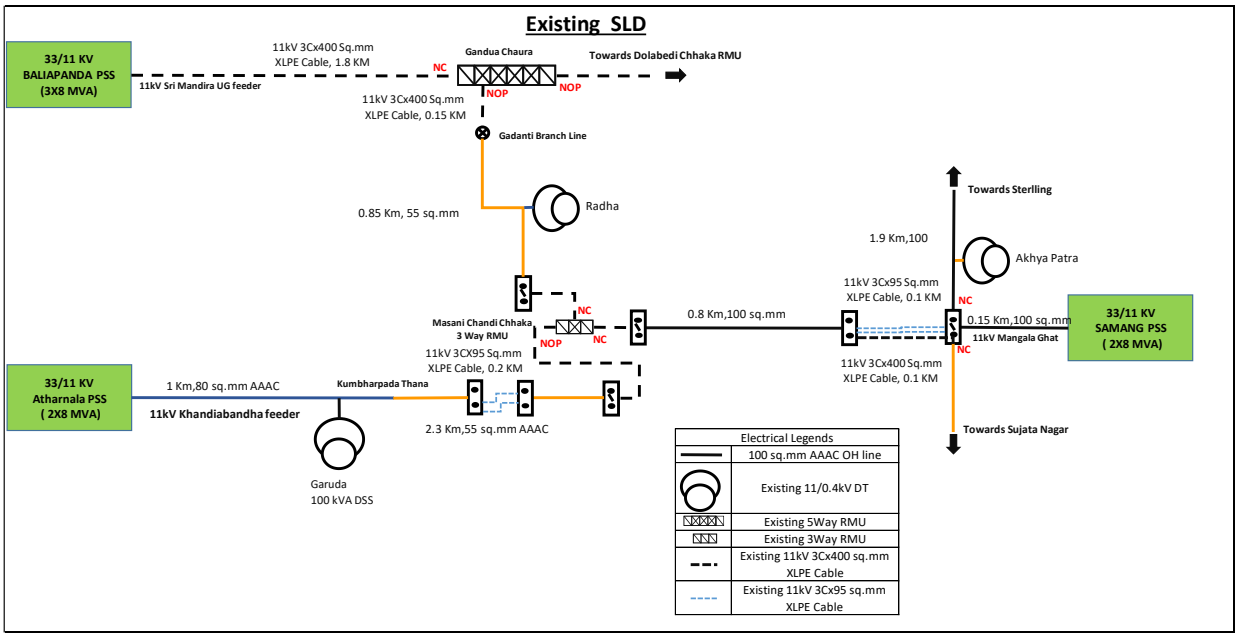
- In the existing scenario, conductor size of 11kV Mangalaghat feeder is 55 sq.mm & the feeder is 81% loaded w.r.t the current carrying capacity of the conductor and 103% loaded considering 13% load growth for urban feeders.
- This feeder is mainly feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Baliapanda	Sri Mandira UG	5.76	4.16	72%	5.31	92%	Overload
Samanga	Mangala Ghat	3.55	2.86	81%	3.66	103%	Underload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

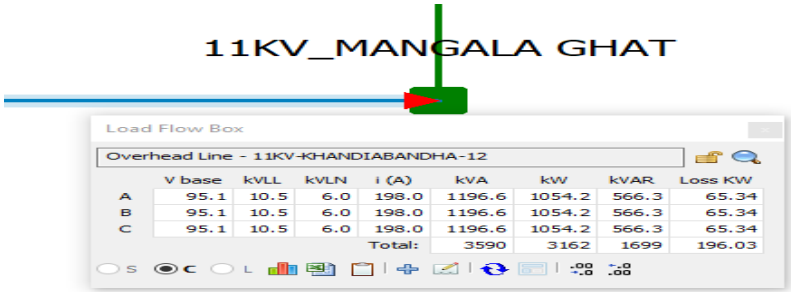


Proposed Scenario:

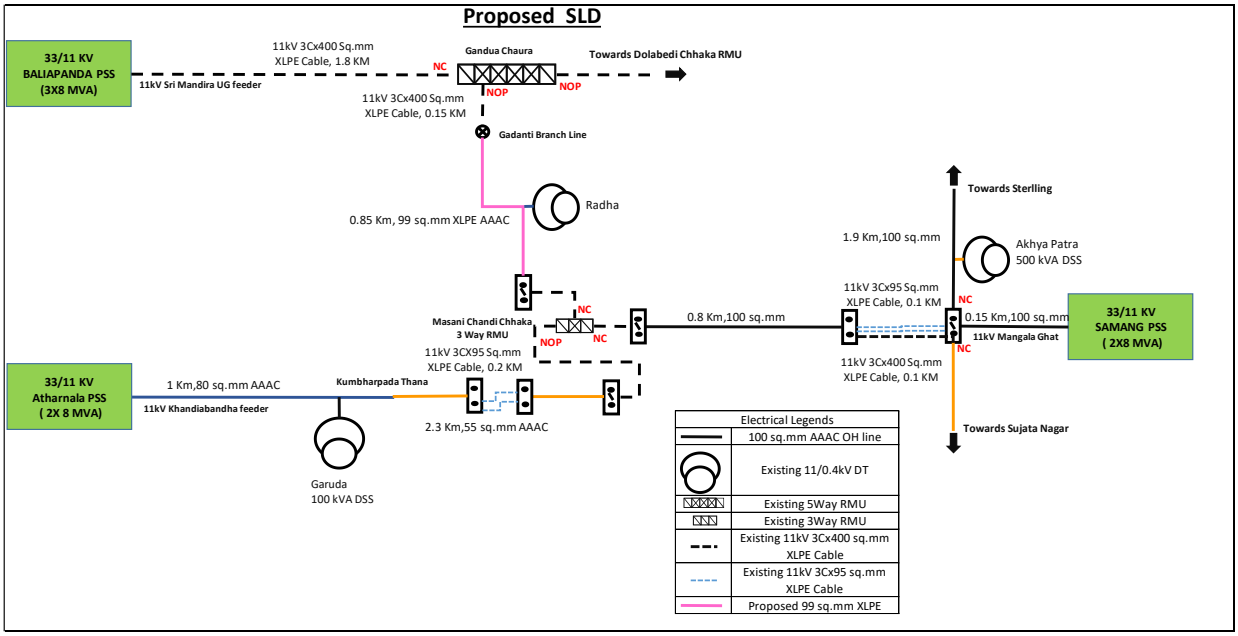
Proposal for Augmentation of 0.85 CKM line using 99 sq.mm XLPE insulated AAAC from Masani Chandi Chowk to Sri Mandira Water Tank.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Baliapanda	Sri Mandira UG	5.76	4.16	72%	5.31	92%	Underload
Samanga	Mangala Ghat	5.19	2.86	55%	3.66	70%	Underload

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		PED
Name of the Sub-Division : -		PURI-I
Name of the Section : -		Paschimadwar
Name of the Work :-		Proposal for Augmentation of 11kV Mangala Ghat feeder 0.85 CKM by using 99 SQ.MM. XLPE Insulated AAA Conductor from Masani Chandi Chowk to Sri Mandira water tank.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Refurbishment & Augmentation of 0.85 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 99 mm2 XLPE Insulated AAAC.	18,31,310.38
2	**Total Gross**	**18,31,310.38**
Total estimated cost is Rs. 0.18 Cr.		

Cost Estimate: 0.18 cr. (For detailed BoQ refer Annexure 9.43)

Benefit:

- To maintain reliable Power Supply to urban consumers by strengthening the line & mitigation of overloading issue of 11kv Mangalaghat feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

44. Mitigation of Feeder Overloading issue of 11kV Prachi OH Feeder

Proposal: Proposal for Bifurcation of existing 11 KV Prachi OH Feeder load emanating from 33/11 KV Baliapanda PSS by constructing 1 No. of new feeder from 33/11 KV Samanga PSS through RMU and 6 KM 11KV new U/G line from Samanga PSS to Strelling Chowk by using 11kV 3Cx400sqmm UG Cable.

Objective: To mitigate the overloading issue of 11kV Prachi O/H feeder.

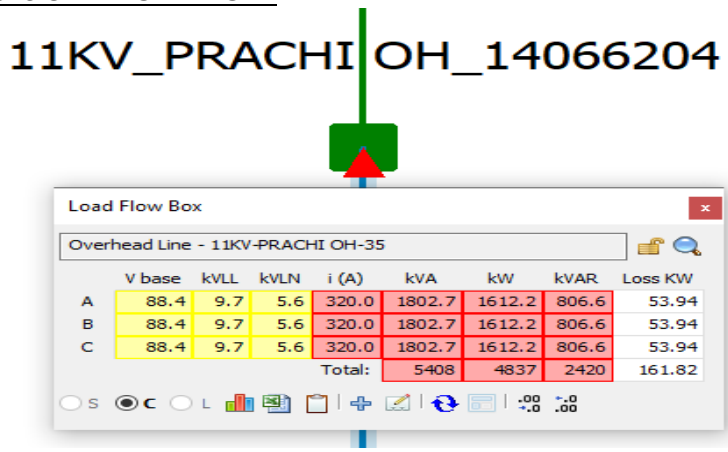
Existing Scenario:

- At present, 11kV Prachi feeder is emanating from 33/11kV Baliapanda PSS.Total length of this feeder is 14.24 km and the peak load is 4.24 MVA.

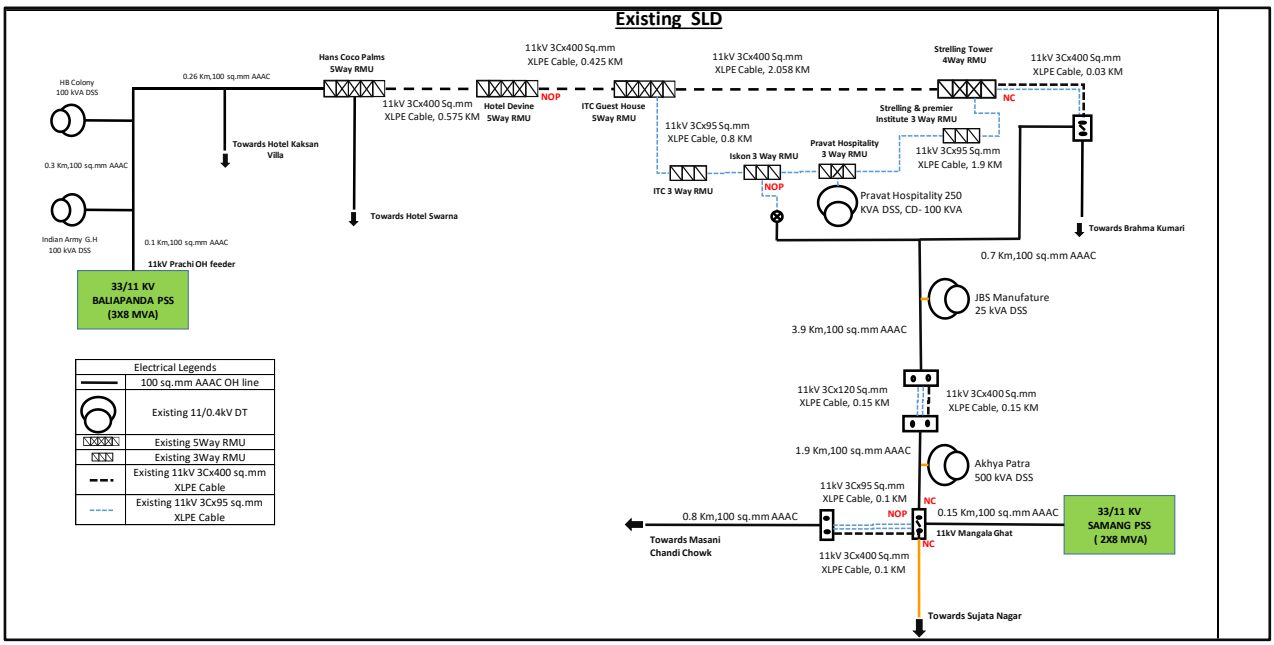
- In the existing scenario, conductor size of 11kV Prachi OH feeder is 100 sq.mm & the feeder is 82% loaded w.r.t the current carrying capacity of the conductor and 104% loaded considering 13% load growth for urban feeders.
- This feeder is mainly feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Baliapanda	Prach OH	5.19	4.24	82%	5.41	104%	Overload
Samanga	Mangala Ghat	5.19	2.86	55%	3.66	70%	Under Load

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

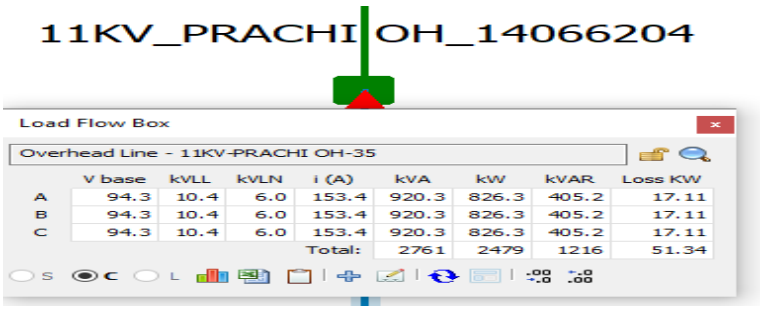


Proposed Scenario:

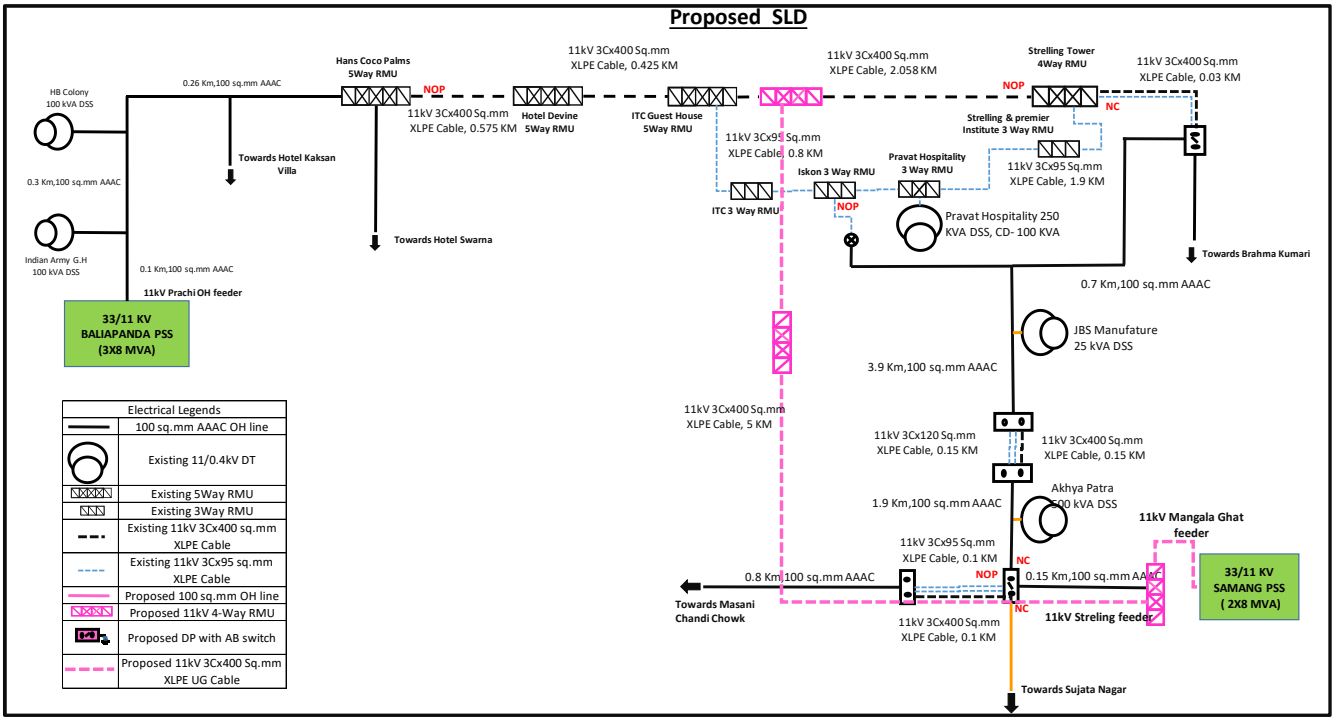
Proposal for construction & laying of 6 KM line using 11kV 3Cx400 sq.mm XLPE U/G cable from Samanga PSS to Strelling Chowk.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Baliapanda	Prach OH	5.19	2.24	43%	2.86	55%	Under Load
Samanga	Mangala Ghat	5.19	2.86	55%	3.66	70%	Under Load
Samanga	Proposed Streling feeder	5.76	2.00	35%	2.55	44%	Under Load

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		PED
Name of the Sub-Division : -		PURI-I
Name of the Section : -		Sadar & Baliapanda
Name of the Work :-		Proposal for Bifurcation of existing 11 KV Prachi OH Feeder load emanating from 33/11 KV Baliapanda PSS by constructing 1 No. of new feeder from 33/11 KV Samanga PSS through RMU and 6 KM 11KV new U/G line from Samanga PSS to Strelling Chowk by using 11kV 3Cx400sqmm UG Cable.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Supply and laying of, 11 kV ,3C X 400 sqmm XLPE UG cable= Length 6 Km , without spare run.	5,18,40,008.02
2	**Total Gross**	**5,18,40,008.02**
Total estimated cost is Rs. 5.18 Cr.		

Cost Estimate: 5.18 cr. (For detailed BoQ refer Annexure 9.44)

Benefit:

- To maintain reliable Power Supply to urban consumers by strengthening the line & mitigation of overloading issue of 11kv Prachi O/H feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

45. Mitigation of Feeder Overloading issue of 11kV Loakantah Feeder

Proposal: Proposal for Augmentation of 11kV Lokanath feeder 1.2 CKM by using 100 SQ.MM. AAA Conductor from Mangalaghat 250 DSS to Hadisahi Line AB Switch.

Objective: To mitigate the overloading issue of 11kV Loakanath feeder.

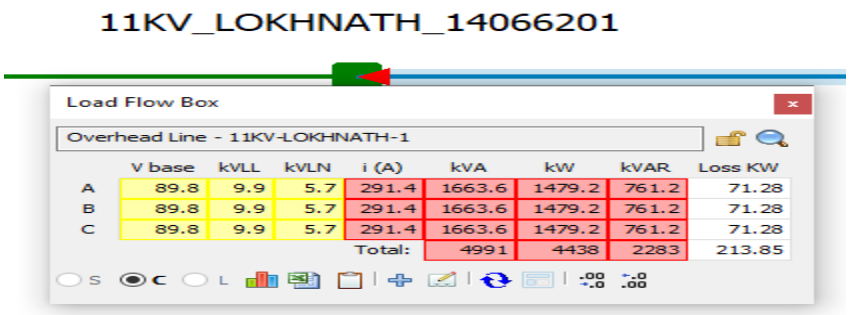
Existing Scenario:

- At present, 11kV Lokanath feeder is emanating from 33/11kV Baliapanda PSS.Total length of this feeder is 11.48 km and the peak load is 3.85 MVA.
- In the existing scenario, conductor size of 11kV Prachi OH feeder is 55/100 sq.mm & the feeder is 109% loaded w.r.t the current carrying capacity of the conductor and 139% loaded considering 13% load growth for urban feeders.

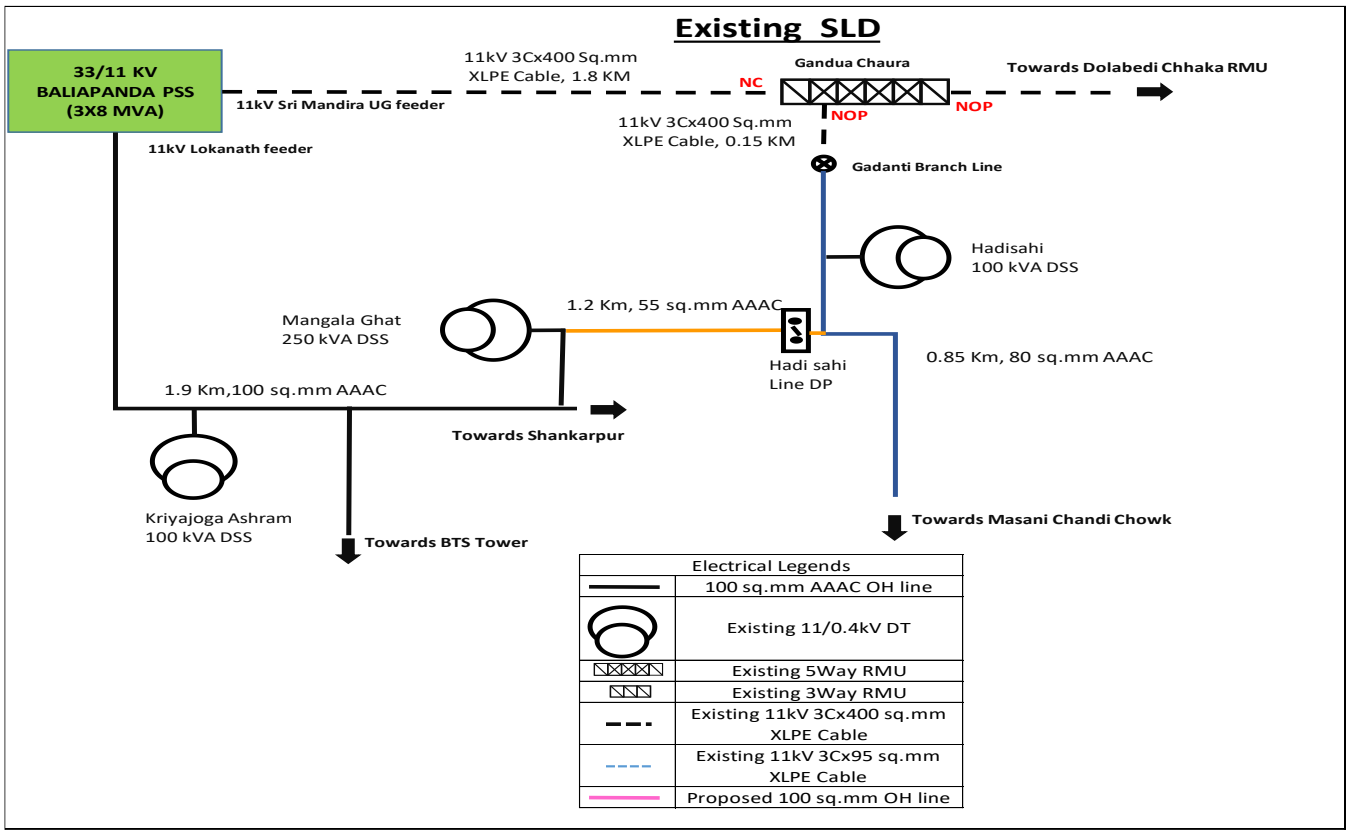
- This feeder is mainly feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Baliapanda	Loakanath	3.55	3.85	109%	4.92	139%	Overload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

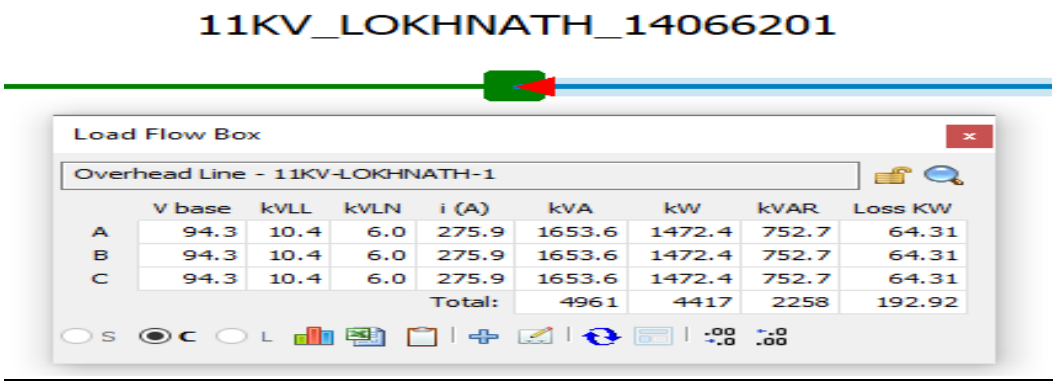


Proposed Scenario:

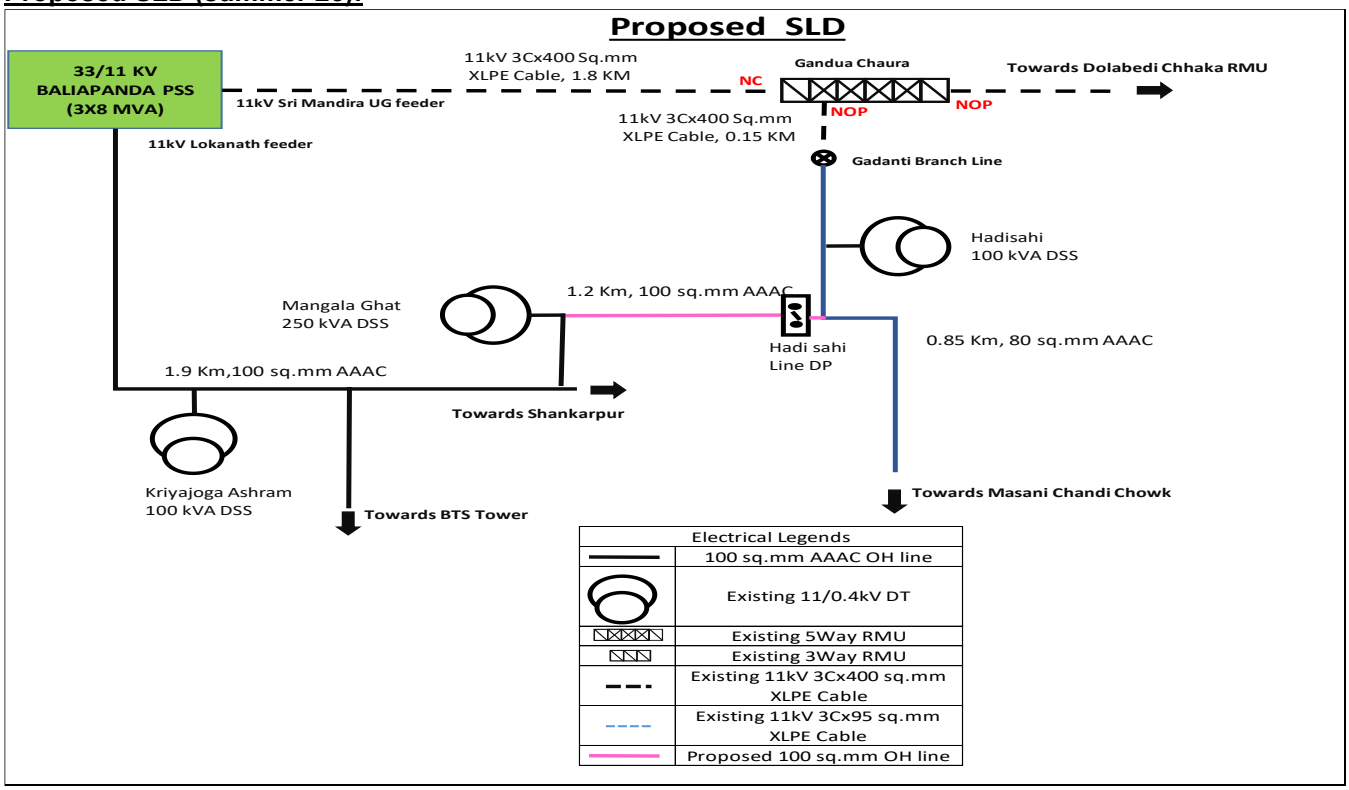
Proposal for construction & laying of 1.2 CKM line using 100 sq.mm AAAC from Mangala ghat 250 KVA DSS to Hadis ahi line AB switch.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Baliapanda	Loakanath	5.19	3.85	74%	4.92	95%	Underload

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		PED
Name of the Sub-Division : -		PURI-I
Name of the Section : -		Paschimadwar & Baliapanda
Name of the Work :-		Proposal for Augmentation of 11kV Lokanath feeder 1.2 CKM by using 100 SQ.MM. AAA Conductor from Mangalaghat 250 DSS to Hadisahi Line AB Switch.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Refurbishment & Augmentation of 1.2 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 100 mm2 AAAC.	18,33,738.14
2	**Total Gross**	**18,33,738.14**
Total estimated cost is Rs. 0.18 Cr.		

Cost Estimate: 0.18 cr. (For detailed BoQ refer Annexure 9.45)

Benefit:

- To maintain reliable Power Supply to urban consumers by strengthening the line & mitigation of overloading issue of 11kv Lokanath feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

46. Mitigation of Feeder Overloading issue of 11kV Khandiabandha Feeder

Proposal: Proposal for Augmentation of 11kV Khandiabandha feeder 3.6 CKM by using 100 SQ.MM. AAA & 0.4 KM U/G line by using 3CX400 sq.mm XLPE U/G cable from Atharnala PSS to Masani chandi Chowk.

Objective: To mitigate the overloading issue of 11kV Khandiabandha feeder.

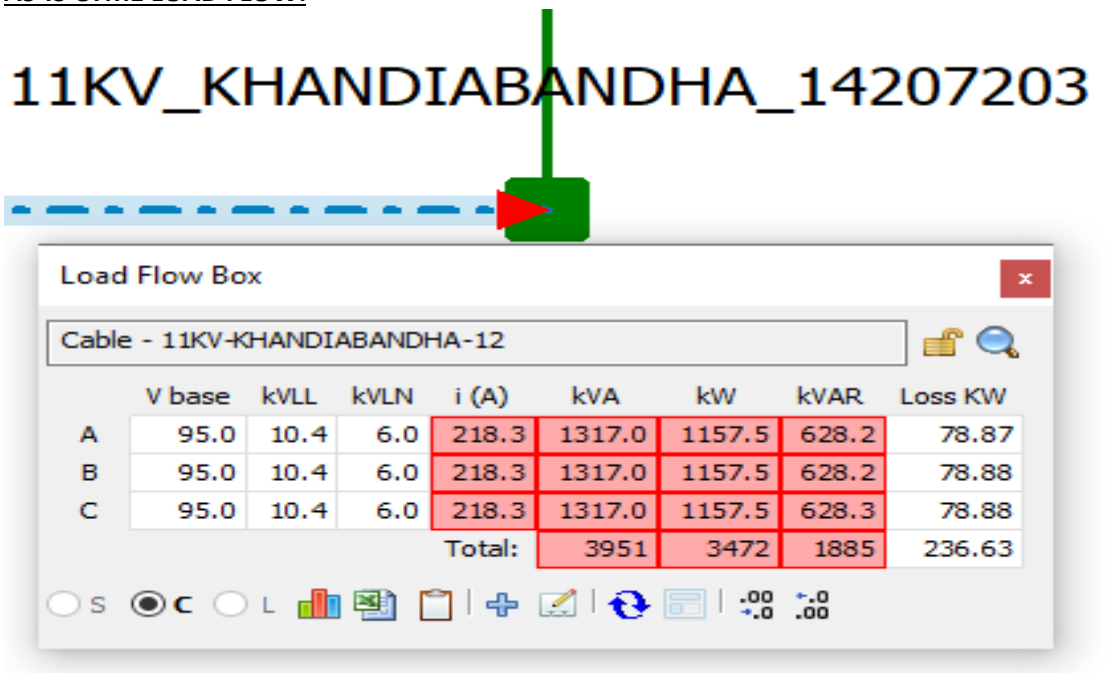
Existing Scenario:

- At present, 11kV Khandiabandha feeder is emanating from 33/11kV Atharnala PSS.Total length of this feeder is 6.5 km and the peak load is 3.13 MVA.
- In the existing scenario, conductor size of 11kV Khandiabandha feeder is 55/80 sq.mm & the feeder is 88% loaded w.r.t the current carrying capacity of the conductor and 113% loaded considering 13% load growth for urban feeders.

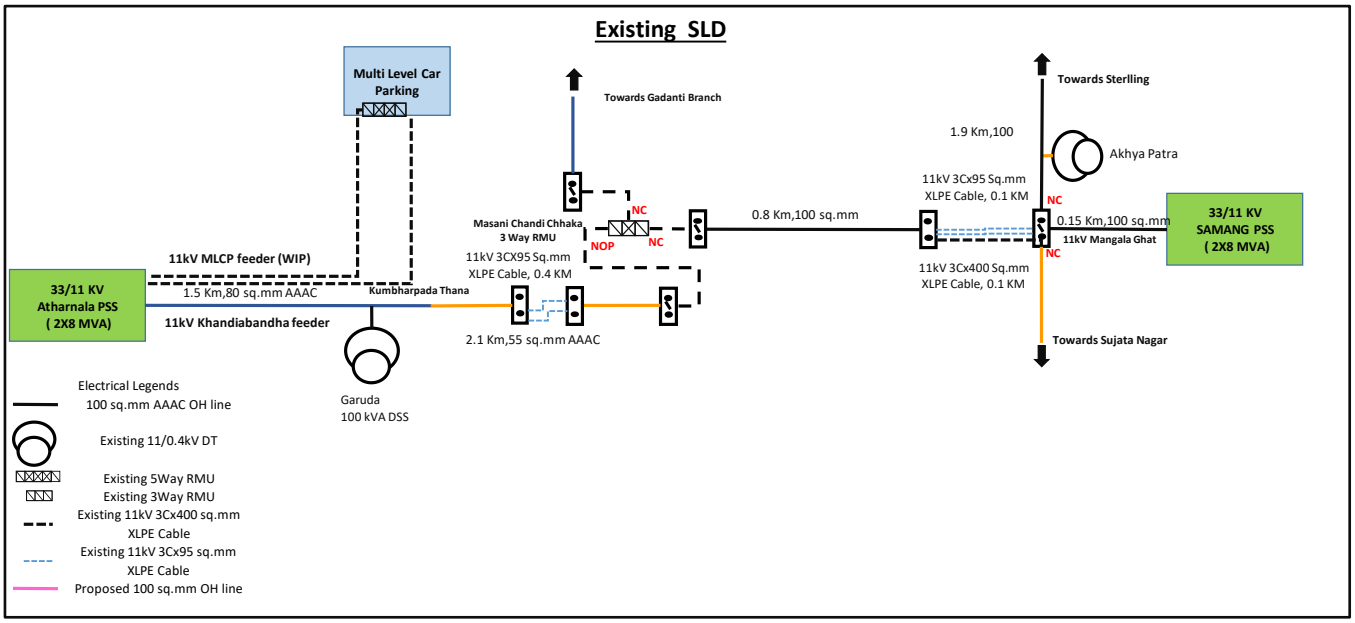
- This feeder is mainly feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Samanga	Mangala Ghat	5.19	2.86	55%	3.66	70%	Underload
Atharnala	Khandiabandha	3.55	3.13	88%	4.00	113%	Overload

AS-IS CYME LOAD FLOW:



Existing SLD (summer'25):

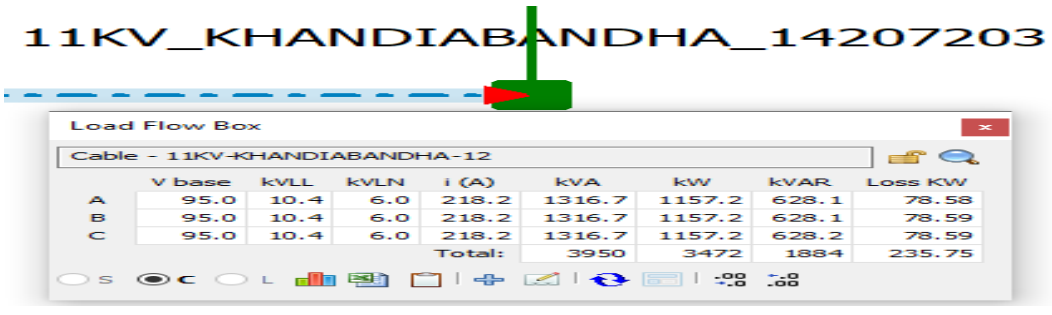


Proposed Scenario:

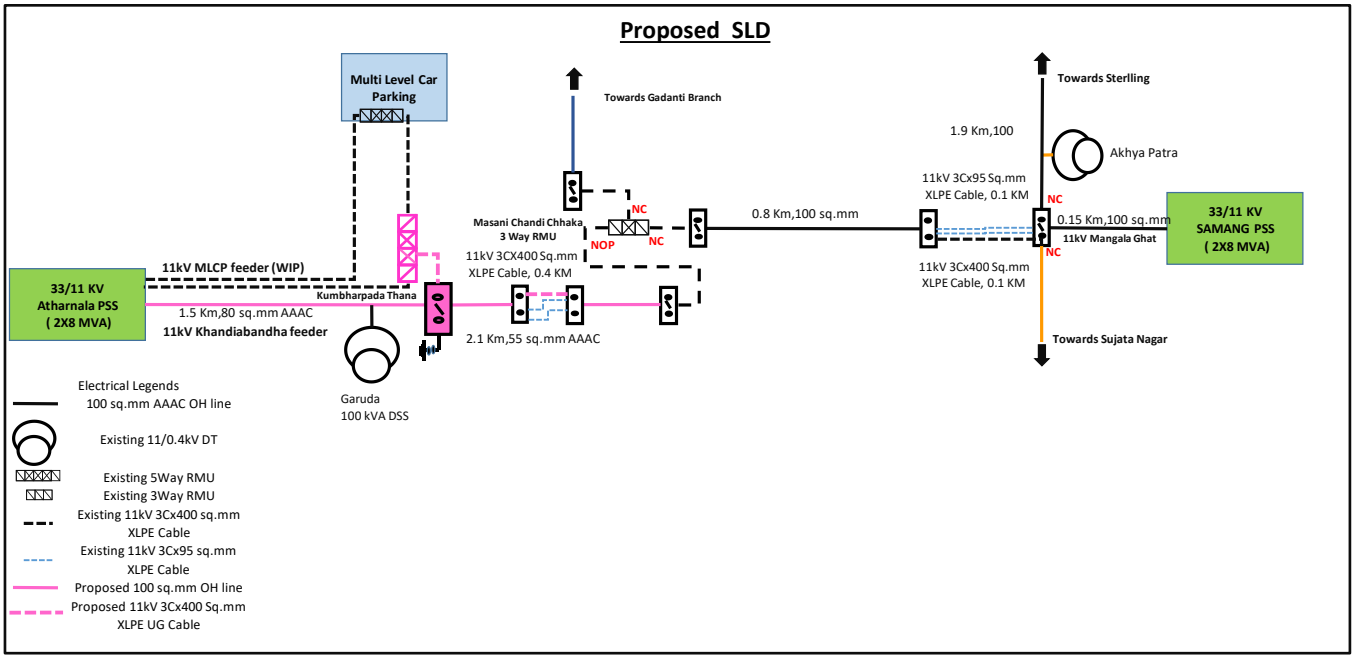
Proposal for construction & laying of 3.6 CKM line using 100 sq.mm AAAC & 0.4 kM U/G line by using 3CX400 sq.mm XLPE U/G cable from Atharnala PSS to Masani Chandi Chowk.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Samanga	Mangala Ghat	5.19	2.86	55%	3.66	70%	Under Load
Atharnala	Khandiabandha	5.19	3.13	60%	4.00	77%	Under Load

Proposed CYME LOAD FLOW:



Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	PED
Name of the Sub-Division : -	PURI-I
Name of the Section : -	Paschimadwar & Power House
Name of the Work :-	Proposal for Augmentation of 11kV Khandiabandha feeder 3.6 CKM by using 100 SQ.MM. AAA & 0.4 KM U/G line by using 3CX400 sq.mm XLPE U/G cable from Atharnala PSS to Masani chandi Chowk.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART-A : Refurbishment & Augmentation of 3.6 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 100 mm2 AAAC.	46,68,660.59
2	PART B: Supply and laying of, 11 kV ,3C X 400 sqmm XLPE UG cable= Length 0.4 Km , without spare run.	50,83,729.60
3	**Total Gross**	**97,52,390.20**
Total estimated cost is Rs. 0.98 Cr.		

Cost Estimate: 0.98 cr. (For detailed BoQ refer Annexure 9.46)

Benefit:

- To maintain reliable Power Supply to urban consumers by strengthening the line & mitigation of overloading issue of 11kv Khandiabandha feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

47. Mitigation of Feeder Overloading issue of 11kV Daspalla Feeder

Proposal: Proposal for Augmentation of 11kV Daspalla feeder, 1 CKM by using 100 SQ.MM. AAAC from Daspalla PSS to Raibandha T-off point.

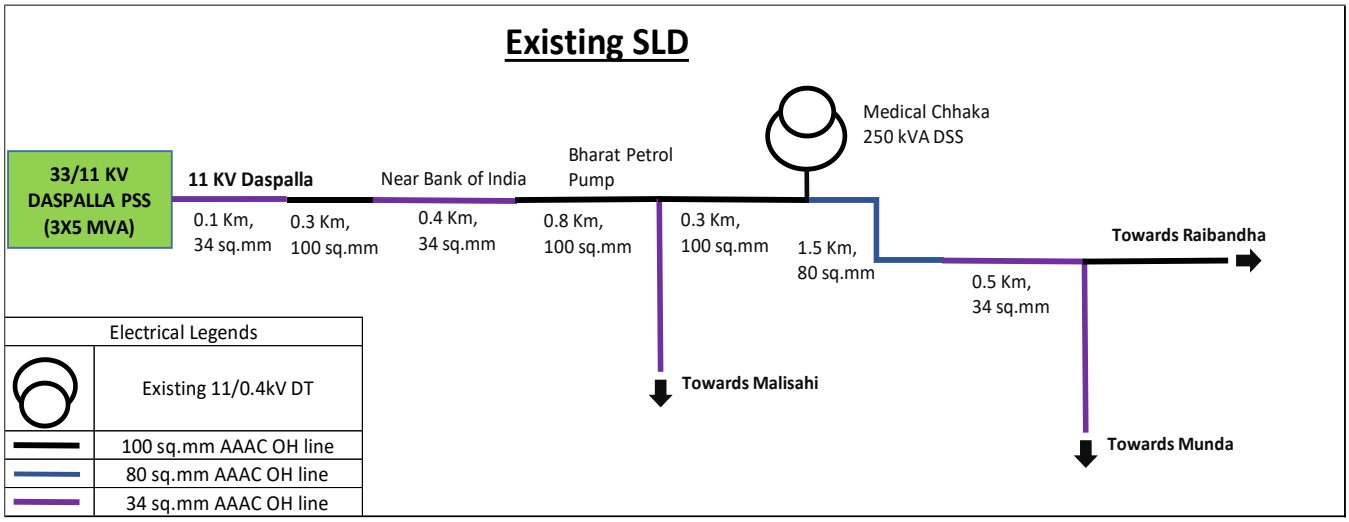
Objective: To mitigate the overloading issue of 11kV Daspalla feeder.

Existing Scenario:

- At present, 11kV Daspalla feeder is emanating from 33/11kV Daspalla PSS.Total length of this feeder is 90.47 km and the peak load is 3.82 MVA.
- In the existing scenario, conductor size of 11kV Khandiabandha feeder is 100/80/34 sq.mm & the feeder is 145% loaded w.r.t the current carrying capacity of the conductor and 185% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers & some part of urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Daspalla	Daspalla	2.63	3.82	145%	4.45	169%	Overload

Existing SLD (summer'25):

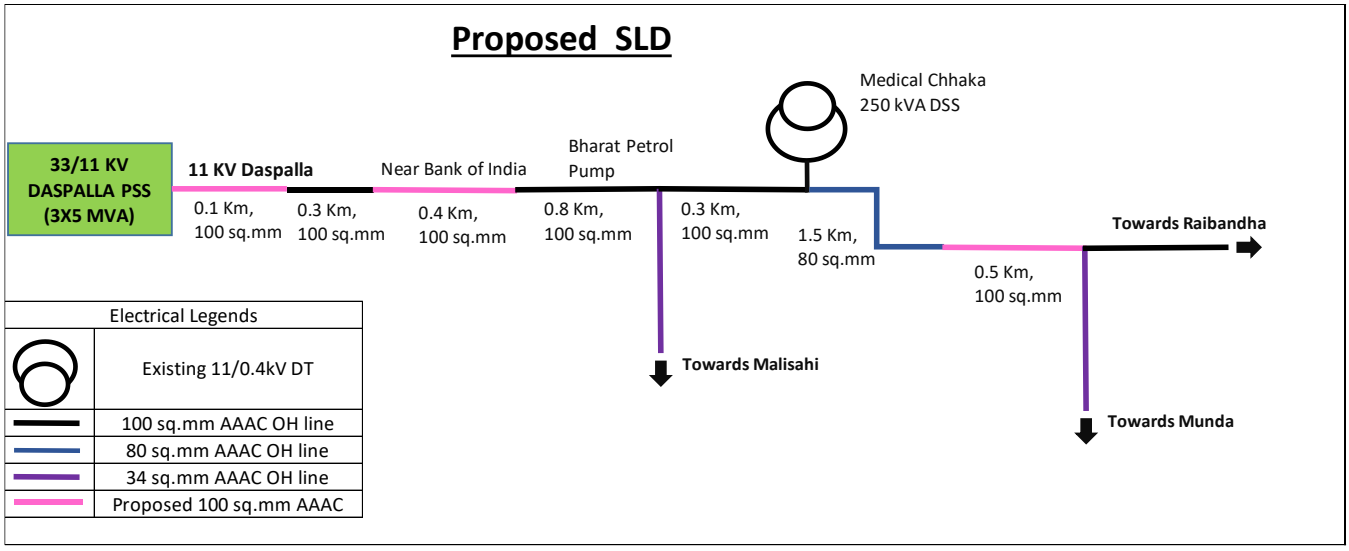


Proposed Scenario:

Proposal for Augmentation of 1 CKM line using 100 sq.mm AAAC from Daspalla PSS to Raibandha T-off point.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Daspalla	Daspalla	5.19	3.82	74%	4.45	86%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		NYED
Name of the Sub-Division : -		Daspalla
Name of the Section : -		Daspalla
Name of the Work :-		Proposal for Augmentation of 11kV Daspalla feeder, 1 CKM by using 100 SQ.MM. AAAC from Daspalla PSS to Raibandha T-off point.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Refurbishment & Augmentation of 1 CKM 3ph 3w 11KV OH line over 11 Mtr WPB & existing pole with 100 mm2 AAAC.	16,04,166.89
2	**Total Gross**	**16,04,166.89**
Total estimated cost is Rs. 0.16Cr.		

Cost Estimate: 0.16 cr. (For detailed BoQ refer Annexure 9.47)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Daspalla feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

48. Mitigation of Feeder Overloading issue of 11kV Banki Town Feeder

Proposal: Proposal for Bifurcation of existing 11 KV Banki Town Feeder load emanating from 33/11 KV Sunadeimundia PSS by constructing of 2 CKM interlinking line with 11kV Ragadi RWSS feeder emanated from 33/11 KV Sunadeimundia PSS.

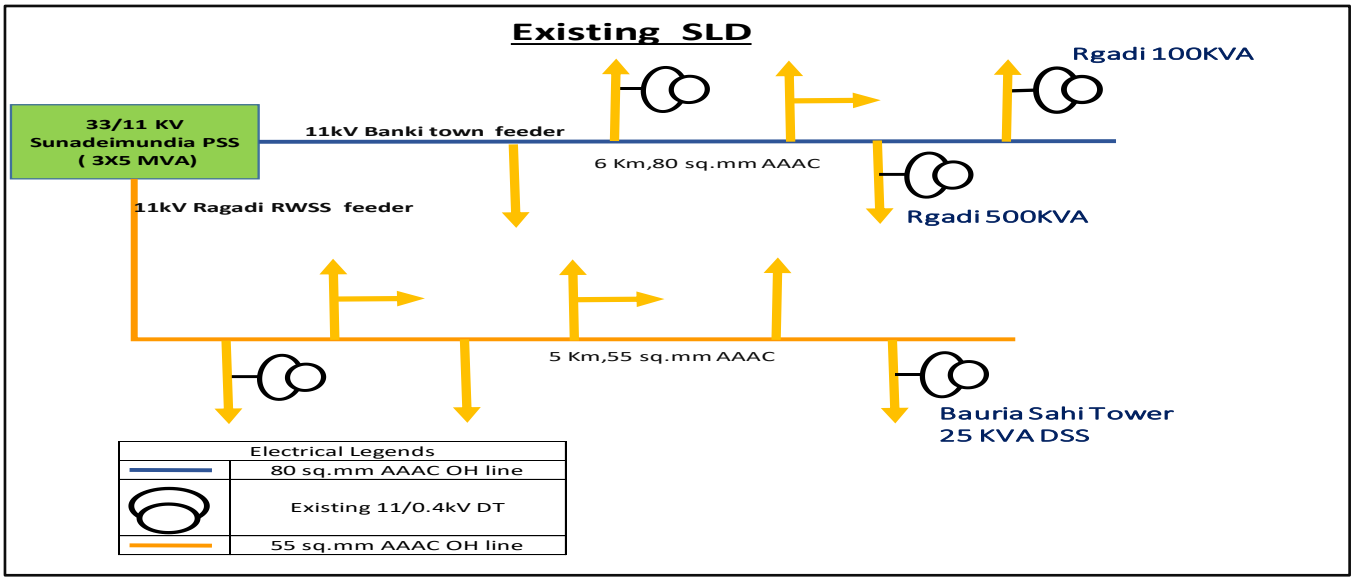
Objective: To mitigate the overloading issue of 11kV Banki Town feeder.

Existing Scenario:

- At present, 11kV Banki Town feeder is emanating from 33/11kV Sunadeimundia PSS.Total length of this feeder is 37.16 km and the peak load is 4.68 MVA.
- In the existing scenario, conductor size of 11kV Khandiabandha feeder is 80/55 sq.mm & the feeder is 103% loaded w.r.t the current carrying capacity of the conductor and 121% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers & some part of urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the rural area, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Sunadeimundia	Banki Town	4.52	4.68	103%	5.45	121%	Overload
Sunadeimundia	Ragadi RWSS	3.55	0.57	16%	0.67	19%	Underload

Existing SLD (summer'25):

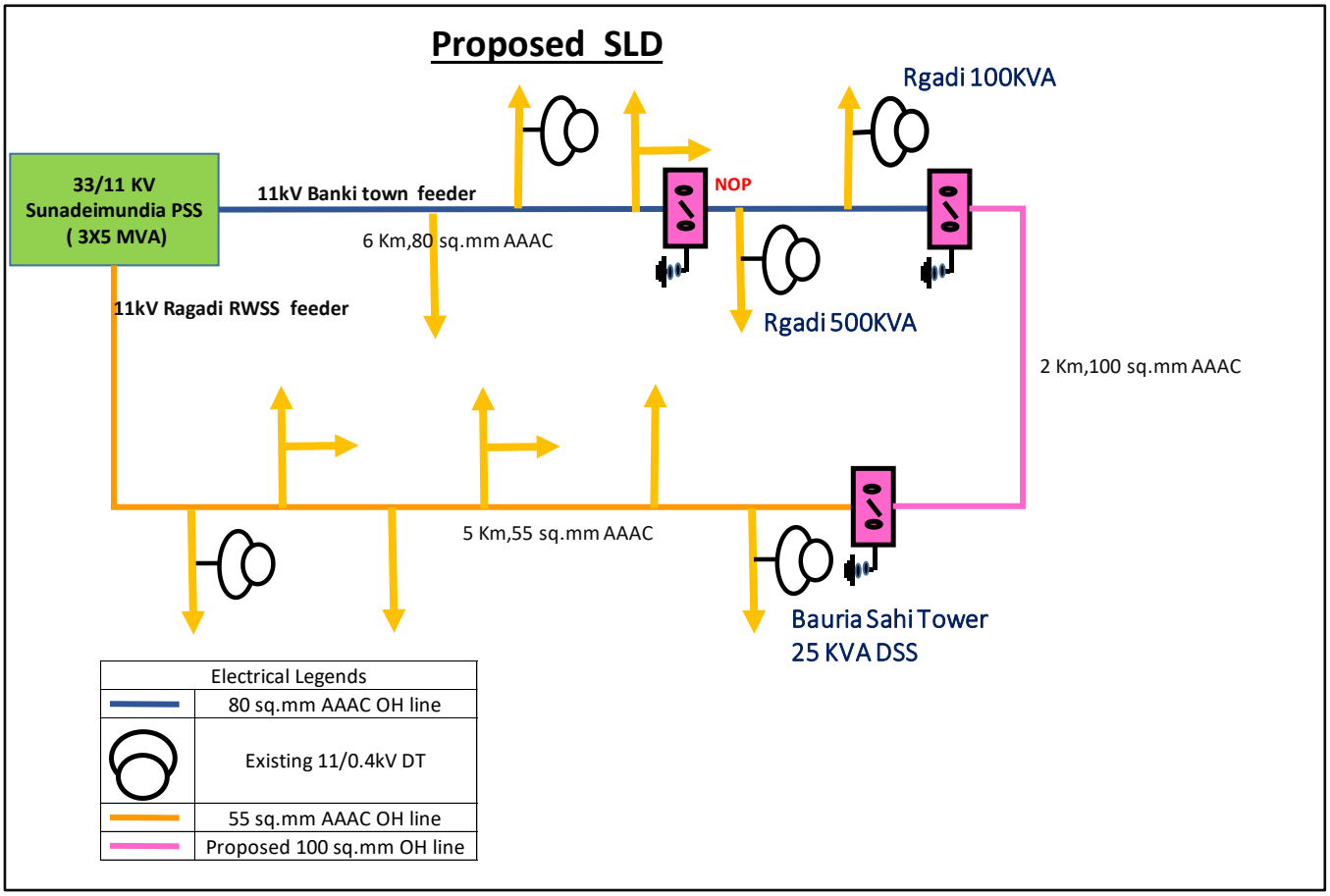


Proposed Scenario:

Proposal to divert load by Construction of 2 CKM interlinking line using 100 sq.mm AAAC from Ragadi 100 KVA DSS to Bauria Sahi 25 KVA DSS of Ragadi RWSS feeder.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Sunadeimundia	Banki Town	4.52	3.00	66%	3.50	77%	Under Load
Sunadeimundia	Ragadi RWSS	3.55	2.25	63%	2.63	74%	Under Load

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		KHD
Name of the Sub-Division : -		Banki
Name of the Section : -		Banki-I
Name of the Work :-		Proposal for Bifurcation of existing 11 KV Banki Town Feeder load emanating from 33/11 KV Sunadeimundia PSS by constructing of 2 CKM interlinking line with 11kV Ragadi RWSS feeder emanated from 33/11 KV Sunadeimundia PSS.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A : Construction of 2 CKM 3ph 3w 11KV OH line over 11 Mtr WPB (GI) Pole 160x152 pole with 100 mm2 AAAC.	41,99,279.98
3	**Total Gross**	**41,99,279.98**
Total estimated cost is Rs. 0.41 Cr.		

Cost Estimate: 0.41 cr. (For detailed BoQ refer Annexure 9.48)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Banki Town feeder.
- The above arrangement will help to release power supply to upcoming potential consumers of urban area.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

49. Mitigation of Feeder Overloading issue of 11 KV Padmapur Feeder

Proposal: Proposal for construction of 11 KV linking line of 3 CKM from Dhiasahi to Satabatia and augmentation of Patapur feeder from Gopal sahi 100KVA DTR to RWSS 63KVA DTR (80-100 Sq.mm.AAAC) of 1 CKM.

Objective: To mitigate the overloading issue of 11 kV Padmapur feeder.

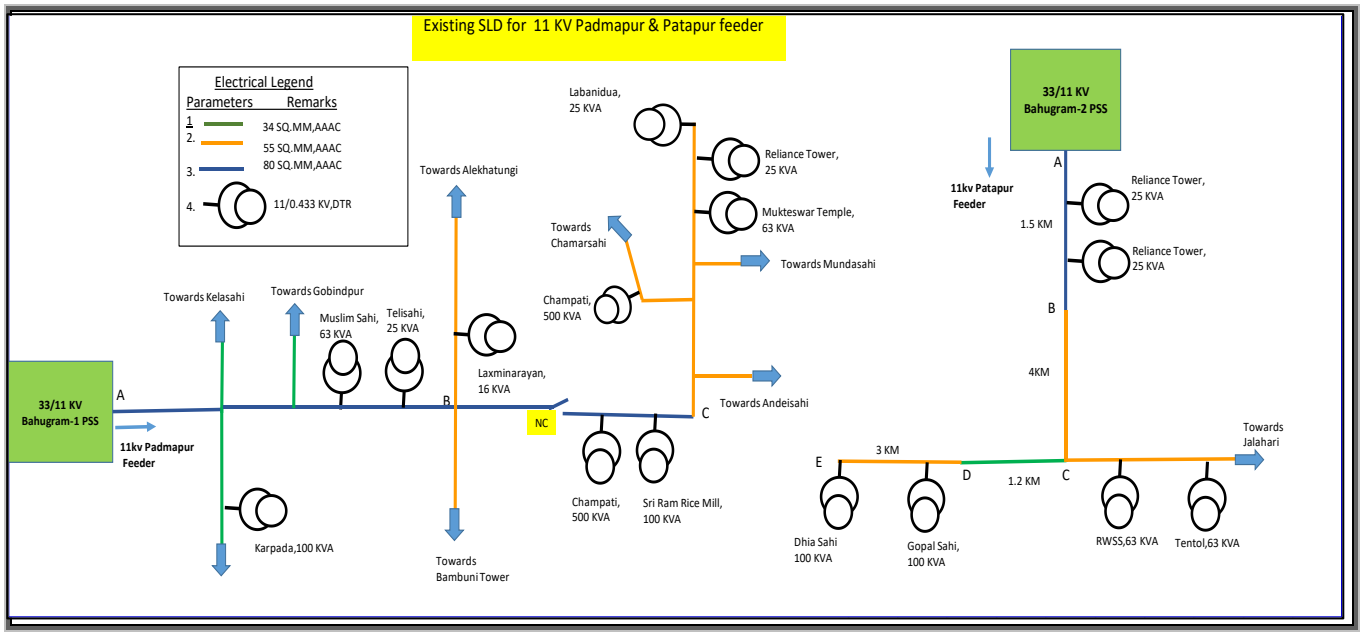
Existing Scenario:

- At present, 11kV Padmapur feeder is emanating from 33/11kV Bahugram-1 PSS.Total length of this feeder is 19.5 km and the peak load is 4.77MVA.
- In the existing scenario, conductor size of 11kV Jarasingha feeder is 34/55/80sqmm & the feeder is 105% loaded w.r.t the current carrying capacity of the conductor and 123% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading								
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Bahugram1	Padmapur	4.52	4.77	105%	Underload	5.56	123%	Overload

Existing Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Bahugram 2	Patapur	3.55	1.18	33%	Underload	1.38	39%	Underload

Existing SLD:



Proposed Scenario:

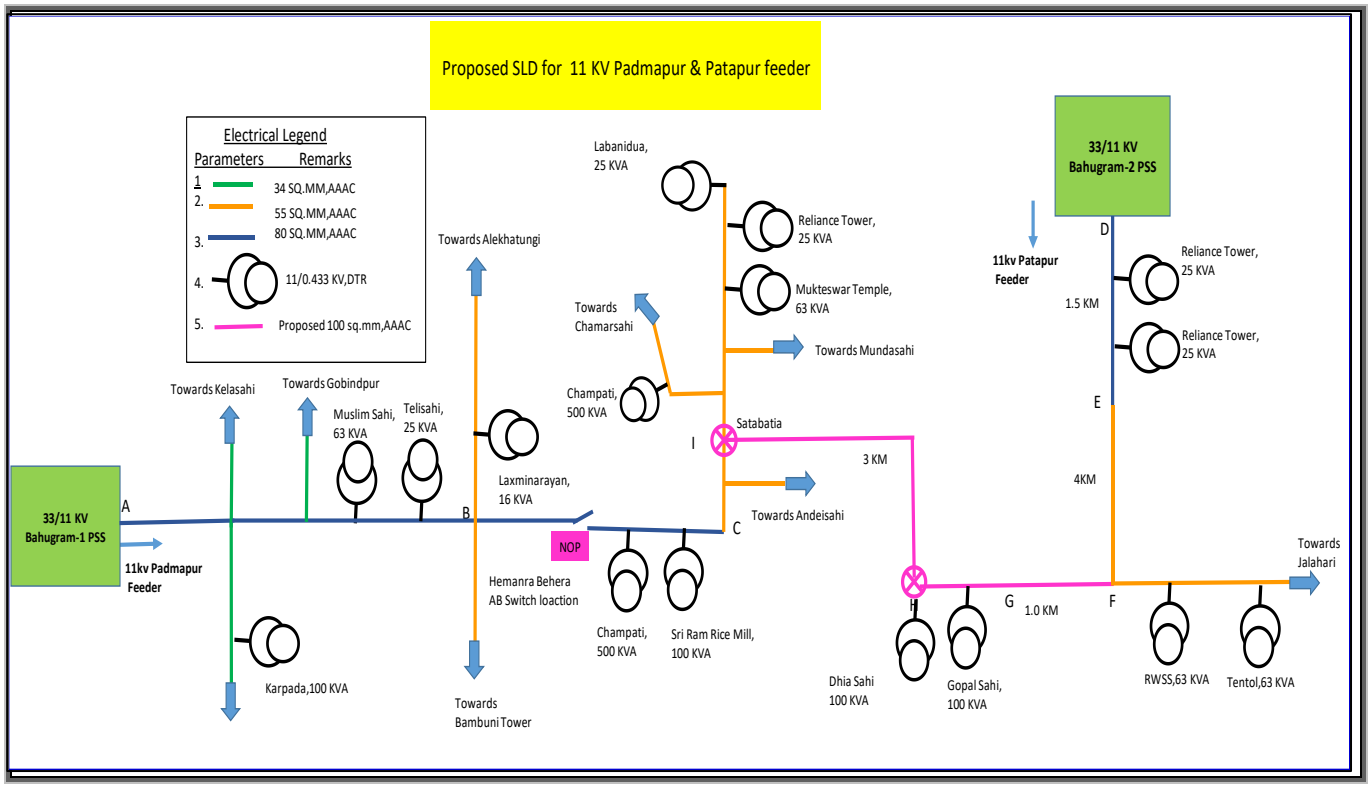
1. Augmentation of existing feeder from Gopal sahi 100KVA DTR to RWSS 63KVA DTR (80-100 Sq.mm.AAAC) of 1 CKM.

2. Construction of 3 CKM of New line using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAA Conductor from Dhiasahi to Satabatia.

Proposed Loading of 11 KV Padmapur feeder								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Bahugram1	Padmapur	4.52	3.24	72%	OK	3.78	84%	OK

Proposed Loading of 11 KV Patapur feeder								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Bahugram2	Patapur	3.55	2.71	76%	OK	3.16	89%	OK

Proposed SLD



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		SED
Name of the Sub-Division : -		Salipur
Name of the Section : -		Bahugram
Name of the Work :-		**PART-A:-** Augmentation of Patapur feeder from Gopal sahi 100KVA DTR to RWSS 63KVA DTR (80-100 Sq.mm. AAAC) of 1 CKM. **PART-B:-** Construction of 3KM of New line using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAA Conductor from Dhiasahi to Satabatia.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Augmentation of Patapur feeder from Gopal sahi 100KVA DTR to RWSS 63KVA DTR (80-100 Sq.mm.AAAC) of 1 CKM.	1408226.318

2	PART-B; -Construction of 3 CKM of New line using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 100 SQ.MM. -AAA Conductor from Dhiasahi to Satabatia.	5808952.945
3	**Total Gross**	**72,17,179.26**
Total estimated cost is Rs. 0.72Cr.		

Cost Estimate: 0.72 cr. (For detailed BoQ refer Annexure 9.49)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11 kv Padmapur feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

50. Mitigation of Feeder Overloading issue of 11kv Paramahansa Feeder

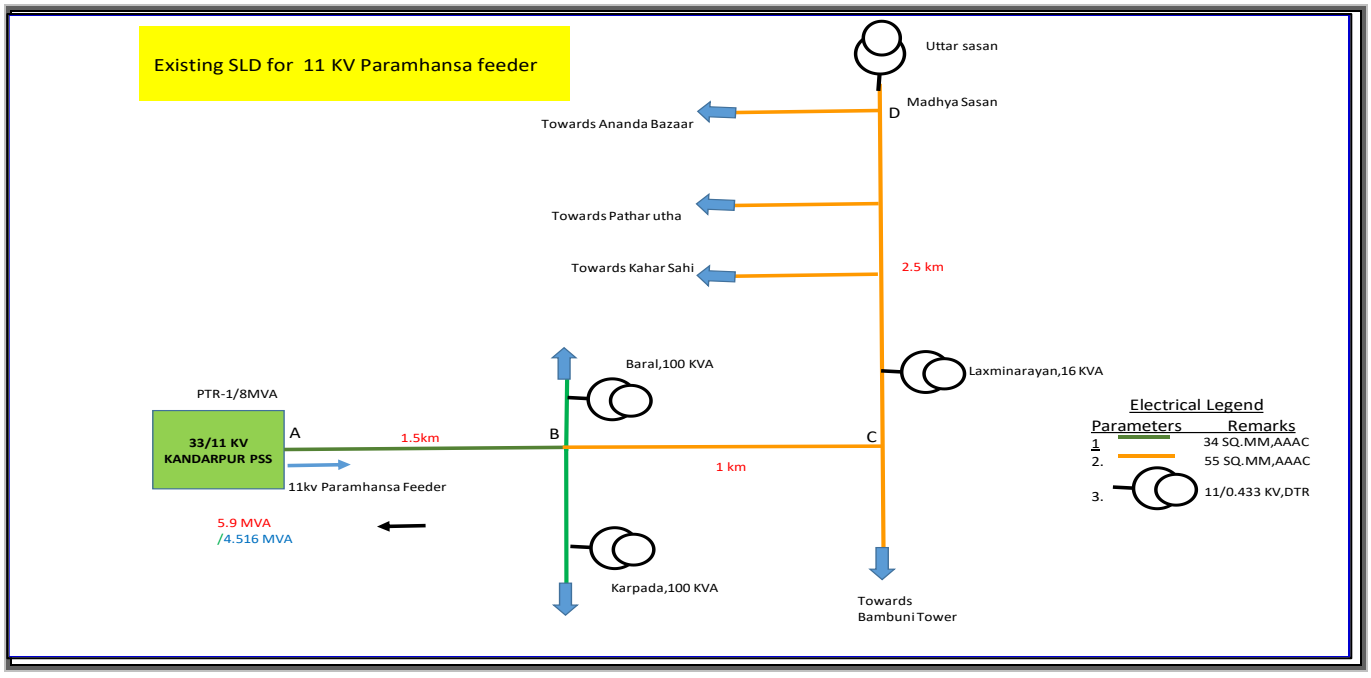
Proposal: Proposal for augmentation of 11 KV Paramahansa feeder from Kandarpur PSS to 3-Pole Banguri for 5 CKM from 34 to 100 Sq.mm.AAAC.

Objective: To mitigate the overloading issue of 11 kV Paramahansa feeder.

Existing Scenario:

- At present, 11kV Paramahansa feeder is emanating from 33/11kV Kandarpur PSS.Total length of this feeder is 21.4 km and the peak load is 2.29 MVA.
- In the existing scenario, conductor size of 11kV Paramahansa feeder is 34/55 sqmm & the feeder is 87% loaded w.r.t the current carrying capacity of the conductor and 111% loaded considering 13% load growth for urban feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading								
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Kandarpur	PARAMAHANSA	2.63	2.29	87%	Overload	2.92	111%	Overload

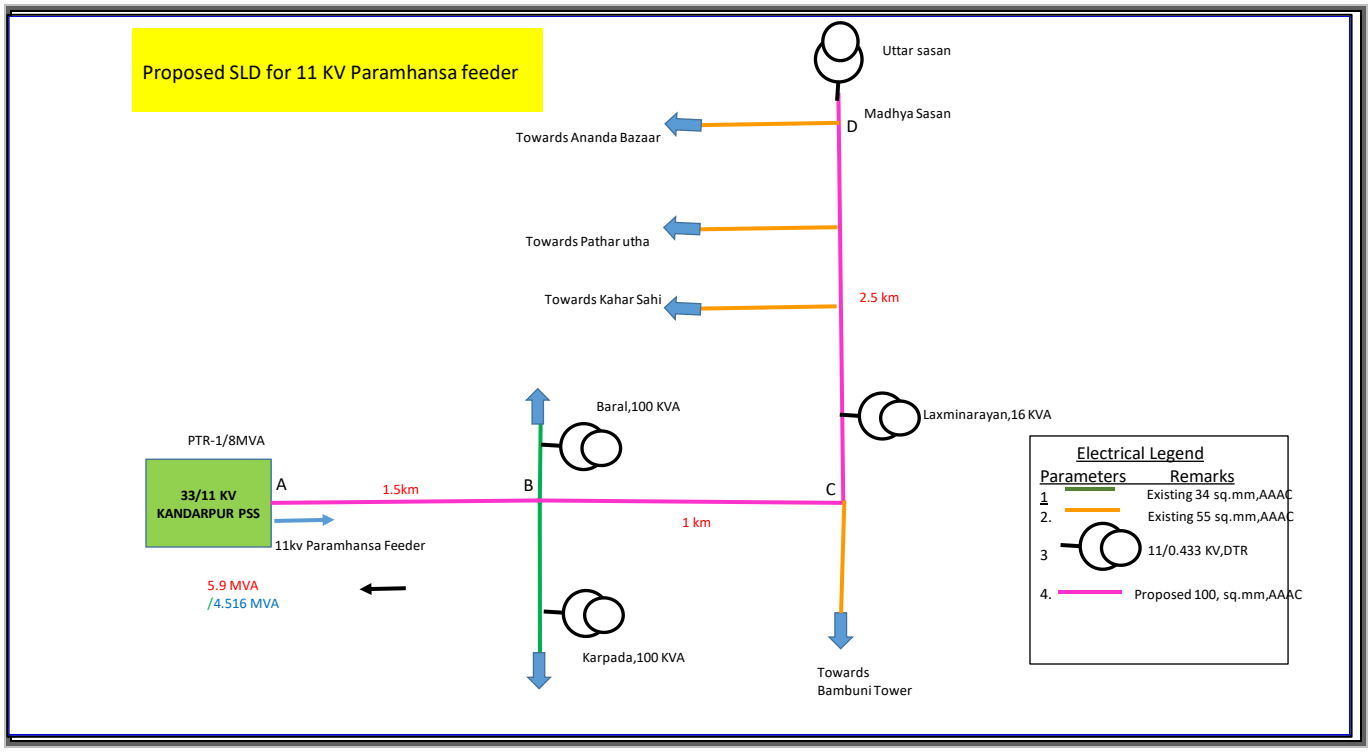


Proposed Scenario:

Proposal for augumentation of 11 KV Paramahansa feeder from Kandarpur PSS to 3-Pole Banguri for 5KM, as existing 11 kv Paramahansa feeder emanating from Kandarpur PSS overloaded over 5 mva PTR,So feeder augumentation required from 34 to 100 Sq.mm.AAAC .

Proposed Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Kandarpur	PARAMAHANSA	5.19	2.29	44%	OK	2.92	56%	OK

Proposed SLD



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	CDD-2
Name of the Sub-Division : -	Jagatpur
Name of the Section : -	Kandarpur
Name of the Work :-	Proposal for Construction for 5 CKM of Augmentation from 34 to 100 Sq.mm.AAAC of existing feeder from Kandarpur PSS to 3-Pole Bangauri 100KVA DTR.

Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART A: Proposal for Construction for 5 CKM of Augmentation from 34 to 100 Sq.mm.AAAC of existing feeder from Kandarpur PSS to 3-Pole Bangauri 100KVA DTR.	6604388.496
4	**Total Gross**	**66,04,388.50**
Total estimated cost is Rs. 0.66Cr.		

Cost Estimate: 0.66 cr. (For detailed BoQ refer Annexure 9.50)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Paramahansa feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

51. Mitigation of Feeder Overloading issue of 11kv Mahanadivihar-1 Feeder

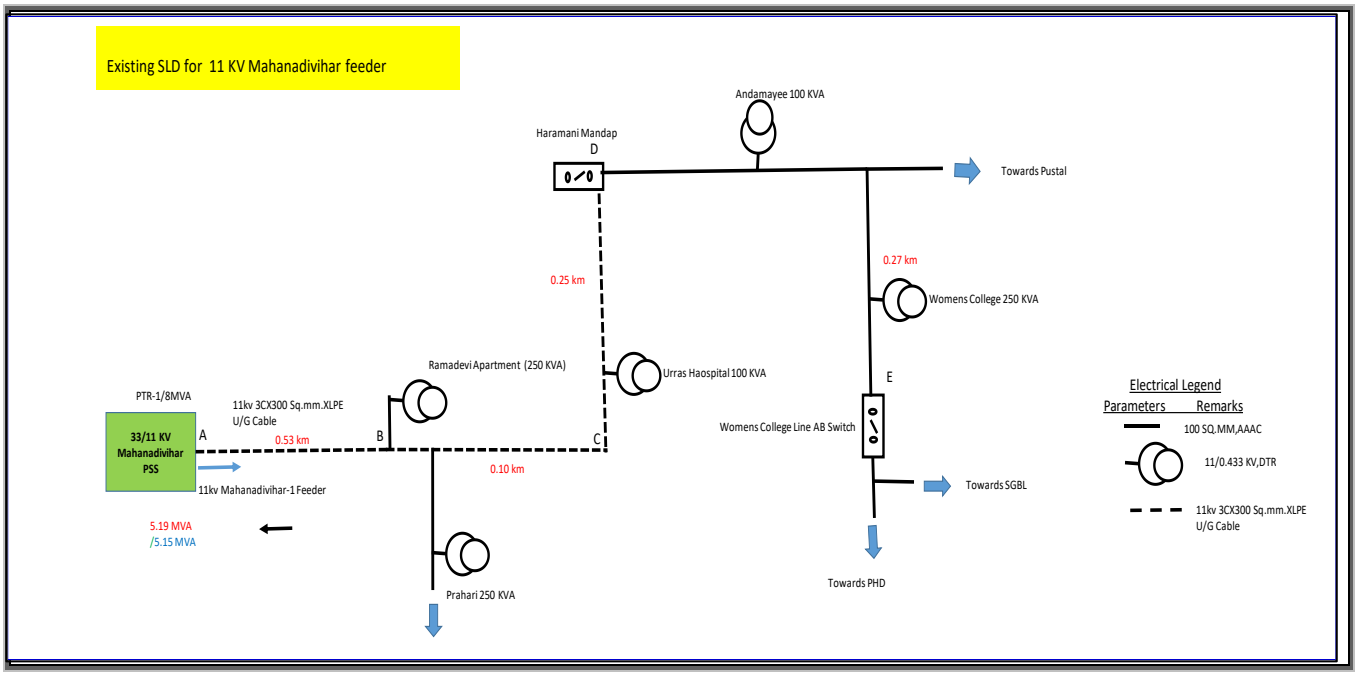
Proposal: Proposal for construction of new 11 KV line by laying of 11KV 3CX400 Sq.mm. XLPE U/G Cable for 1 KM from Mahanadivihar PSS to Koila field for load bifurcation of existing 11 KV Mahanadivihar-1 feeder.

Objective: To mitigate the overloading issue of 11 kV Mahanadivihar-1 feeder.

Existing Scenario:

- At present, 11kV Mahanadivihar-1 feeder is emanating from 33/11kV Mahanadivihar PSS.Total length of this feeder is 7.4 km and the peak load is 5.15 MVA.
- In the existing scenario, conductor size of 11kV Mahanadivihar-1 feeder is 100sqmm & the feeder is 99% loaded w.r.t the current carrying capacity of the conductor and 127% loaded considering 13% load growth for urban feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV Mahanadivihar-1 feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Mahanadivihar	Mahanadivihar-1	5.19	5.15	99%	Overload	6.58	127%	Overload



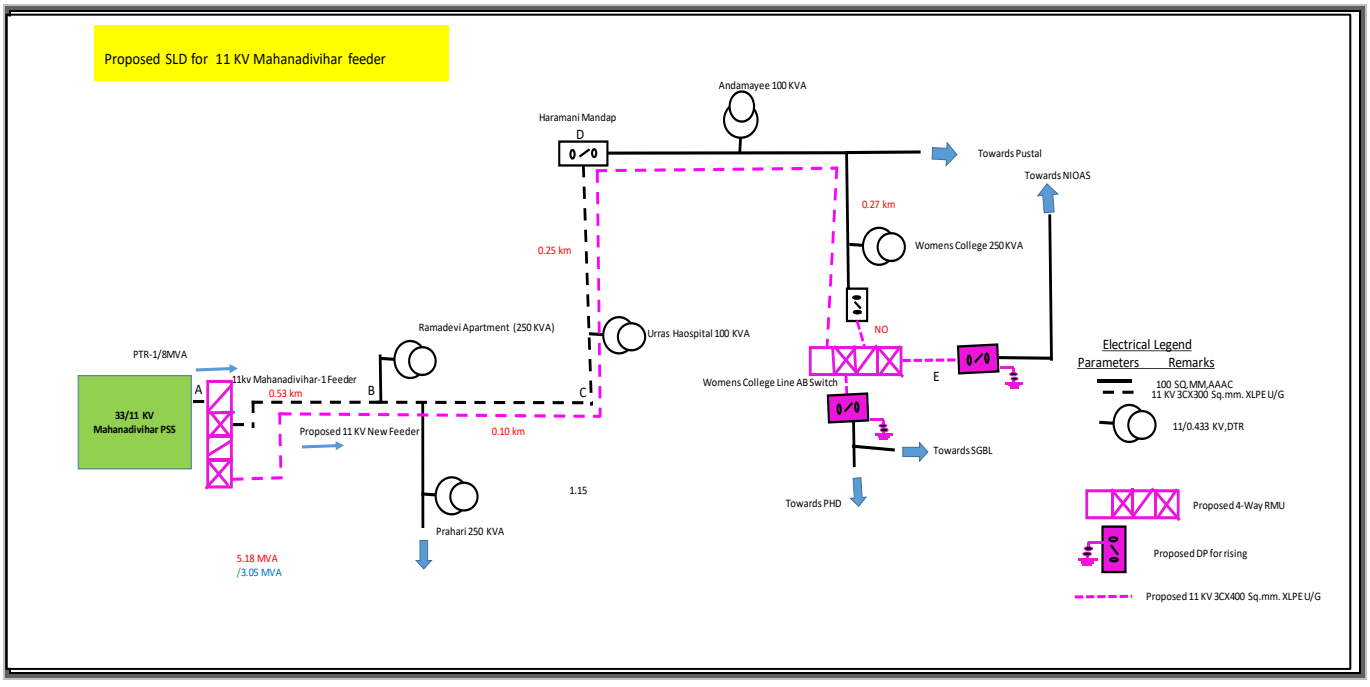
Proposed Scenario:

Construction of new line by laying of 11KV 3CX400 Sq.mm. XLPE U/G Cable for 1 CKM from Mahanadivihar PSS to Koila field for load bifurcation of existing 11 KV Mahanadivihar-1 feeder, as existing 11 kv Mahanadivihar-1 feeder emanating from Mahanadivihar PSS overloaded over 8 mva PTR. So, feeder load bifurcation required to mitigate the overloading issue.

Proposed Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Mahanadivihar	Mahanadivihar-1	5.19	3.05	59%	OK	3.90	75%	OK

New Feeder Proposed Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Mahanadivihar	Proposed New 11 KV Feeder	5.19	2.10	40%	OK	2.68	52%	OK

Proposed SLD



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		CDD-2
Name of the Sub-Division : -		Mahanadivihar
Name of the Section : -		Mahanadivihar-1
Name of the Work :-		**PART-A:-** Construction of new 11 KV line by laying of 11KV 3CX400 Sq.mm. XLPE U/G Cable for 1 CKM from Mahanadivihar PSS to Koila field for load bifurcation of existing 11 KV Mahanadivihar-1 feeder. **PART-B:-** Installation of 2 Nos. of DP with AB switch for rising of HT Cable.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A:- Construction of new line by laying of 11KV 3CX400 Sq.mm. XLPE U/G Cable for 1 CKM from Mahanadivihar PSS to Koila field for load bifurcation of existing 11 KV Mahanadivihar-1 feeder.	97,30,426.27
2	PART-B:- Installation of 2 Nos. of DP with AB switch for rising of HT Cable.	4,64,536.10
3	**Total Gross**	**1,01,94,962.37**
Total estimated cost is Rs. 1.01Cr.		

Cost Estimate: 1.01 cr. (For detailed BoQ refer Annexure 9.51)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Mahanadivihar-1 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

52. Mitigation of Feeder Overloading issue of 11 KV Town Feeder

Proposal: Proposal for augmentation of 2 CKM line of 11 KV Ankula feeder from 55 to 100 Sq.mm. AAAC from Athagarh PSS to Birakishorepur and construction of new 11 KV linking line using 100 Sq.mm.AAAC for 500 MTR from Birakishorepur tail end to Birakishorepur 63 KVA DSS.

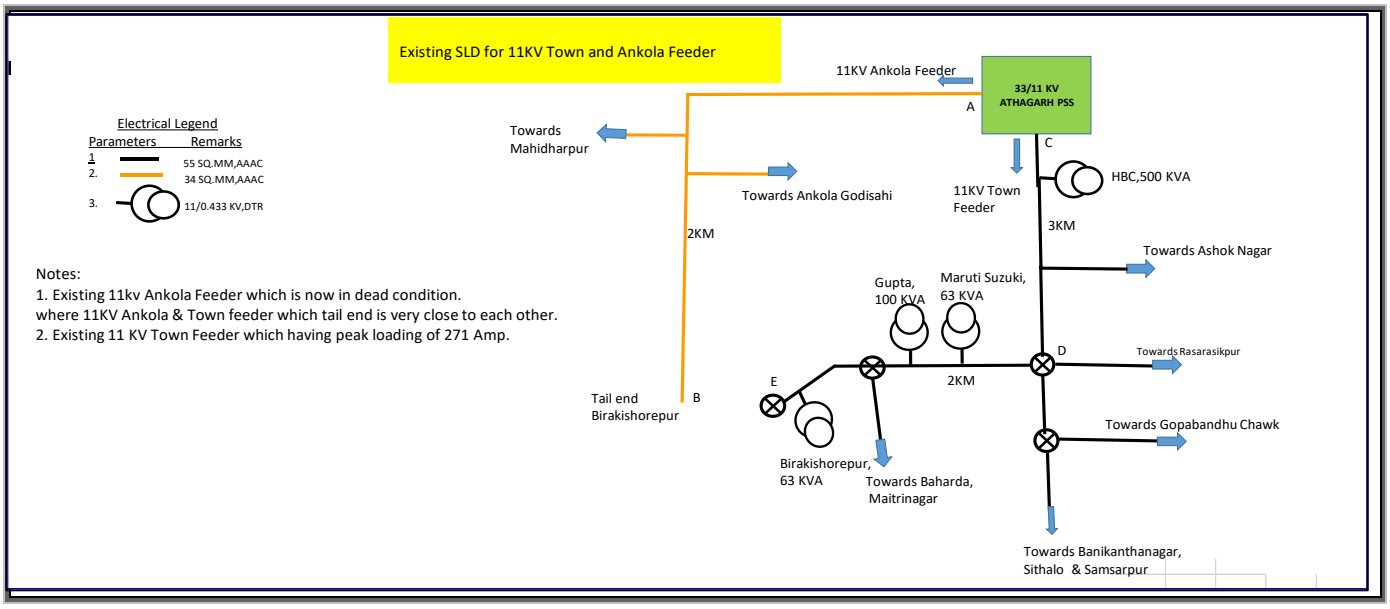
Objective: To mitigate the overloading issue of 11 kV Town feeder.

Existing Scenario:

- At present, 11kV Town feeder is emanating from 33/11kV Athagarh PSS.Total length of this feeder is 21.6 km and the peak load is 5.80 MVA.
- In the existing scenario, conductor size of 11kV Town feeder is 100sqmm & the feeder is 112 % loaded w.r.t the current carrying capacity of the conductor and 143 % loaded considering 13% load growth for urban feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV Town feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Athagarh	Town	5.19	5.80	112%	Overload	7.41	143%	Overload

Existing SLD

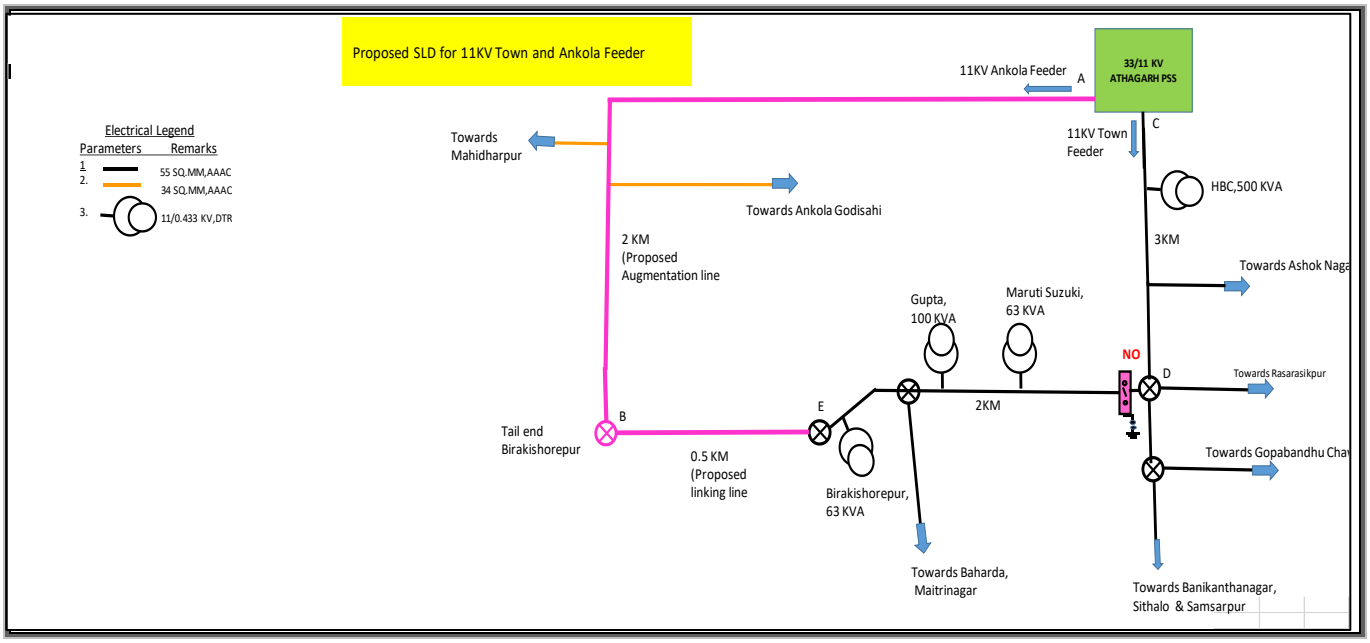


Proposed Scenario:

1. Proposal for augmentation of 2 CKM line of 11 KV Ankula feeder from 55 to 100 Sq.mm. AAAC from Athagarh PSS to Birakishorepur.
2. Construction of new 11 KV line using 100 Sq.mm.AAAC for 500 MTR from Birakishorepur tail end to Birakishorepur 63 KVA DSS due to interlinking existing 11 KV Town feeder with 11 KV Ankulo feeder, inorder to mitigate the overloading issue.

Proposed Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Athagarh	Town	5.19	3.24	63%	OK	4.14	80%	OK

New Feeder Proposed Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Athagarh	Proposed New 11 KV Feeder	5.19	2.55	49%	OK	3.27	63%	OK



Detailed Scope of Work and Abstract of Estimate

TPCODL	
Name of the Division :-	AED
Name of the Sub-Division : -	Athagarh
Name of the Section : -	Athagarh-1
Name of the Work :-	**PART-A:-** Proposal for Construction for 2 CKM of Augmentation from 55 to 100 Sq.mm.AAAC of existing11 KV Town feeder from Athagarh PSS to Birakishorepur. **PART-B:-** Construction of new 11 KV line using 100 Sq.mm.AAAC for 500 MTR from Birakishorepur tail end to Birakishorepur 63 KVA DSS.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART-A:-Proposal for Construction for 2 CKM of Augmentation from 55 to 100 Sq.mm.AAAC of existing11 KV Town feeder from Athagarh PSS to Birakishorepur.	1954843.296
2	PART-B:- Construction of new 11 KV line using 100 Sq.mm.AAAC for 500 MTR from Birakishorepur tail end to Birakishorepur 63 KVA DSS.	1166195.953
3	**Total Gross**	**31,21,039.25**
Total estimated cost is Rs. 0.31Cr.		

Cost Estimate: 0.31 cr. (For detailed BoQ refer Annexure 9.52)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Town feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

53. Mitigation of Feeder Overloading issue of 11 KV Purighat Feeder

Proposal: Proposal for augmentation of 11 KV Purighat Feeder from Sishubhawan PSS to Jhola sahi (100-148 Sq.mm.AAAC) for 3 CKM.

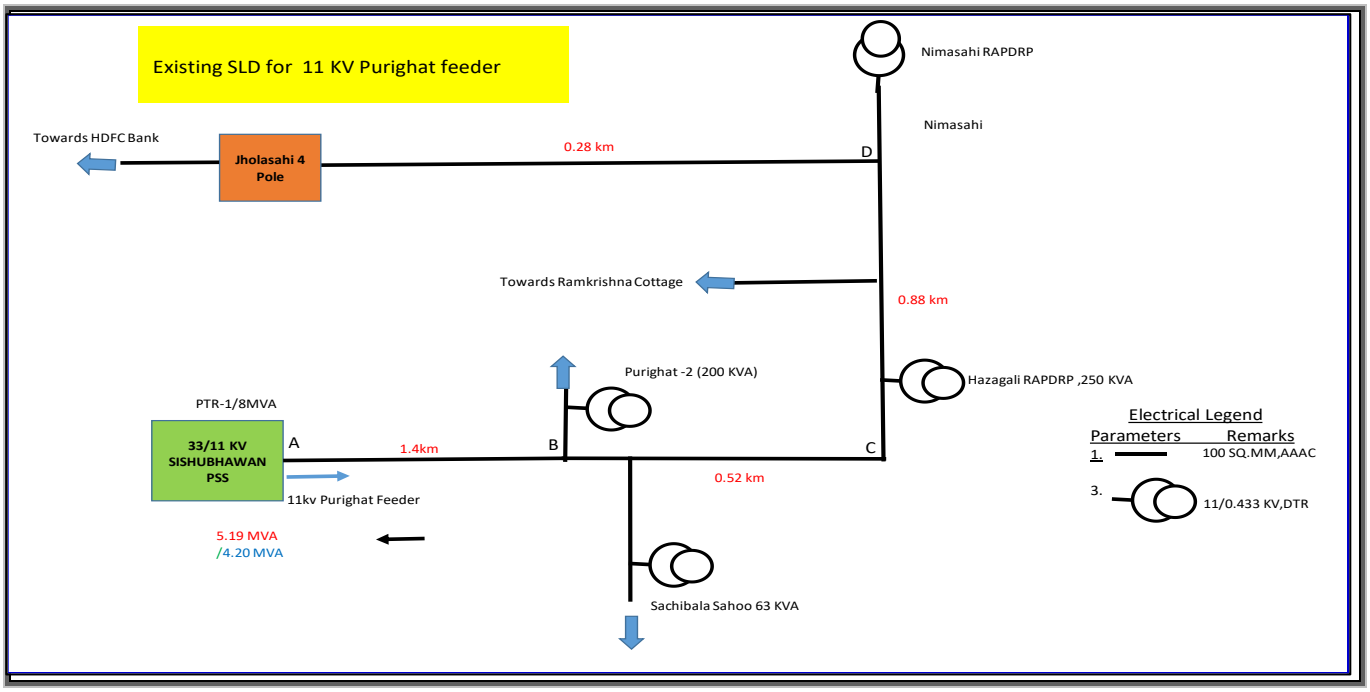
Objective: To mitigate the overloading issue of 11 kV Purighat feeder.

Existing Scenario:

- At present, 11kV Purighat feeder is emanating from 33/11kV Sishubhawan PSS.Total length of this feeder is 3.4 km and the peak load is 4.20 MVA.
- In the existing scenario, conductor size of 11kV Purighat feeder is 100sqmm & the feeder is 81% loaded w.r.t the current carrying capacity of the conductor and 103% loaded considering 13% load growth for urban feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV Purighat feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Sishubhawan	Purighat	5.19	4.20	81%	Overload	5.36	103%	Overload

Existing SLD

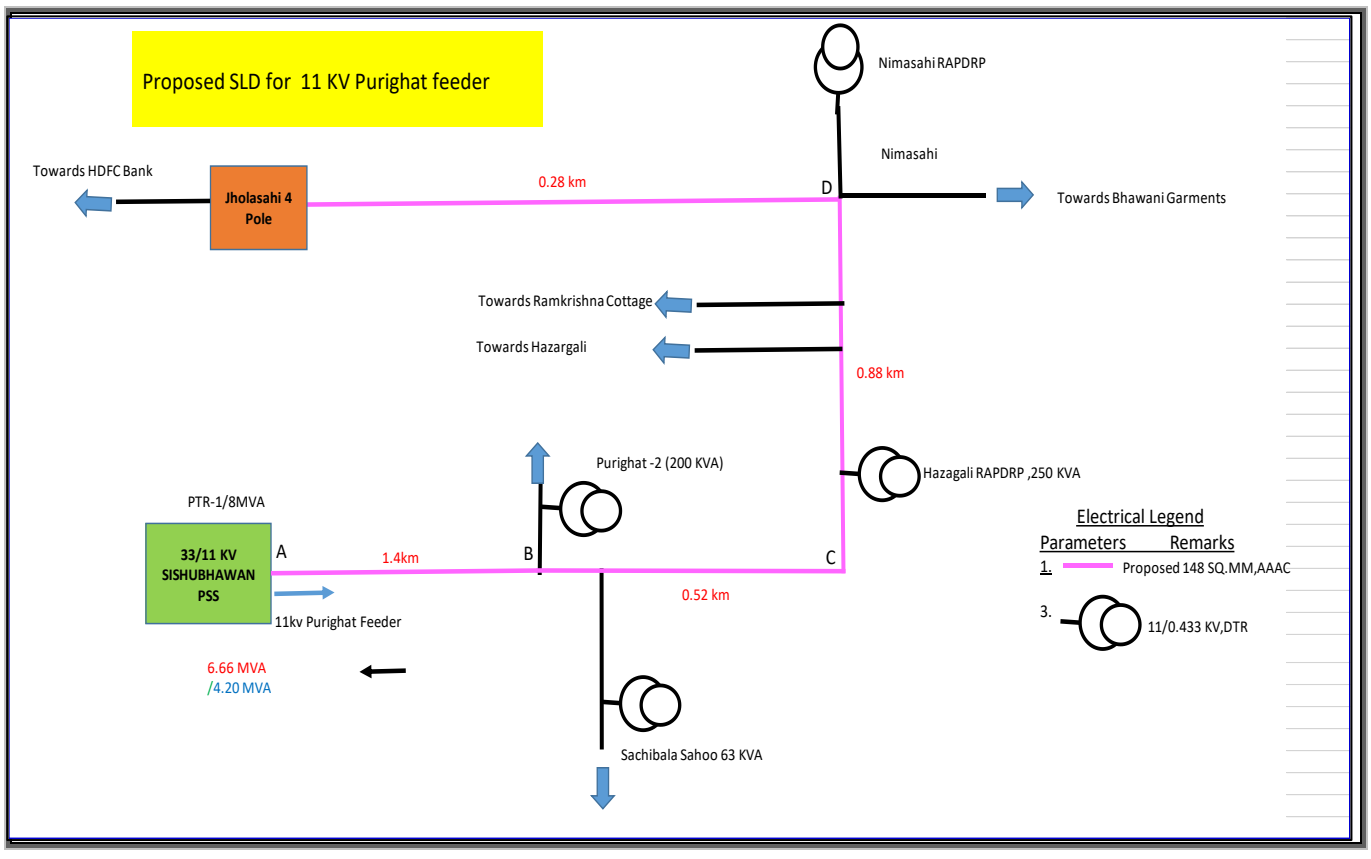


Proposed Scenario:

Proposal for augmentation of 11 KV Purighat Feeder from Sishubhawan PSS to Jhola sahi (100-148 Sq.mm.AAAC) for 3 CKM to mitigate the overloading issue.

Proposed Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Sishubhawan	Purighat	6.68	4.20	63%	OK	5.36	80%	OK

Proposed SLD



Detailed Scope of Work and Abstract of Estimate

TPCODL		
Name of the Division :-		CDD-1
Name of the Sub-Division : -		Sishubhawan
Name of the Section : -		Kajibazar
Name of the Work :-		**PART-A:-** Conductor Augmentation of 11 KV Purighat Feeder from Sishubhawan PSS to Jhola sahi (100-148 Sq.mm.AAAC) for 3 CKM.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A:-Conductor Augmentation of 11 KV Purighat Feeder from Sishubhawan PSS to Jhola sahi (100-148 Sq.mm.AAAC) for 3 CKM.	4767855.721
2	**Total Gross**	**47,67,855.72**
Total estimated cost is Rs. 0.47Cr.		

Cost Estimate: 0.47 cr. (For detailed BoQ refer Annexure 9.53)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Purighat feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

54. Mitigation of Feeder Overloading issue of 11 KV Mahanadi Feeder

Proposal: Proposal for augmentation of 11 KV Mahanadi feeder from 80-100 SQ.MM. -AAA Conductor from Pasupati Agrovet to Pragati cut point for 3.2 CKM and laying of 1.2 KM 11KV U/G cable of 3C X 400 Sq.mm.XLPE cable from Jagatpur(IPICOL) PSS to Pragati cut point.

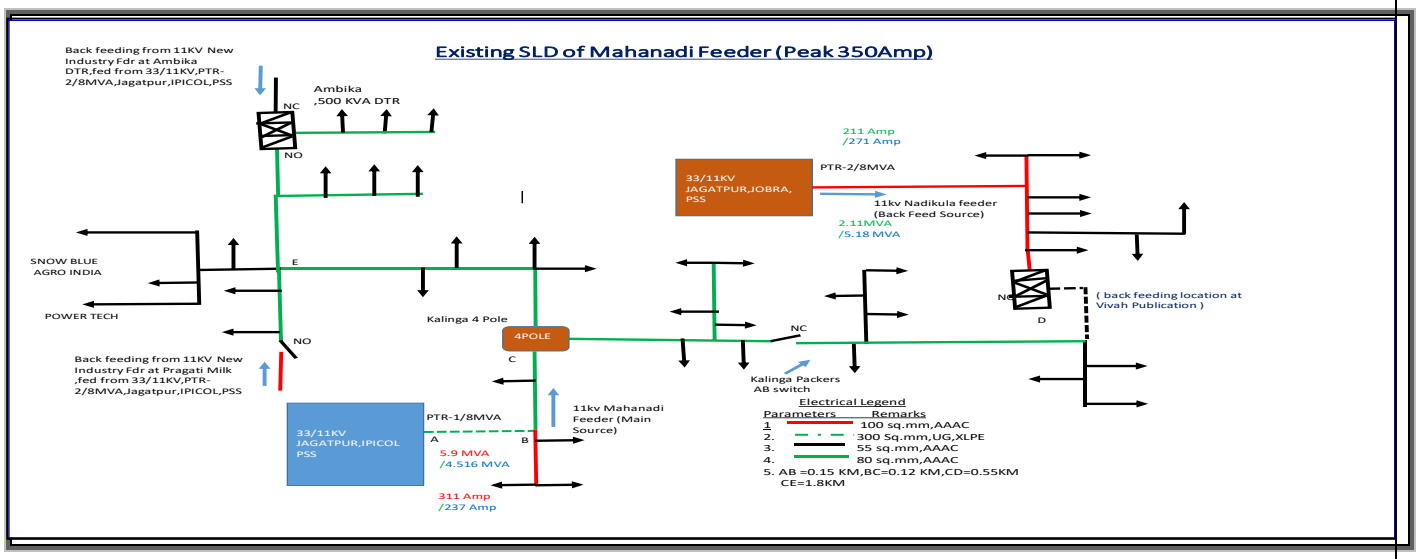
Objective: To mitigate the overloading issue of 11 kV Mahanadi feeder.

Existing Scenario:

- At present, 11kV Mahanadi feeder is emanating from 33/11kV IPICOL PSS.Total length of this feeder is 5.4 km and the peak load is 6.68 MVA.
- In the existing scenario, conductor size of 11kV Mahanadi feeder is 100sqmm & the feeder is 129% loaded w.r.t the current carrying capacity of the conductor and 164% loaded considering 13% load growth for urban feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV Mahanadi feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Jagatpur / IPICOL	MAHANADI	5.19	6.68	129%	Overload	8.53	164%	Overload

Existing SLD

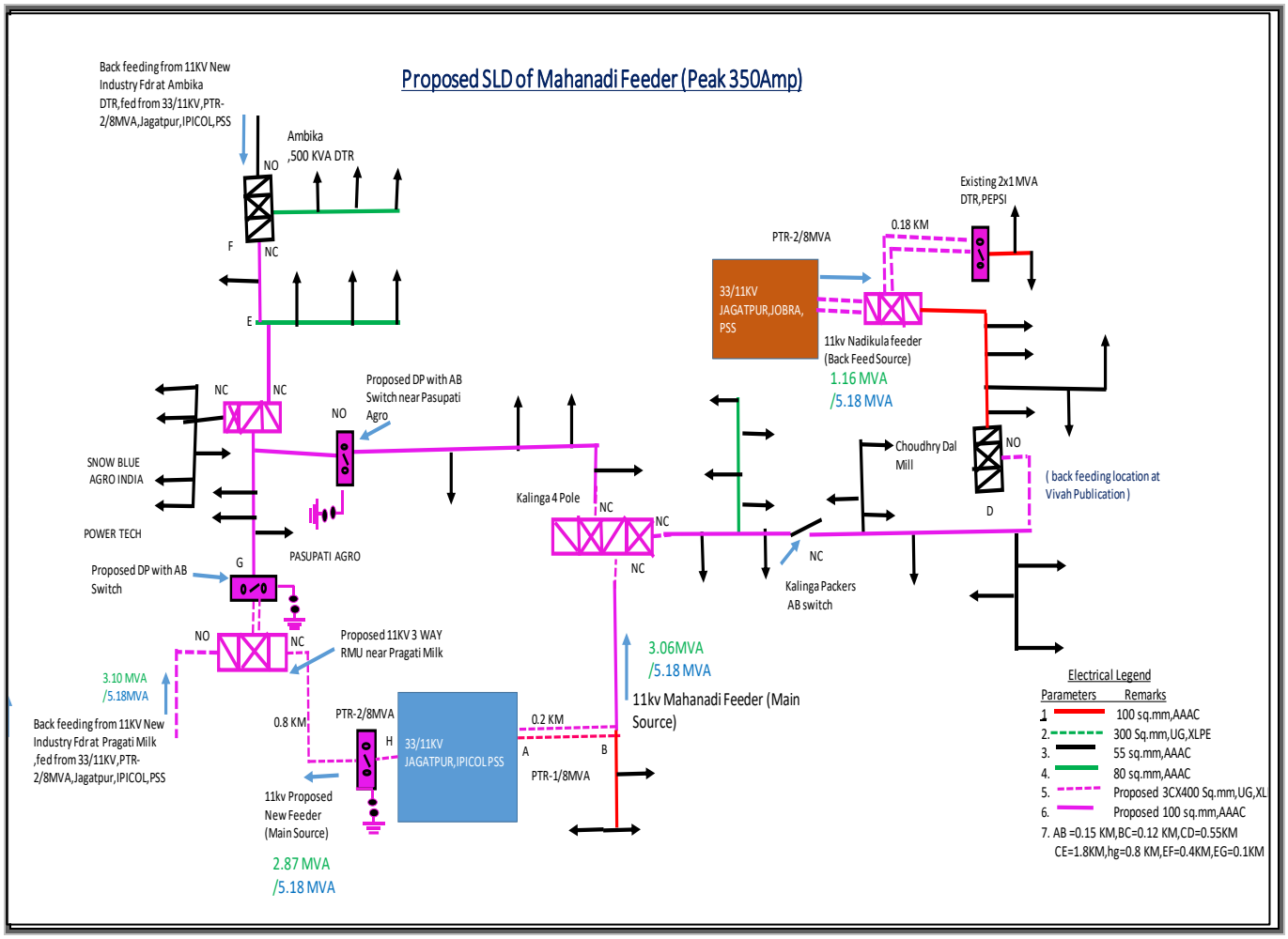


Proposed Scenario:

1. Construction of Augmentation of Line from 80-100 SQ.MM. -AAA Conductor from Jagatpur Ipicol premises, near Pasupati Agrovet to Pragati cut point for 3.2 CKM.
2. Laying of 11KV U/G Line of 3C X 400 Sq.mm.XLPE cable from Jagatpur(IPICOL) PSS to Pragati cut point for load bifurcation from Mahanadi feeder to new feeder to eliminate the overloading issue.
3. Installation of 1 No of 11 KV, 3 Way RMU at Pragati cut point for N-1 connectivity in between 11 KV Nadikula feeder and Mahanadi Feeder.
4. Installation of 2 Nos of 11 KV 3WAY and 1 No of 4WAY RMU at Kalinga Packer, Krishna Cokes and at Kalinga 4 Pole respectively.
5. Laying of 11 KV U/G Line of 3CX400 Sq.mm. XLPE cable from Jagatpur(IPICOL) PSS to IBEL cut point for Mahanadi feeder.

Proposed Loading of 11 Kv Mahanadi Feeder								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Jagatpur/ IPICOL	MAHANADI	5.19	3.82	74%	OK	4.87	94%	Ok

New feeder Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Jagatpur / IPICOL	11 KV New Feeder	5.19	2.86	55%	OK	3.66	71%	Ok



Detailed Scope of Work and Abstract of Estimate

TPCODL	
Name of the Division :-	CDD-2
Name of the Sub-Division : -	Jobra
Name of the Section : -	Jagatpur
Name of the Work :-	**PART A: -** Construction of Augmentation of Line from 80-100 SQ.MM. -AAA Conductor from Jagatpur Ipicol premises, near Pasupati Agrovet to Pragati cut point for 3.2 CKM. **PART B:-** Construction of 1.2km UG of 3CX400 sqmm (Refer SLD). **PART-C:-** Construction of 11kV 3 Nos. 3WAY RMU for new line from Jagatpur Ipicol premises, near Pasupati Agrovet & Pragati cut point. **PART D: -** 11kV Line DP with AB Switch from Jagatpur Ipicol premises, near Pasupati Agrovet & Pragati cut point.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross

1	PART A: Construction of Augmentation of Line using 100 SQ.MM. -AAA Conductor from Jagatpur Ipicol premises, near Pasupati Agrovet to Pragati cut point for 3.2 CKM.	4145172.36
2	PART B: Construction of 1.2km UG of 3CX400 sqmm from Gangua Line AB switch to Vijay nagar Line AB switch	89,10,567.57
2	PART-C: Construction of 11kV 3 Nos. RMU for new line from Jagatpur Ipicol premises, near Pasupati Agrovet & Pragati cut point.	68,06,544.93
3	PART D: 11kV Line DP with AB Switch from Jagatpur Ipicol premises, near Pasupati Agrovet & Pragati cut point.	9,28,322.20
4	**Total Gross**	**2,07,90,607.07**
Total estimated cost is Rs. 2.08Cr.		

Cost Estimate: 2.08 cr. (For detailed BoQ refer Annexure 9.54)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Mahanadi feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

55. Mitigation of Feeder Overloading issue of 11 KV New Industry Feeder

Proposal: Proposal for **a**ugmentation of 11 KV New Industry feeder of 0.8 CKM from 55 Sq.mm to 100 Sq.mm. and Construction of 1 KM U/G of 3CX400 sq.mm. from Jagatpur(IPICOL) PSS to IDCO 4 pole.

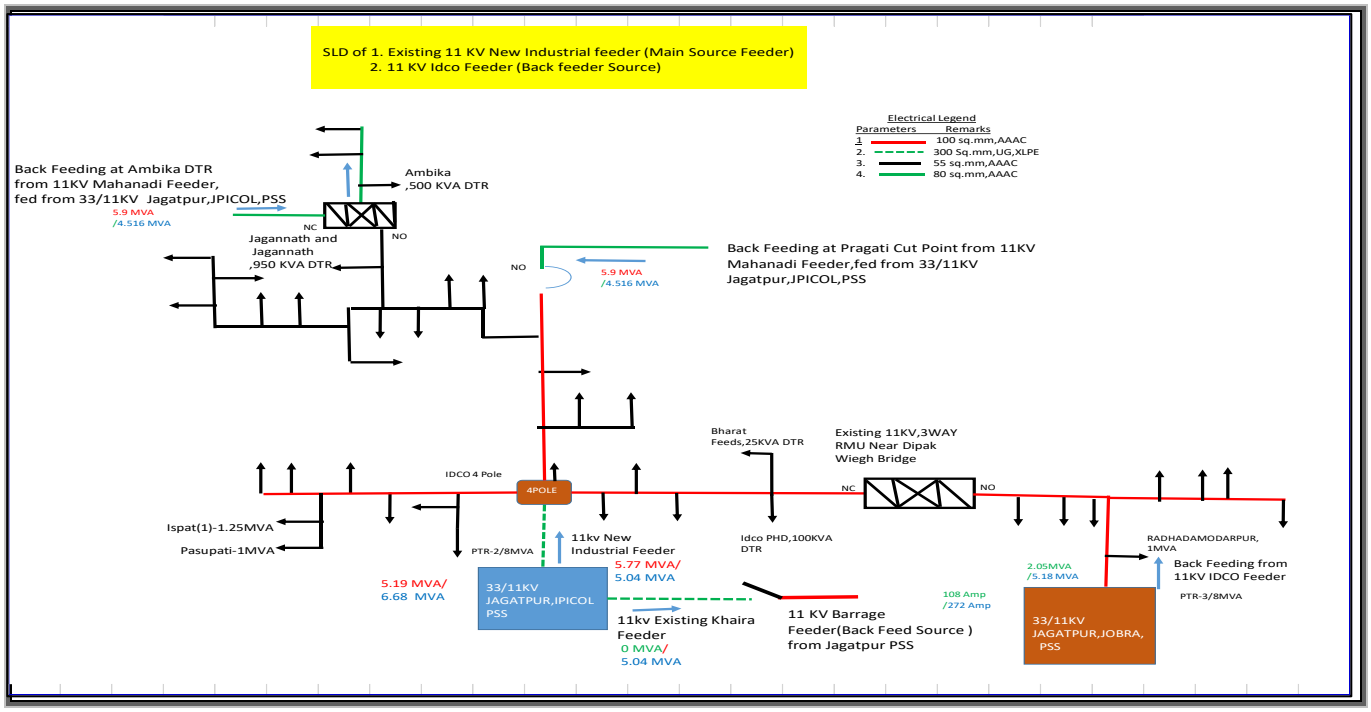
Objective: To mitigate the overloading issue of 11 kV New Industry feeder.

Existing Scenario:

- At present, 11kV New Industry feeder is emanating from 33/11kV IPICOL PSS.Total length of this feeder is 7.3 km and the peak load is 6.68 MVA.
- In the existing scenario, conductor size of 11kV feeder is 100sqmm & the feeder is 129% loaded w.r.t the current carrying capacity of the conductor and 164% loaded considering 13% load growth for urban feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV New Industry feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Jagatpur/ IPICOL	NEW INDUSTRIAL	5.19	6.68	129%	Overload	8.53	164%	Overload

Existing SLD



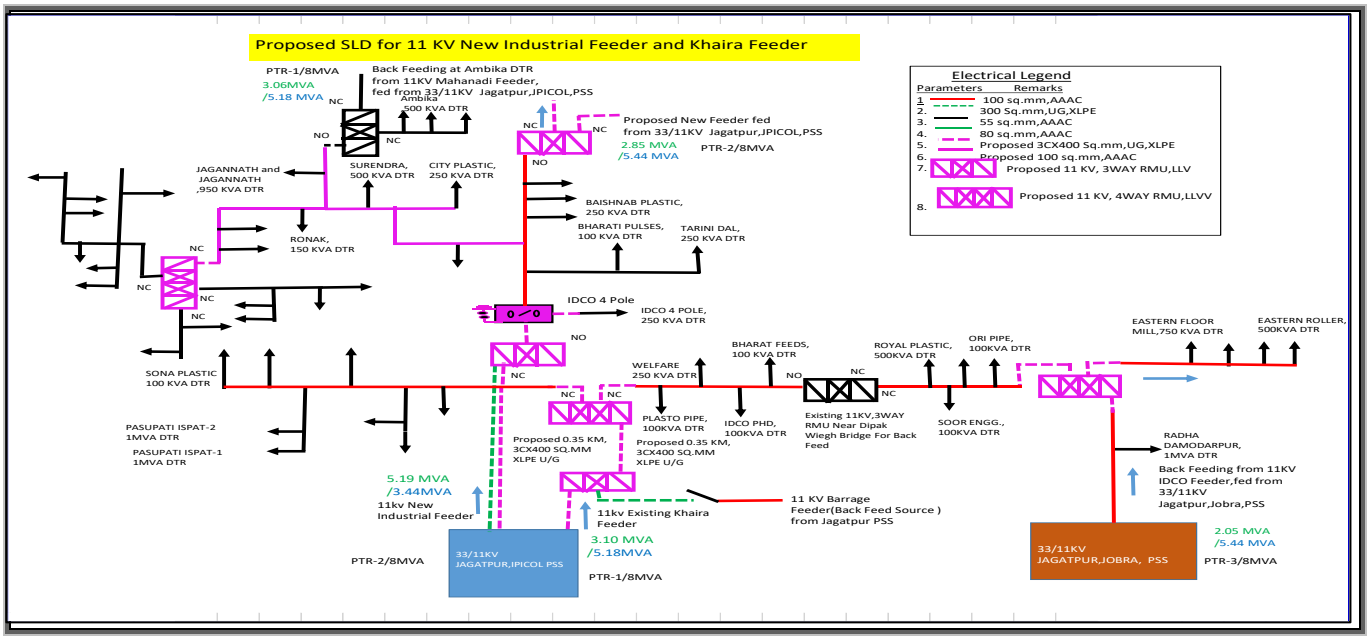
Proposed Scenario:

1. Construction of Augmentation of existing New Industry feeder of 0.8 KM from 55 Sq.mm to 100 Sq.mm. to increase the circuit capacity.
2. Construction of 1km UG of 3CX400 sqmm from Jagatpur(IPICOL) PSS to IDCO 4 pole.
3. Construction of 2 Nos.11kV 3-WAY RMU & 3 Nos.11kV 4-WAY RMU (Refer SLD).
4. Construction of 11kV Line DP with AB Switch (Refer SLD).

Proposed Loading of New Industry feeder								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Jagatpur / IPICOL	NEW INDUSTRIAL	5.19	3.44	66%	OK	4.39	85%	OK

Proposed Loading of Khaira feeder								
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Feeder Overloading status**	**Loading of Feeder after 5 Years Load growth**	**% Loading of Feeder after 5 Years Load growth**	**Feeder Overloading Status**
Jagatpur / IPICOL	Khaira	5.19	3.05	59%	OK	3.90	75%	OK

Proposed SLD



Detailed Scope of Work and Abstract of Estimate

TPCODL	
Name of the Division :-	CDD-2
Name of the Sub-Division : -	Jagatpur
Name of the Section : -	Jagatpur
Name of the Work :-	PART A:- Construction of Augmentation of existing New Industry feeder of 0.8 KM from 55 Sq.mm to 100 Sq.mm. to increase the circuit capacity. **PART B:-** Construction of 1km UG of 3CX400 sqmm from Jagatpur(IPICOL) PSS to IDCO 4 pole. **PART-C:-** Construction of 2 Nos.11kV 3-WAY RMU & 3 Nos.11kV 4-WAY RMU (Refer SLD). **PART D:-** Construction of 11kV Line DP with AB Switch (Refer SLD).
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART A: Construction of Augmentation of existing New Industry feeder of 0.8 KM from 55 Sq.mm to 100 Sq.mm. to increase the circuit capacity.	1175855.139
2	PART B: Construction of 1km UG of 3CX400 sqmm from Jagatpur(IPICOL) PSS to IDCO 4 pole.	74,14,202.45
3	PART-C: Construction of 2 Nos.11kV 3-WAY RMU & 3 Nos.11kV 4-WAY RMU (Refer SLD).	81,60,785.65
4	PART D: 11kV Line DP with AB Switch (Refer SLD).	13,92,483.30
5	**Total Gross**	**1,81,43,326.54**
Total estimated cost is Rs. 1.81Cr.		

Cost Estimate: 1.81 cr. (For detailed BoQ refer Annexure 9.55)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11 KV New Industry feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

57. Mitigation of Feeder Overloading issue of 11 KV Rajnagar Feeder

Proposal: Proposal for augmentation of 5 CKM 11 KV line of Rajnagar Fdr. from 55 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from 33/11 KV Rajnagar PSS to Khurunti Line AB Switch.

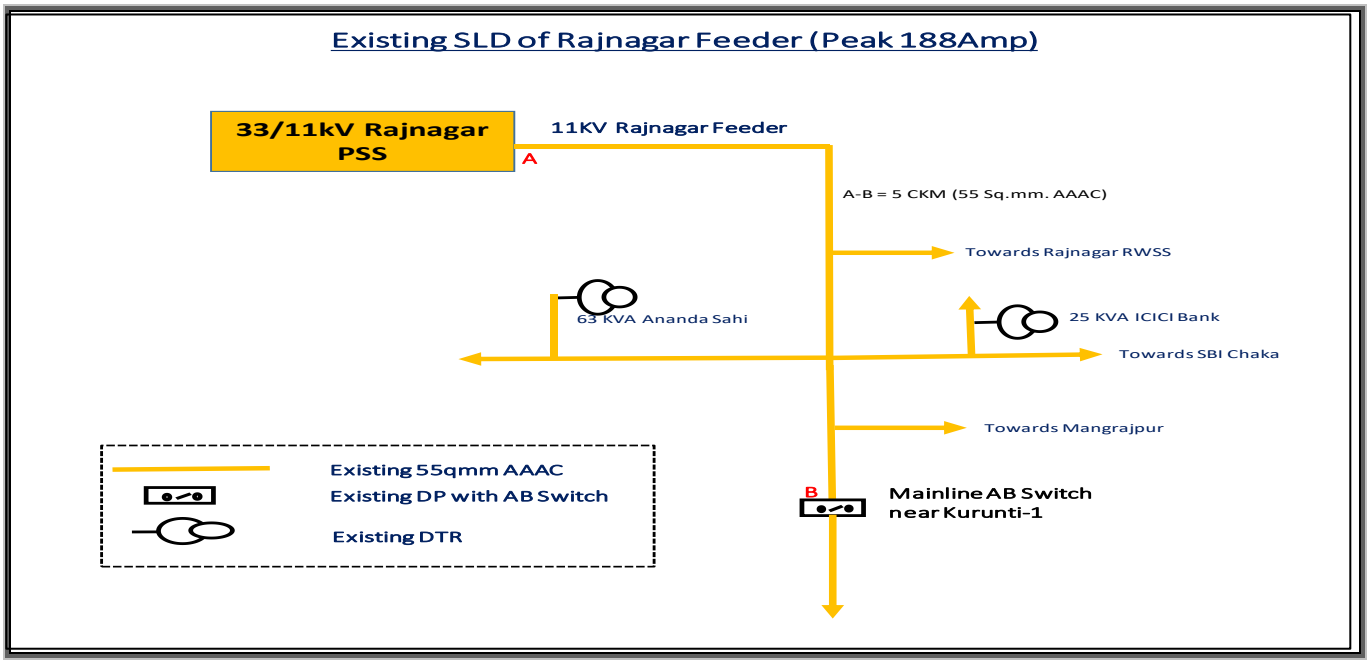
Objective: To mitigate the overloading issue of 11 kV Rajnagar feeder.

Existing Scenario:

- At present, 11 kV Rajnagar feeder is emanating from 33/11kV Rajnagar PSS.Total length of this feeder is 97.5 km and the peak load is 3.58 MVA.
- In the existing scenario, conductor size of 11kV Rajnagar feeder is 34/55/80sqmm & the feeder is 101% loaded w.r.t the current carrying capacity of the conductor and 118% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 Years**	**% Loading in Summer -25**	**Feeder Status**
Rajnagar	Rajnagar	3.55	3.59	101%	4.18	118%	Overload

Existing SLD (summer'25):

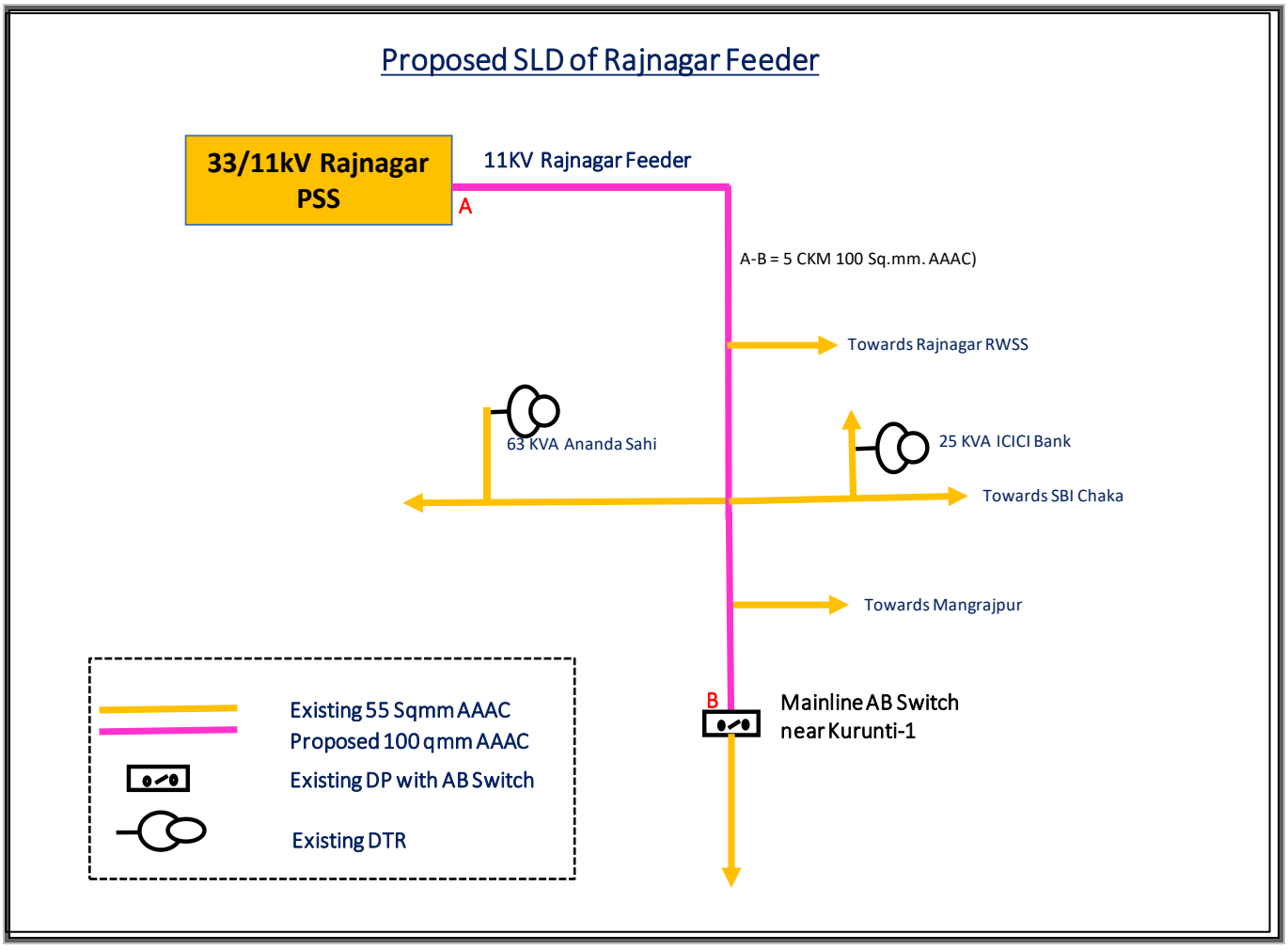


Proposed Scenario:

Proposal for augmentation of 5 CKM 11 KV line of 11 KV Rajnagar Fdr. From 55 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from 33/11 KV Rajnagar PSS to Khurunti Line AB Switch.

Loading Of Feeder after Proposal							
Name of the PSS	11 kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 8% Load Growth for 2 Years	% Loading in Summer -25	Feeder Status
Rajnagar	Rajnagar	5.19	3.59	69%	4.18	81%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		KED-1
Name of the Sub-Division : -		Rajnagar
Name of the Section : -		Rajnagar-2
Name of the Work :-		Proposal for augmentation of 5 CKM 11 KV line of 11 KV Rajnagar Fdr. From 55 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from 33/11 KV Rajnagar PSS to Khurunti Line AB Switch.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A: Augmentation of 5 CKM 11 KV line (from 55 Sq.mm. to 100 Sq.mm. AAAC) using 11 Mtr. WPB pole & 100 Sq.mm. AAA Conductor from Rajnagar PSS to Kurunti Mainline AB Switch	6,481,143.16
2	**Total Gross**	**6,481,143.16**
Total estimated cost is Rs. 0.64Cr.		

Cost Estimate: 0.64 cr. (For detailed BoQ refer Annexure 9.57)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11 KV Rajnagar feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

58. Mitigation of Feeder Overloading issue of 11 KV Tinimuhani Feeder

Proposal: Proposal for augmentation of 2.5 CKM 11 KV line of Tinimuhani Fdr. from 34/55 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from 33/11 KV Kendrapara PSS to Dandamunda 250 KVA DSS.

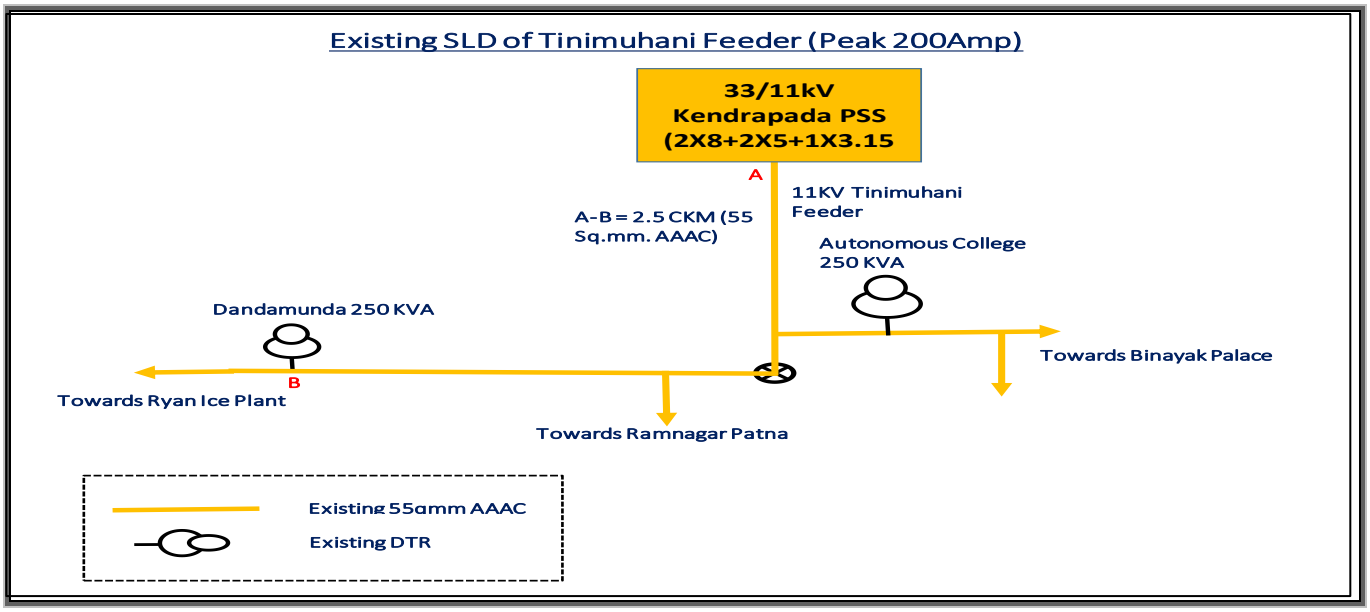
Objective: To mitigate the overloading issue of 11 kV Tinimuhani feeder.

Existing Scenario:

- At present, 11kV Tinimuhani feeder is emanating from 33/11kV Kendrapara PSS.Total length of this feeder is 12.4 km and the peak load is 3.82 MVA.
- In the existing scenario, conductor size of 11kV Tinimuhani feeder is 34/55 sqmm & the feeder is 108% loaded w.r.t the current carrying capacity of the conductor and 125% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural as well as sub urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Name of the PSS	11 kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 8% Load Growth for 2 Years	% Loading in Summer-25	Feeder Status
Kendrapada	Tinimuhani	3.55	3.82	108%	4.45	125%	Overload

Existing SLD (summer'25):

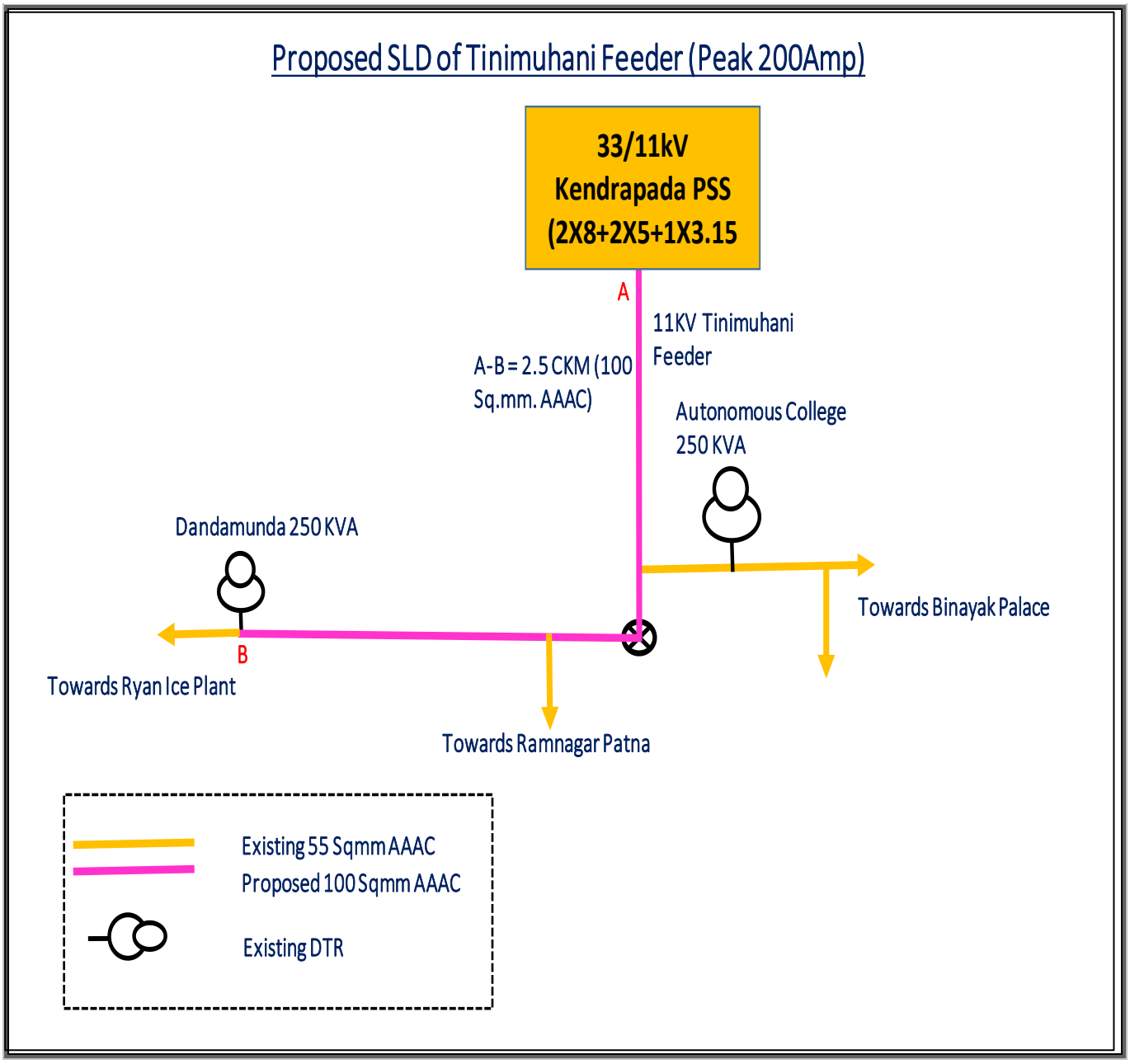


Proposed Scenario:

Proposal for augmentation of 2.5 CKM 11 KV line of 11 KV Tinimuhani Fdr. From 34/55 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from 33/11 KV Kendrapara PSS to Dandamunda 250 KVA DSS.

Loading Of Feeder after Proposal							
Name of the PSS	11 kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 8% Load Growth for 2 Years	% Loading in Summer-25	Feeder Status
Kendrapada	Tinimuhani	5.19	3.82	74%	4.45	86%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		KED-1
Name of the Sub-Division : -		Kendrapada
Name of the Section : -		Kendrapada-1
Name of the Work :-		Augmentation of 2.5 CKM 11 KV line (from 34/55 Sq.mm. to 100 Sq.mm. AAAC) using 11 Mtr. WPB pole & 100 Sq.mm. AAA Conductor from Kendrapara PSS to Dandamunda 250 KVA DSS.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A: Augmentation of 2.5 CKM 11 KV line (from 34/55 Sq.mm. to 100 Sq.mm. AAAC) using 11 Mtr. WPB pole & 100 Sq.mm. AAA Conductor from Kendrapara PSS to Dandamunda 250 KVA DSS.	3,441,899.93
2	**Total Gross**	**3,441,899.93**
Total estimated cost is Rs. 0.34Cr.		

Cost Estimate: 0.34 cr. (For detailed BoQ refer Annexure 9.58)

Benefit:

- To maintain reliable Power Supply to Sub Urban/rural consumers by strengthening the line & mitigation of overloading issue of 11 KV Tinimuhani feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

59. Mitigation of Feeder Overloading issue of 11 KV Chatua Feeder

Proposal: Proposal for augmentation of 10.5 CKM 11 KV line of Chatua Fdr. from 55 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from 33/11 KV Kujanga PSS to Patarpur.

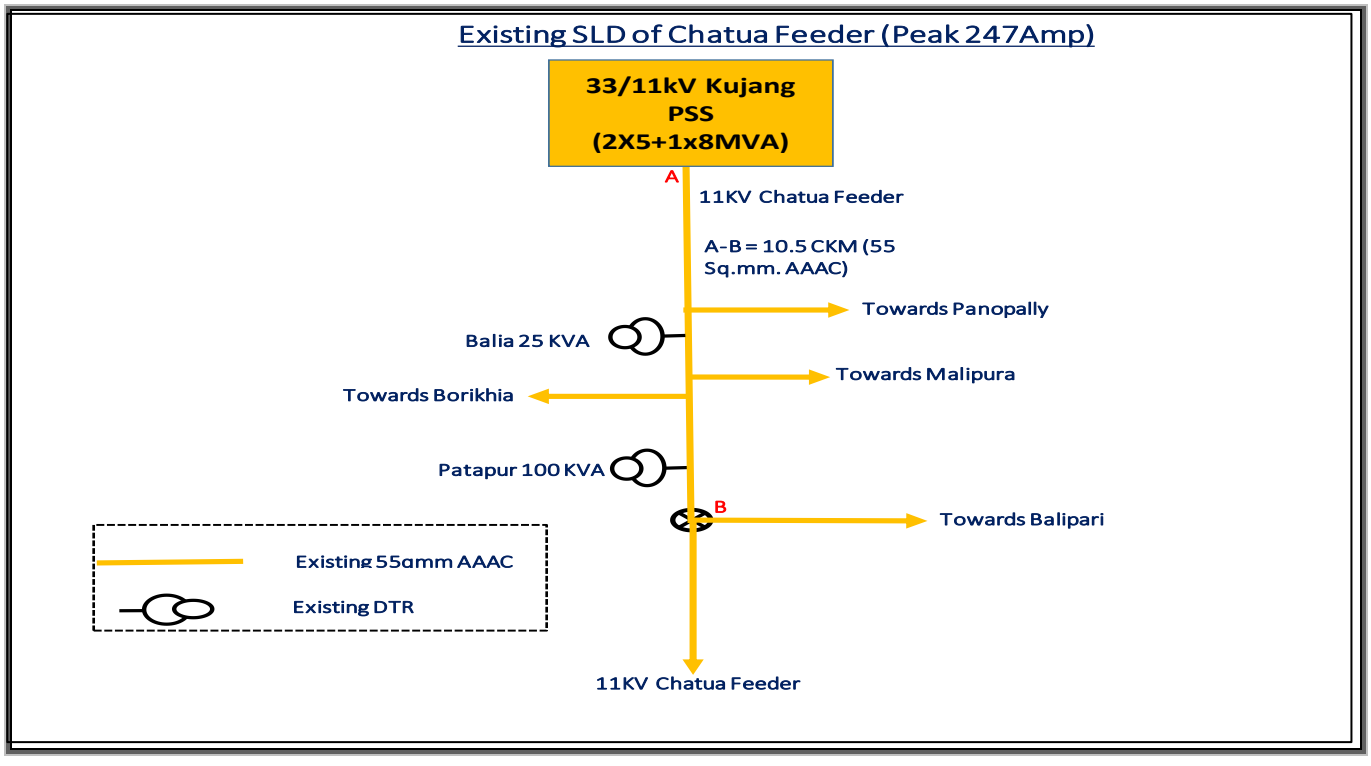
Objective: To mitigate the overloading issue of 11 kV Chatua feeder.

Existing Scenario:

- At present, 11kV Chatua feeder is emanating from 33/11kV Kujanga PSS.Total length of this feeder is 177 km and the peak load is 4.39 MVA.
- In the existing scenario, conductor size of 11kV Chatua feeder is 55 sqmm & the feeder is 124% loaded w.r.t the current carrying capacity of the conductor and 144% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Kujanga	Chatua	3.55	4.39	124%	5.12	144%	Overload

Existing SLD (summer'25):

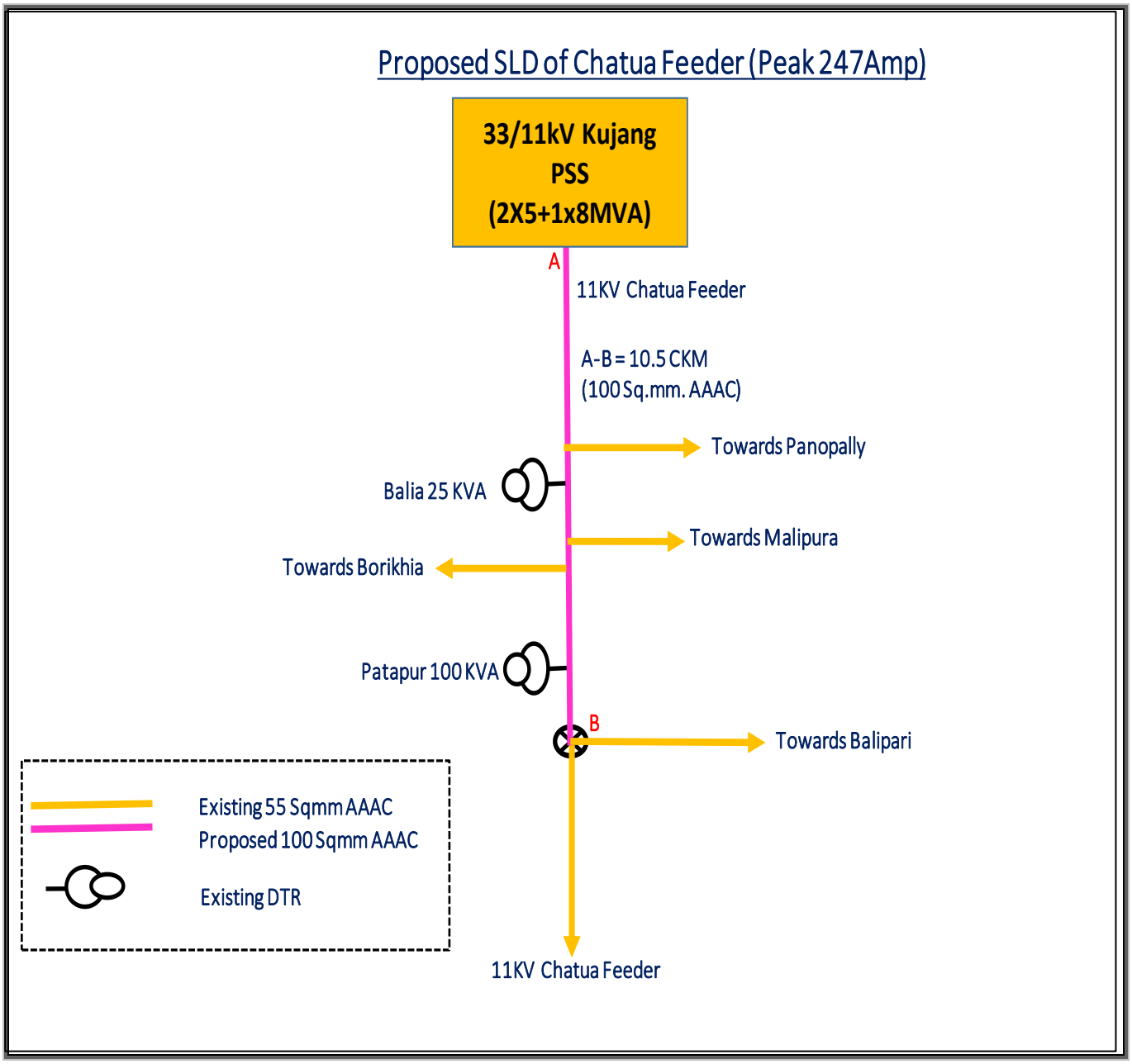


Proposed Scenario:

Proposal for augmentation of 10.5 CKM 11 KV line of 11 KV Chatua Fdr. From 55 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from 33/11 KV Kujanga PSS to Patarpur.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Kujanga	Chatua	5.19	4.39	85%	5.12	99%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		PDP
Name of the Sub-Division : -		Kujanga
Name of the Section : -		Kujanga
Name of the Work :-		Augmentation of 10.5 CKM 11 KV line (from 55 Sq.mm. to 100 Sq.mm. AAAC) using 11 Mtr. WPB pole & 100 Sq.mm. AAA Conductor from Kujanga PSS to Patarpur.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A: Augmentation of 10.5 CKM 11 KV line (from 55 Sq.mm. to 100 Sq.mm. AAAC) using 11 Mtr. WPB pole & 100 Sq.mm. AAA Conductor from Kujanga PSS to Patarpur.	13,557,289.99
2	**Total Gross**	**13,557,289.99**
Total estimated cost is Rs. 1.36Cr.		

Cost Estimate: 1.36 cr. (For detailed BoQ refer Annexure 9.59)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11 KV Chatua feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

60. Mitigation of Feeder Overloading issue of 11 KV Keredagara Feeder

Proposal: Proposal for augmentation of 8 CKM 11 KV line of Keredagara Fdr. from 34 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from Olara to Rajpur.

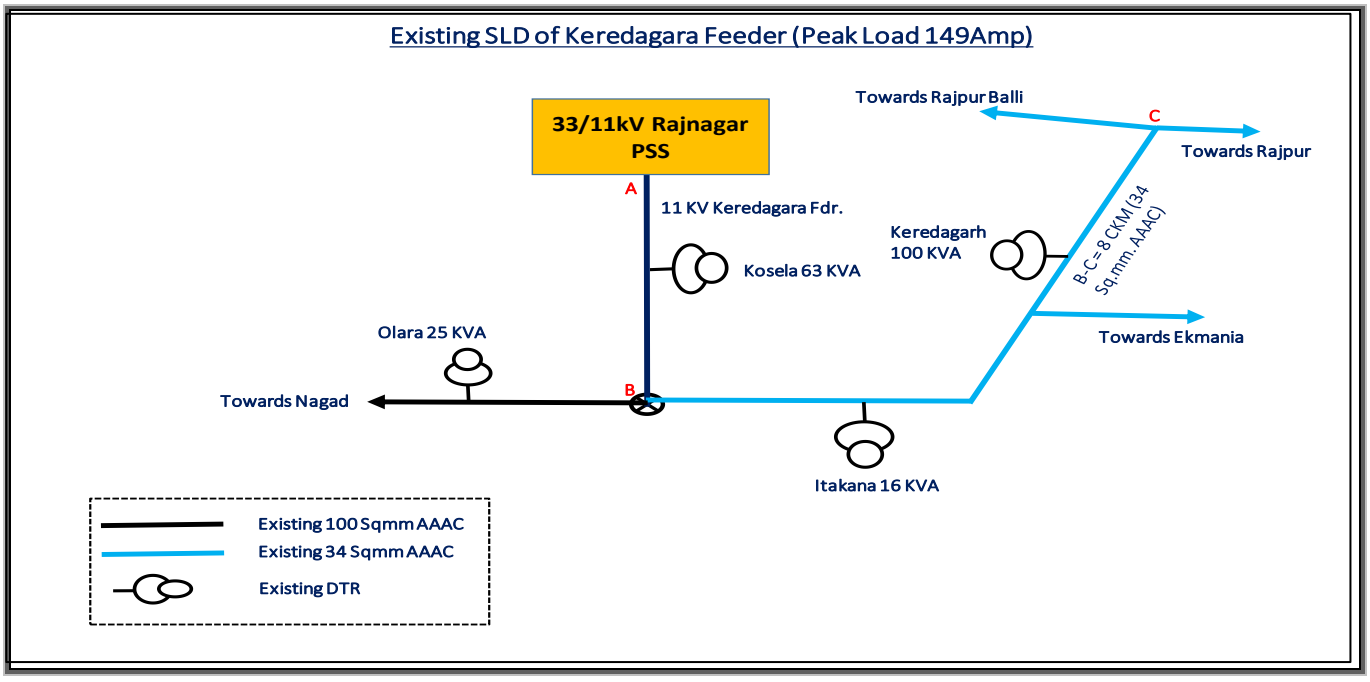
Objective: To mitigate the overloading issue of 11 kV Keredagara feeder.

Existing Scenario:

- At present, 11kV Keredagara feeder is emanating from 33/11kV Rajnagar PSS.Total length of this feeder is 46.7 km and the peak load is 2.84 MVA.
- In the existing scenario, conductor size of 11kV Keredagara feeder is 34 sqmm & the feeder is 108% loaded w.r.t the current carrying capacity of the conductor and 126% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	11 kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 8% Load Growth for 2 Years	% Loading in Summer-25	Feeder Status
Rajnagar	Keredagara	2.63	2.84	108%	3.32	126%	Overload

Existing SLD (summer'25):

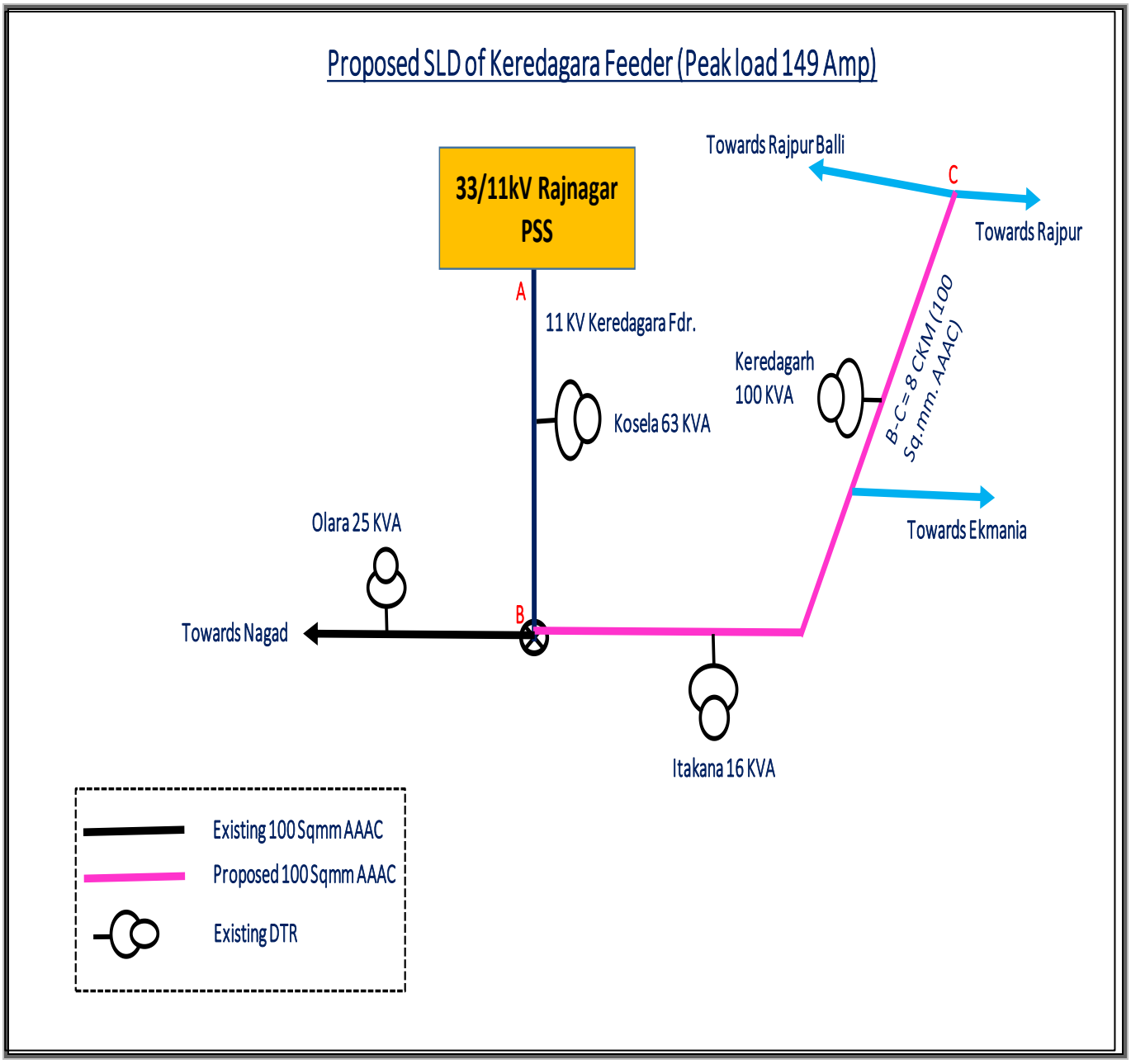


Proposed Scenario:

Proposal for augmentation of 8 CKM 11 KV line of 11 KV Keredagara Fdr. From 34 Sq.mm. AAAC to 100 Sq.mm. AAAC using 11 Mtr. WPB Pole (interposing) & 100 Sq.mm. AAA Conductor from Olara to Rajpur.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Rajnagar	Keredagara	5.19	2.84	55%	3.32	64%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL		
Name of the Division :-		KED-1
Name of the Sub-Division : -		Rajnagar
Name of the Section : -		Rajnagar-I
Name of the Work :-		Augmentation of 8 CKM 11 KV line (from 34 Sq.mm. to 100 Sq.mm. AAAC) using 11 Mtr. WPB pole & 100 Sq.mm. AAA Conductor from Olara to Rajpur.
Names of Schemes: -		**CAPEX 24-25**
Abstract of Estimate		
Sl. No.	**Description**	**Gross**
1	PART-A: Augmentation of 8 CKM 11 KV line (from 34 Sq.mm. to 100 Sq.mm. AAAC) using 11 Mtr. WPB pole & 100 Sq.mm. AAA Conductor from Olara to Rajpur	10,430,549.45
2	**Total Gross**	**10,430,549.45**
Total estimated cost is Rs. 1.04Cr.		

Cost Estimate: 1.04 cr. (For detailed BoQ refer Annexure 9.60)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Keredagara feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

61. Mitigation of Feeder Overloading issue of 11kv Jarasingha Feeder

Proposal: Proposal for construction of Construction of 6.8KM of New Linking line using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Badkera feeder eminating from Badkera PSS to Benagadia of Jarasingha feeder eminating from Hemsarpada PSS.

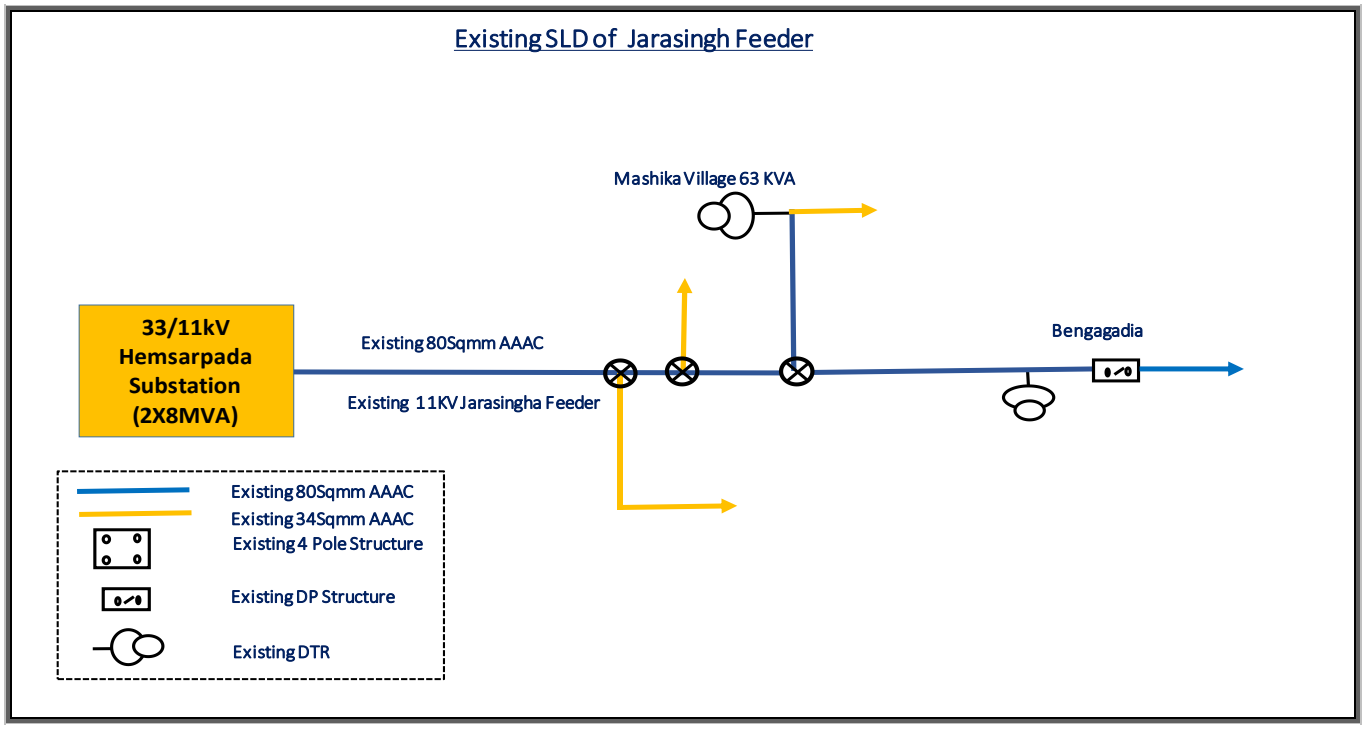
Objective: To mitigate the overloading issue of 11kV Jarasingha feeder.

Existing Scenario:

- At present, 11kV Jarasingha feeder is emanating from 33/11kV Hemsarpada PSS.Total length of this feeder is 26km and the peak load is 4.87MVA.
- In the existing scenario, conductor size of 11kV Jarasingha feeder is 34/55/80sqmm & the feeder is 108% loaded w.r.t the current carrying capacity of the conductor and 126% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, new linking line feeder is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Hemsarpada	Jarasingha	4.52	4.87	108%	5.68	126%	Overload
Badkera	Badkera	4.52	1.77	39%	2.07	46%	OK

Existing SLD (summer'25):

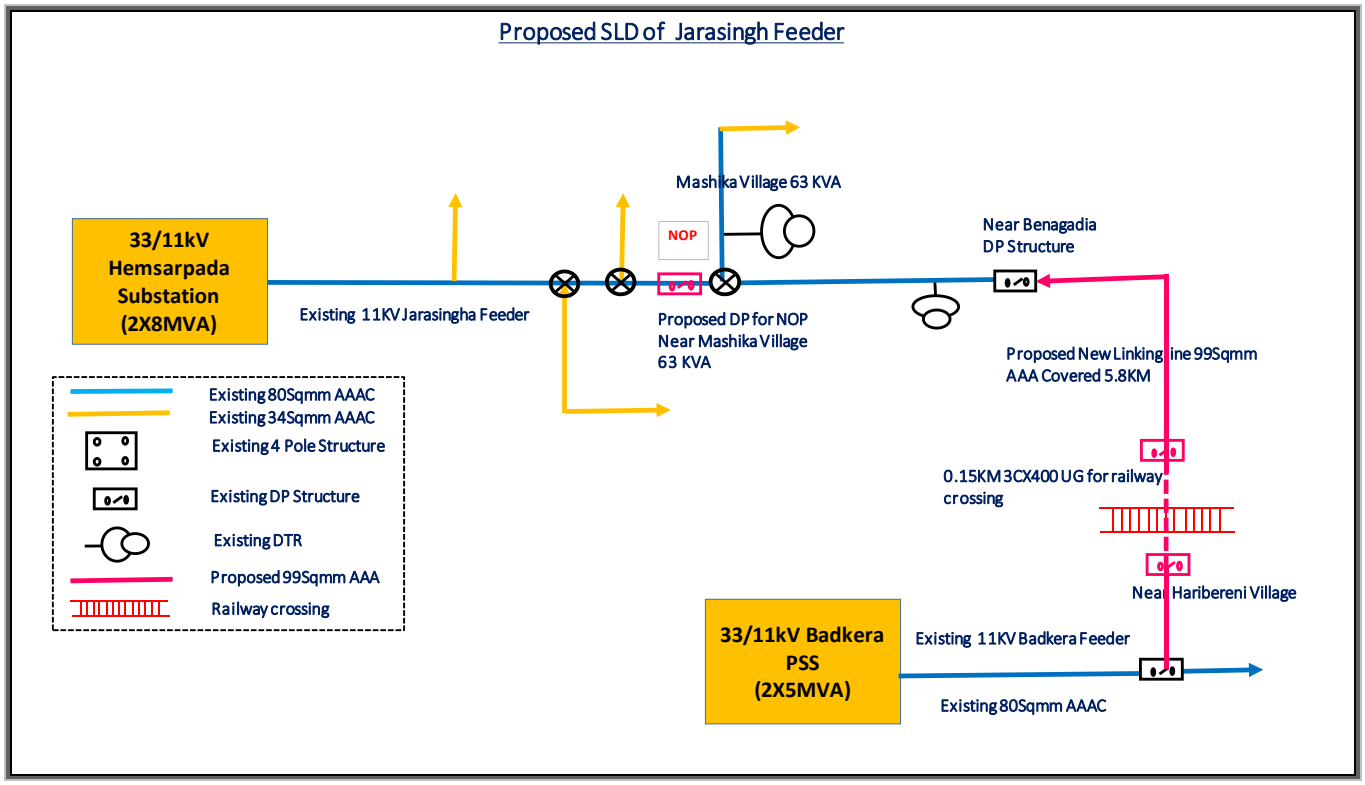


Proposed Scenario:

Proposal for construction of 6.8KM of New Linking line using 11mtr long 160x152, 30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Badkera feeder emanating from Badkera PSS to Benagadia of Jarasingha feeder emanating from Hemsarpada PSS.

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Hemsarpada	Jarasingha	4.52	3.37	74%	3.93	87%	OK
Badkera	Badkera	5.19	3.27	63%	3.82	74%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	ANED
Name of the Sub-Division : -	Angul
Name of the Section : -	ANGUL-III
Name of the Work :-	Proposal for construction of Construction of 5.8KM of New Linking line using 11mtr long 160x152, 30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Badkera feeder emanating from Badkera PSS to Benagadia of Jarasingha feeder emanating from Hemsarpada PSS.
Names of Schemes: -	**CAPEX 24-25**
Abstract of Estimate	

Sl. No.	Description	Amount
1	Part A: Proposal for Construction of new linking line of 5.8kM from Badkera Feeder to Benagadia	14709287.79
2	PART B: Construction of 0.15KM of 3CX400SQMM UG Cable New line for railway crossing	2217070.205
3	PART-C: Construction of Guarding for Line Protecting Guarding on Double Pole for Road Crossing	1,38,000.98
4	**Total Gross**	**1,70,64,358.97**
Total estimated cost is Rs. 1.71Cr.		

Cost Estimate: 1.71 cr. (For detailed BoQ refer Annexure 9.61)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Jarasingha feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

62. Mitigation of Feeder Overloading issue of 11kv Kurudol Feeder

Proposal: Proposal for Augmentation of existing 11kV Kurudol Feeder emanating from 33/11kV Industrial PSS from lower size conductor 55/80sqmm to 99 SQ.MM. -AAA Conductor from Truck Association to Raniguda Pump House.

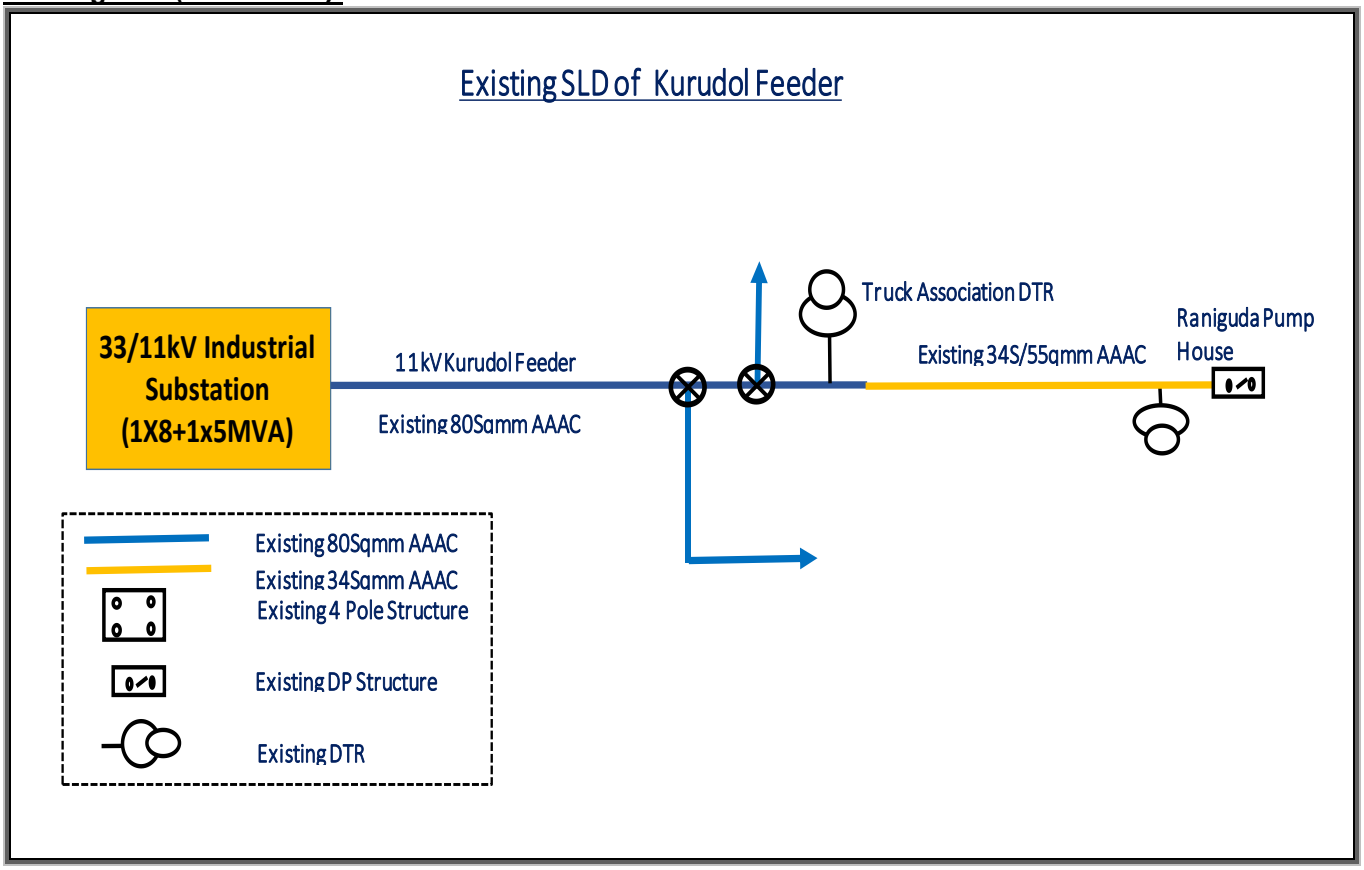
Objective: To mitigate the overloading issue of 11kV Kurudol feeder.

Existing Scenario:

- At present, 11kV Kurudol feeder is emanating from 33/11kV Industrial PSS.Total length of this feeder is 32km and the peak load is 4.39MVA.
- In the existing scenario, conductor size of 11kV Kurudol feeder is 34/55/80sqmm & the feeder is 97% loaded w.r.t the current carrying capacity of the conductor and 113% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 8% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Industrial	Kurudol	4.52	4.39	97%	5.12	113%	Overload

Existing SLD (summer'25):

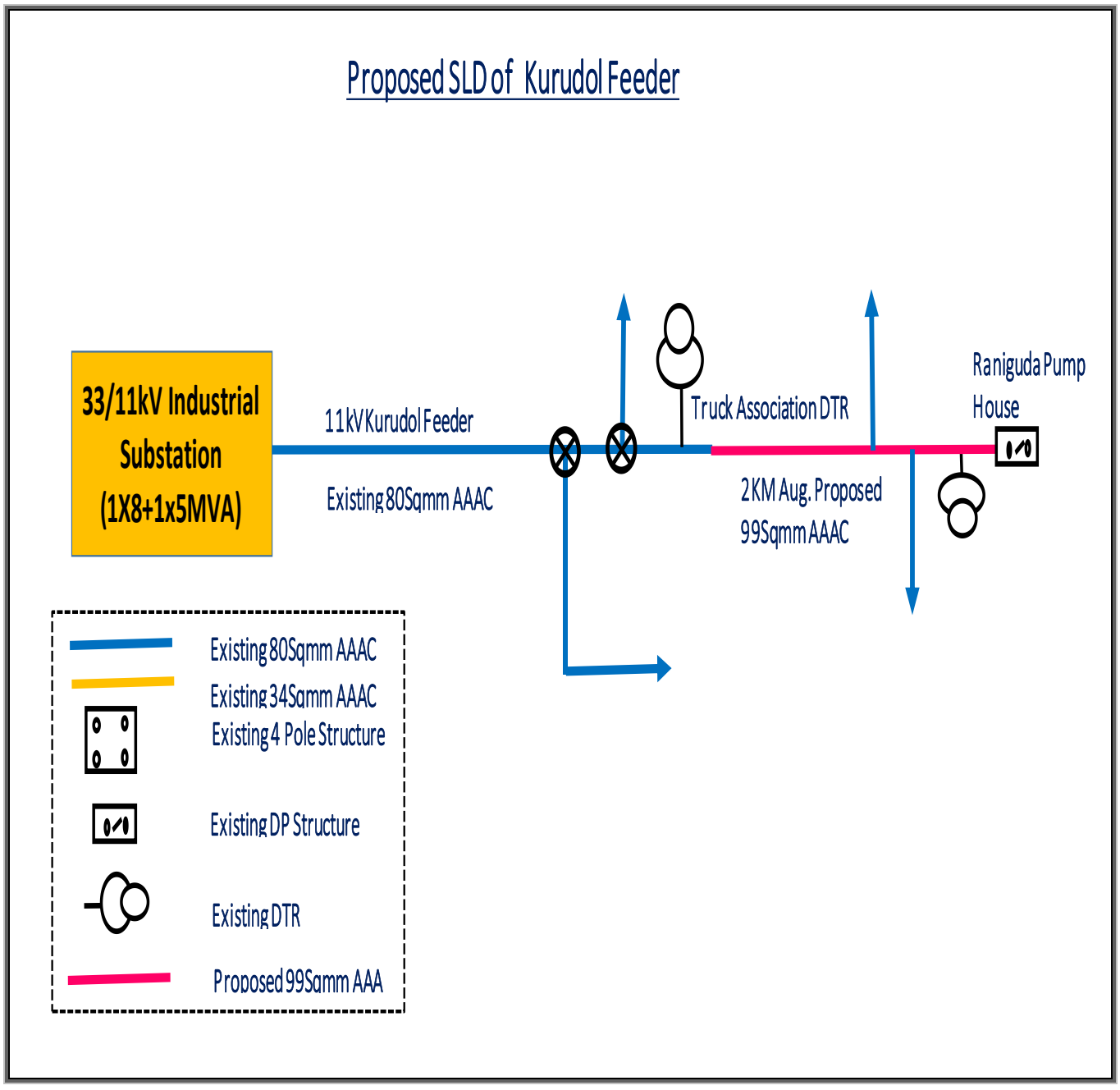


Proposed Scenario:

Proposal for Construction of 2KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Truck Association to Raniguda Pump House

Loading Of Feeder after Proposal							
Name of the PSS	11 kV kV Feeder Name	Feeder Capacity (MVA)	Peak Loading AS IS (MVA)	% Existing Loading of feeder	Summer 25 loading considering 8% Load Growth for 2 years	% Loading in Summer-25	Feeder Status
Industrial	Kurudol	5.19	4.39	85%	5.12	99%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	ANED
Name of the Sub-Division : -	Angul
Name of the Section : -	ANGUL-III
Name of the Work :-	Proposal for Construction of 2KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Truck Association to Raniguda Pump House
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Amount
1	PART-A; Construction of 2KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Truck Association to Raniguda Pump House	41,12,182.68
2	**Total Gross**	**41,12,182.68**
Total estimated cost is Rs. 0.41Cr.		

Cost Estimate: 0.41 cr. (For detailed BoQ refer Annexure 9.62)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Kurudol feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

63. Mitigation of Feeder Overloading issue of 11kv PTC Feeder

Proposal: Proposal for Augmentation of existing 11kV PTC Feeder emanating from 33/11kV RCMS PSS from lower size conductor 55/80sqmm to 99 SQ.MM. -AAA Conductor from Raaz Chhak to Turanga Chhaka.

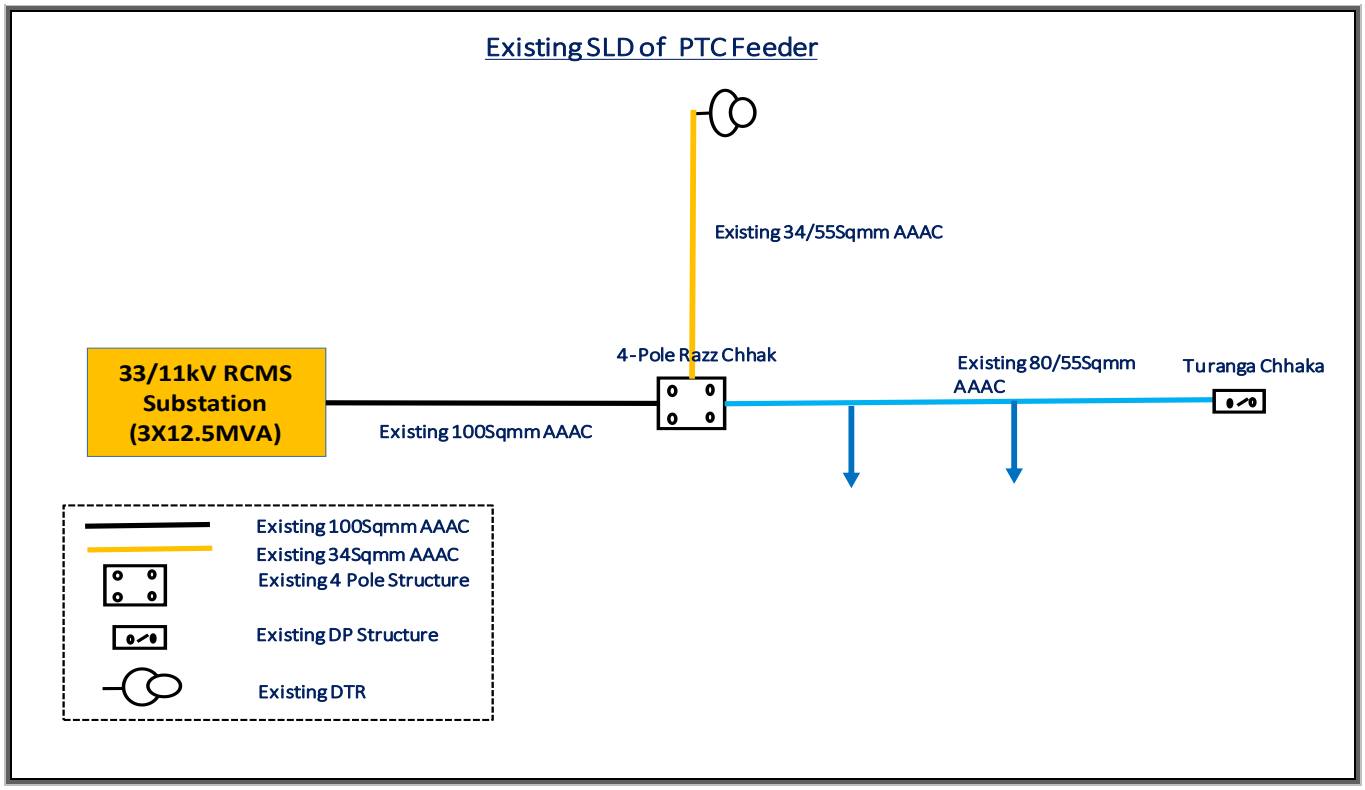
Objective: To mitigate the overloading issue of 11kV PTC feeder.

Existing Scenario:

- At present, 11kV PTC feeder is emanating from 33/11kV RCMS PSS.Total length of this feeder is 23km and the peak load is 4.08MVA.
- In the existing scenario, conductor size of 11kV PTC Feeder is 55/80sqmm & the feeder is 90% loaded w.r.t the current carrying capacity of the conductor and 115% loaded considering 13% load growth for Urban feeders.
- This feeder is mainly feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
RCMS	PTC	4.52	4.08	90%	5.21	115%	Overload
NALCO	Turanga	4.52	1.34	30%	1.56	34%	OK

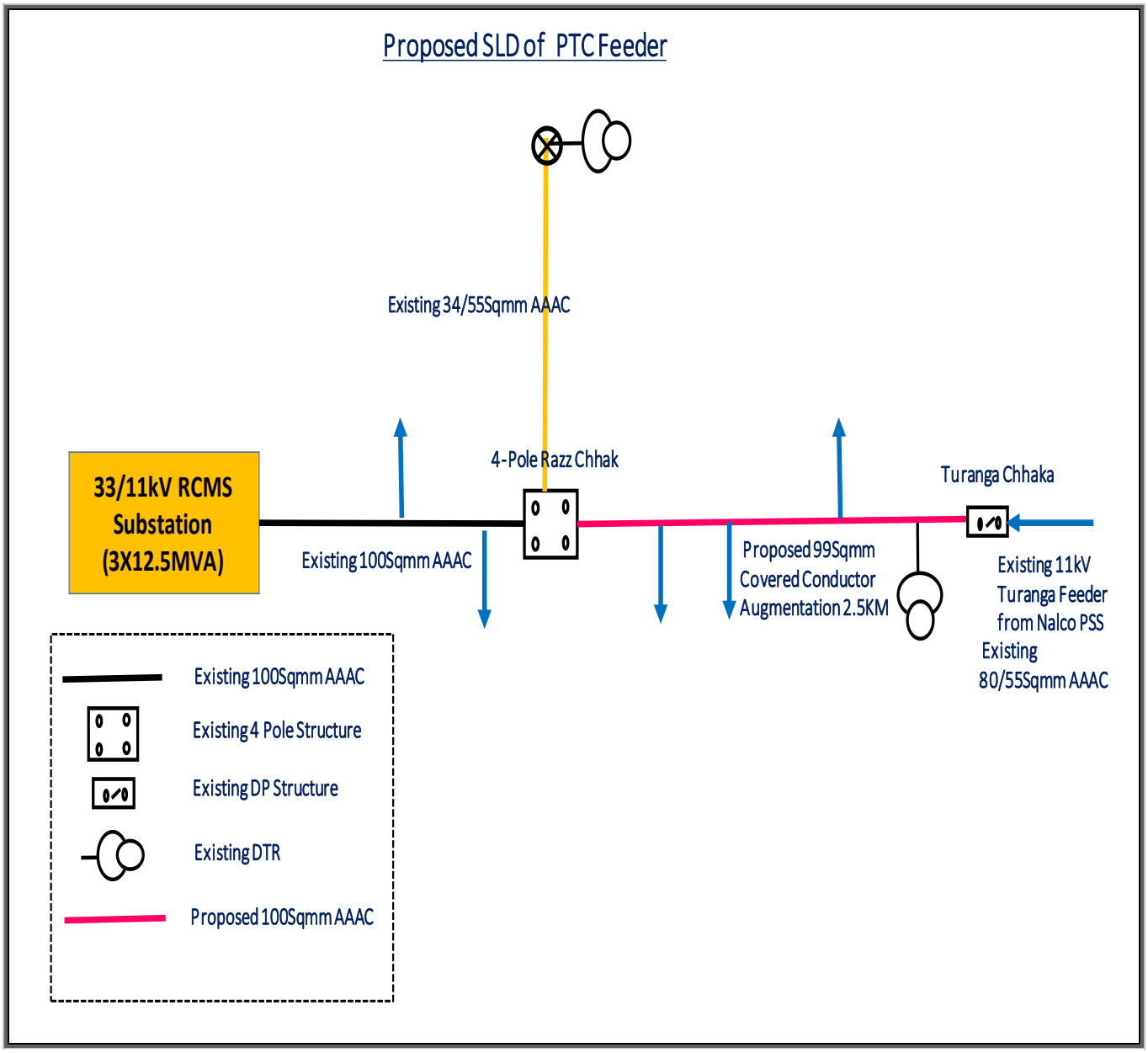
Existing SLD (summer'25):



Proposed Scenario:

Proposal for construction of 2.5KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Raaz Chhak to Turanga Chhaka.

Proposed SLD (summer'25):



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
RCMS	PTC	5.19	3.08	59%	3.94	76%	OK
NALCO	Turanga	4.52	2.34	52%	2.98	66%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED			
Name of the Division :-	TED		
Name of the Sub-Division : -	Angul		
Name of the Section : -	Angul-1		
Name of the Work :-	Proposal for construction of 2.5KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Raaz Chhak to Turanga Chhaka		
Names of Schemes: -	**CAPEX 24-25**		
Abstract of Estimate			
Sl. No.	**Description**		**Amount**
1	PART-A; Construction of 2.5KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Raza Chhak to Turanga Chhaka		50,12,828.35
2	**Total Gross**		**50,12,828.35**
Total estimated cost is Rs. 0.50Cr.			

Cost Estimate: 0.50 cr. (For detailed BoQ refer Annexure 9.63)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv PTC feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

64. Mitigation of Feeder Overloading issue of 11kv Kulad Feeder

Proposal: Bifurcation of existing 11kV Kulad Feeder emanating from 33/11kV Banarpal PSS by construction of new 11 KV O/H linking line from Badudisahi proposed cutpoint to Banarpal Polce station 25KVA DTR.

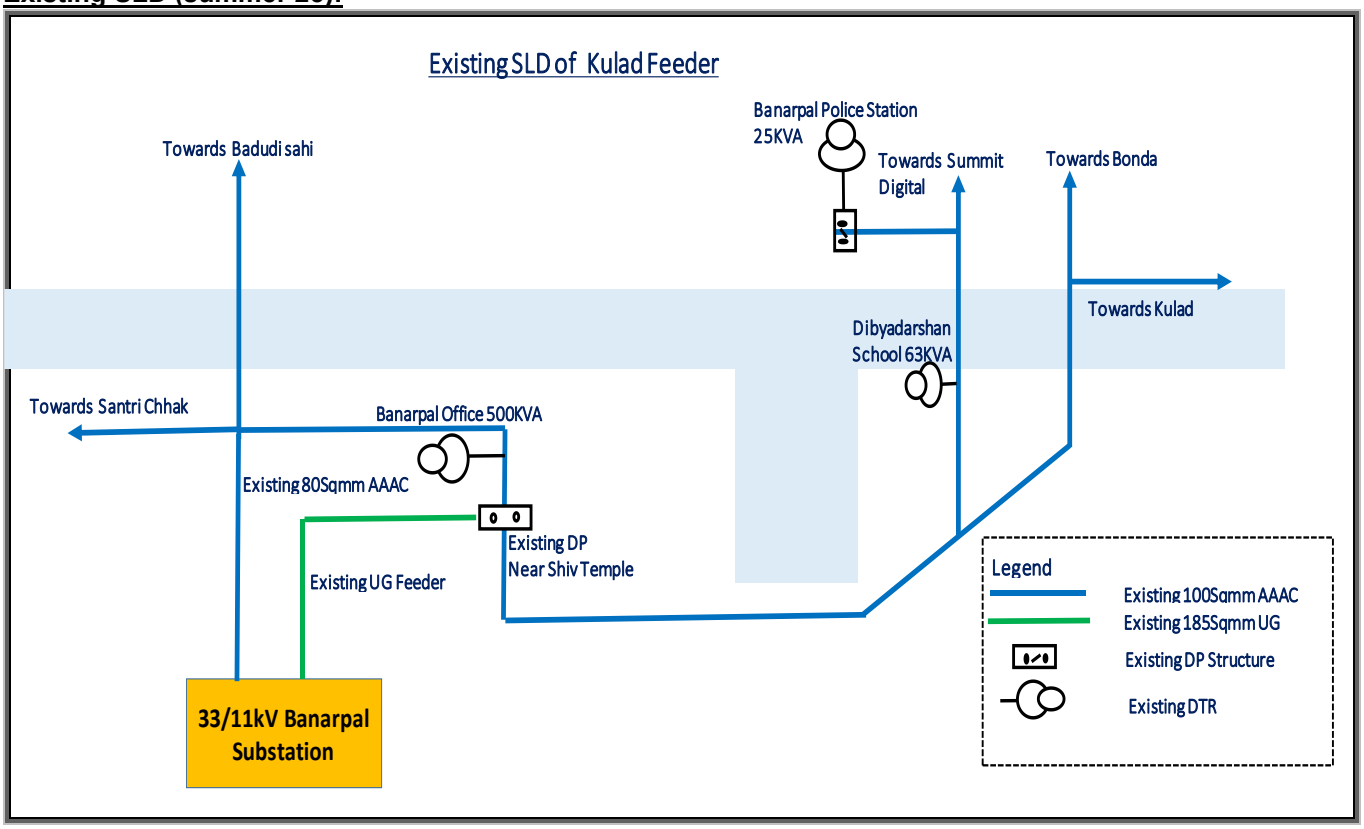
Objective: To mitigate the overloading issue of 11kV Kulad feeder.

Existing Scenario:

- At present, 11kV Kulad feeder is emanating from 33/11kV Banarpa PSS.Total length of this feeder is 16.3km and the peak load is 4.58MVA.
- In the existing scenario, conductor size of 11kV Kulad Feeder is 55/80sqmm & the feeder is 101% loaded w.r.t the current carrying capacity of the conductor and 129% loaded considering 13% load growth for Urban feeders.
- This feeder is mainly feeding urban consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, feeder bifurcation is proposed for improving reliability and to mitigate overload condition.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Banarpal	Kulad	4.52	4.58	101%	5.85	129%	Overload

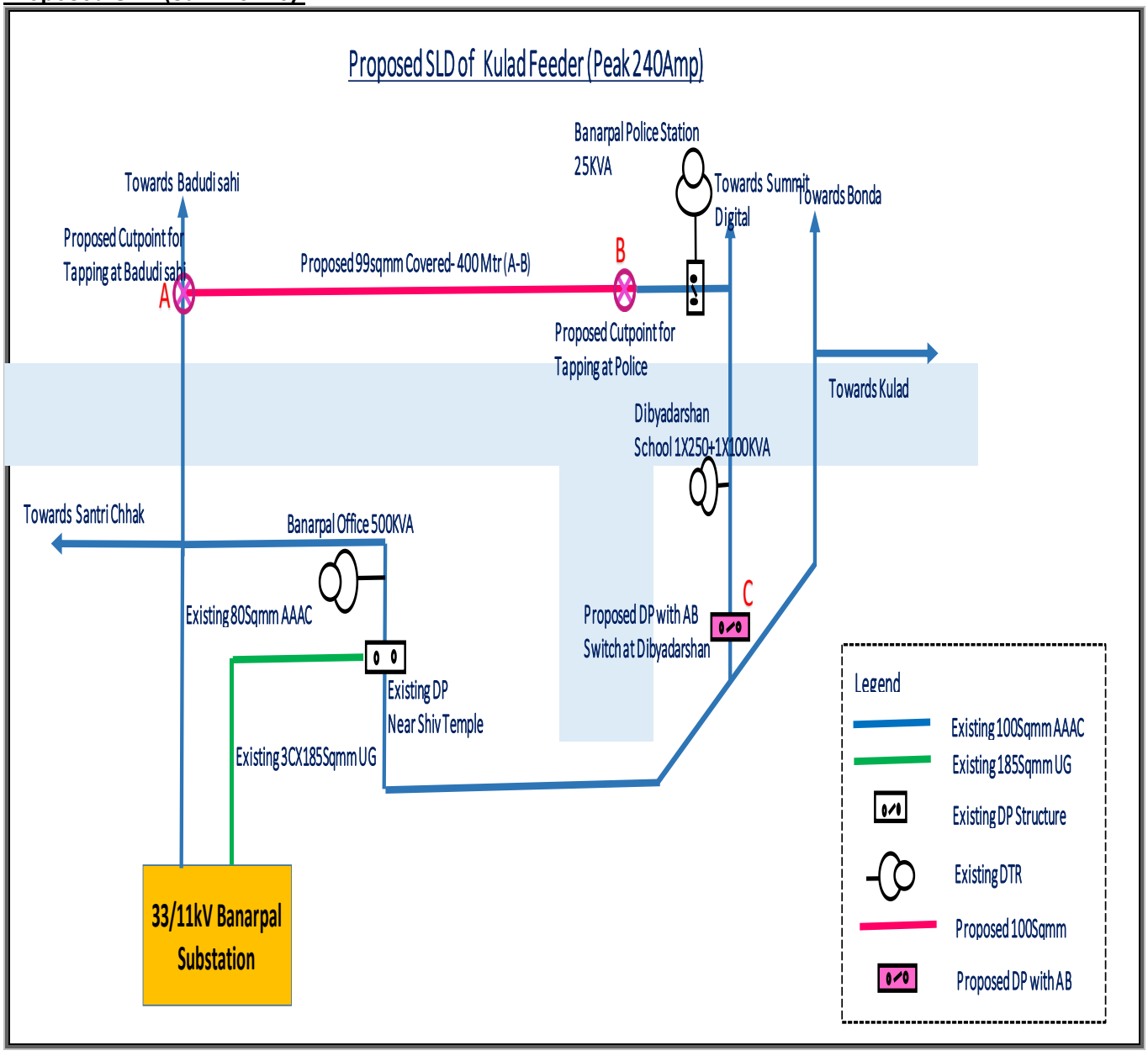
Existing SLD (summer'25):



Proposed Scenario:

Proposal for construction of new 11 KV O/H linking line for Bifurcation of load for Kulad feeder from Badudisahi proposed cut point to Banarpal Police station 25KVA DTR

Proposed SLD (summer'25):



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading considering 13% Load Growth for 2 years**	**% Loading in Summer-25**	**Feeder Status**
Banarpal	Kulad	4.52	3.08	68%	3.93	87%	OK
Banarpal	New Feeder	4.52	1.50	33%	1.92	42%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	TED
Name of the Sub-Division : -	Chainpal
Name of the Section : -	Banarpal
Name of the Work :-	Proposal for construction of new 11 KV O/H linking line for Bifurcation of load for Kulad feeder from Badudisahi proposed cut point to Banarpal Police station 25KVA DTR
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Amount
1	Proposal for construction of 0.4KM new 11 KV O/H linking line for Bifurcation of load for Kulad feeder from Badudisahi proposed cut point to Banarpal Police station 25KVA DTR using 99 SQ.MM. -AAA Conductor	11,90,059.17
2	**Total Gross**	11,90,059.17
Total estimated cost is Rs. 0.12Cr.		

Cost Estimate: 0.12 cr. (For detailed BoQ refer Annexure 9.64)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Kulad feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

65. Mitigation of Feeder Overloading issue of 11kv RE-2Feeder

Proposal: Proposal for Augmentation of existing 11kV RE-2 feeder emanating from 33/11kV Hatatota PSS from lower size conductor 34sqmm to 99 SQ.MM. -AAA Conductor from Hatatota PSS to 4pole Talagda AB switch.

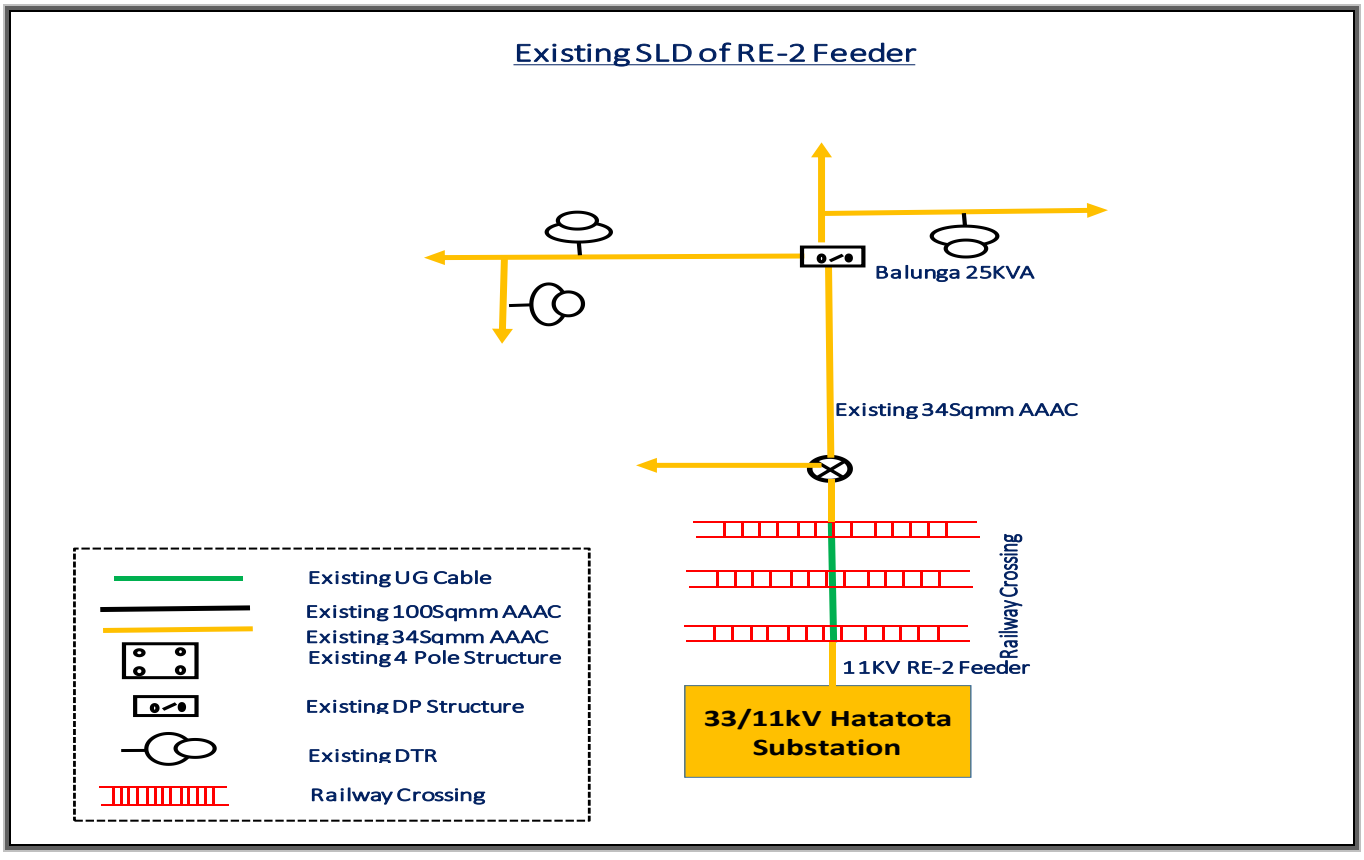
Objective: To mitigate the overloading issue of 11kV RE-2 feeder.

Existing Scenario:

- At present, 11kV RE-2 feeder is emanating from 33/11kV Hatatota PSS.Total length of this feeder is 40.4km and the peak load is 2.67MVA.
- In the existing scenario, conductor size of 11kV RE-2 Feeder is 34sqmm & the feeder is 101% loaded w.r.t the current carrying capacity of the conductor and 118% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading Considering 8% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Hatatota	RE-2	2.63	2.67	101%	3.12	118%	Overload

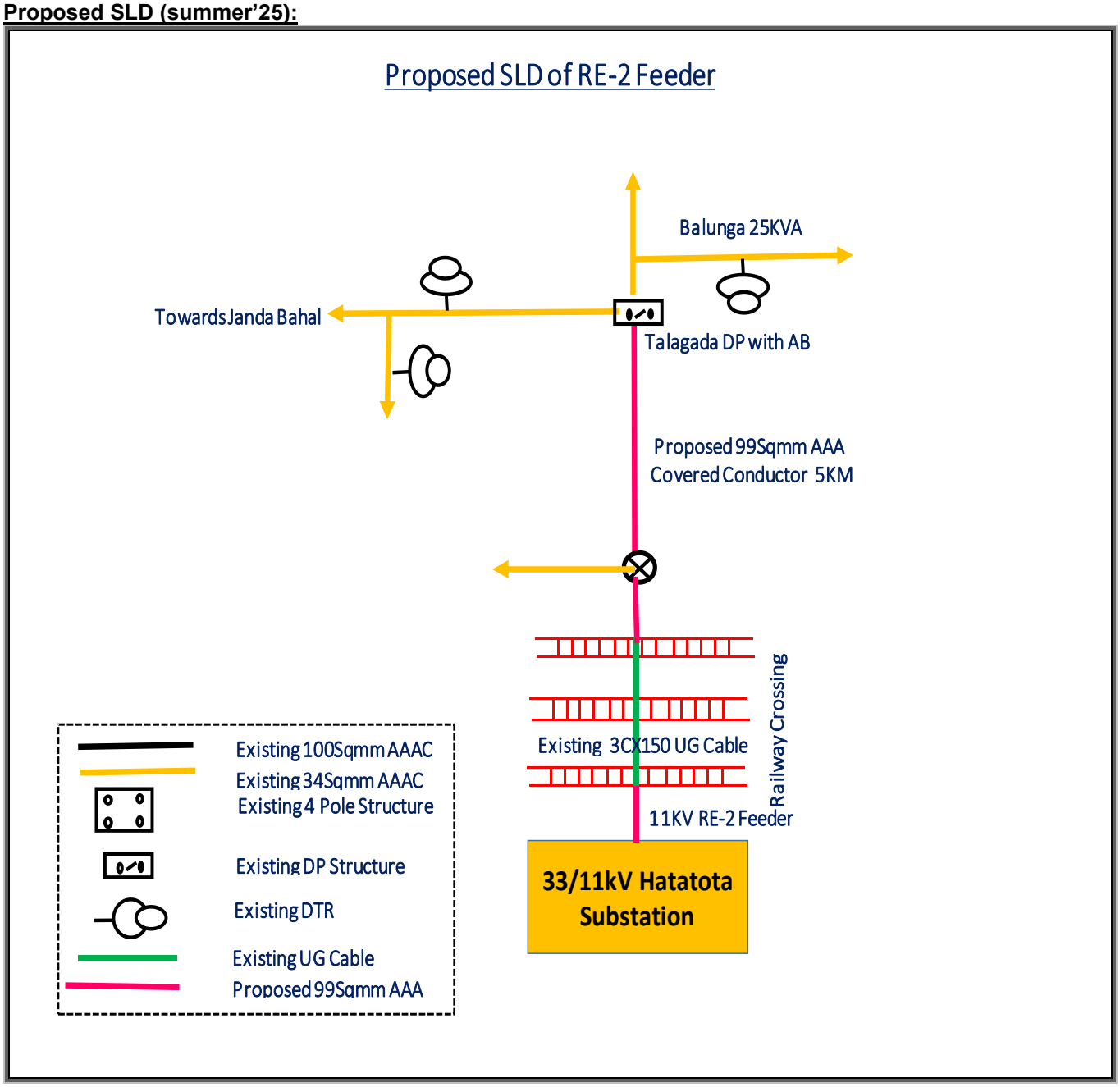
Existing SLD (summer'25):



Proposed Scenario:

Proposal for Construction for Augmentation of RE-2 feeder from existing conductor 35sqmm to 100sqmm from Hatatota PSS to 4pole Talagda AB switch.

Proposed SLD (summer'25):



Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading Considering 8% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Hatatota	RE-2	5.19	2.67	51%	3.12	60%	OK

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED	
Name of the Division :-	TED
Name of the Sub-Division : -	Talcher
Name of the Section : -	Hatatota
Name of the Work :-	Proposal for Construction for Augmentation of RE-2 feeder from existing conductor 35sqmm to 100sqmm from Hatatota PSS to 4pole Talagda AB switch.
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Amount
1	PART-A; Construction of 5KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Hatatota PSS to Talgadia Line AB Switch	1,02,31,440.73
2	**Total Gross**	**1,02,31,440.73**
Total estimated cost is Rs. 1.02Cr.		

Cost Estimate: 1.02 cr. (For detailed BoQ refer Annexure 9.65)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv RE-2 feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

66. Mitigation of Feeder Overloading issue of 11kv Siminai Feeder

Proposal: Proposal for Augmentation of existing 11kV Siminai feeder emanating from 33/11kV Gundichapada PSS from lower size conductor 34sqmm to 99 SQ.MM. -AAA Conductor from Ankartipur Cut point to Ankartipur Village

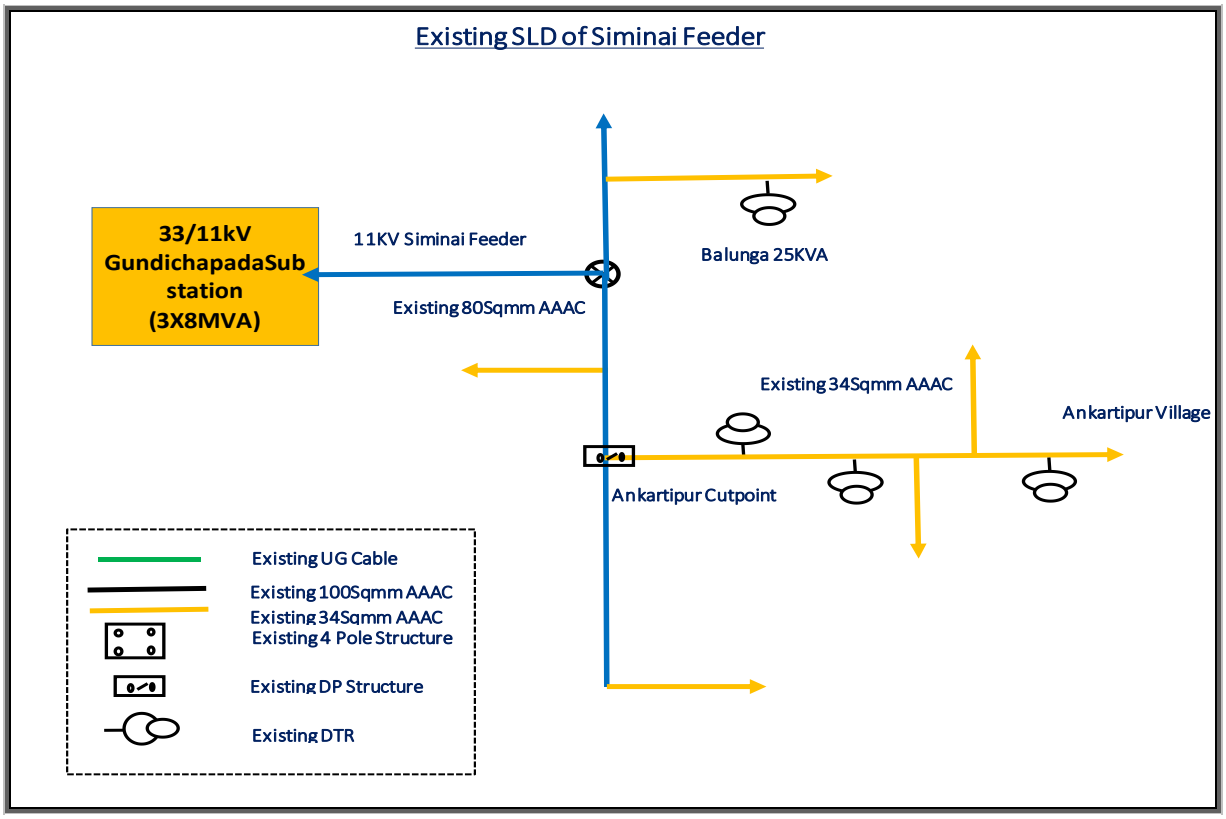
Objective: To mitigate the overloading issue of 11kV Siminai feeder.

Existing Scenario:

- At present, 11kV Siminai feeder is emanating from 33/11kV Gundichapada PSS.Total length of this feeder is 52.8km and the peak load is 2.67MVA.
- In the existing scenario, conductor size of 11kV Siminai branch Feeder is 34sqmm & the feeder is 101% loaded w.r.t the current carrying capacity of the conductor and 118% loaded considering 8% load growth for rural feeders.
- This feeder is mainly feeding rural consumers, several breakdown on 11kV feeder is encountered which hampers the reliability of power supply and also considering future load growth of the residential building, augmentation of this feeder is proposed for improving reliability.

Existing Loading							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading Considering 8% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Gundichapada	Siminai	2.63	3.51	133%	4.10	156%	Overload

Existing SLD:

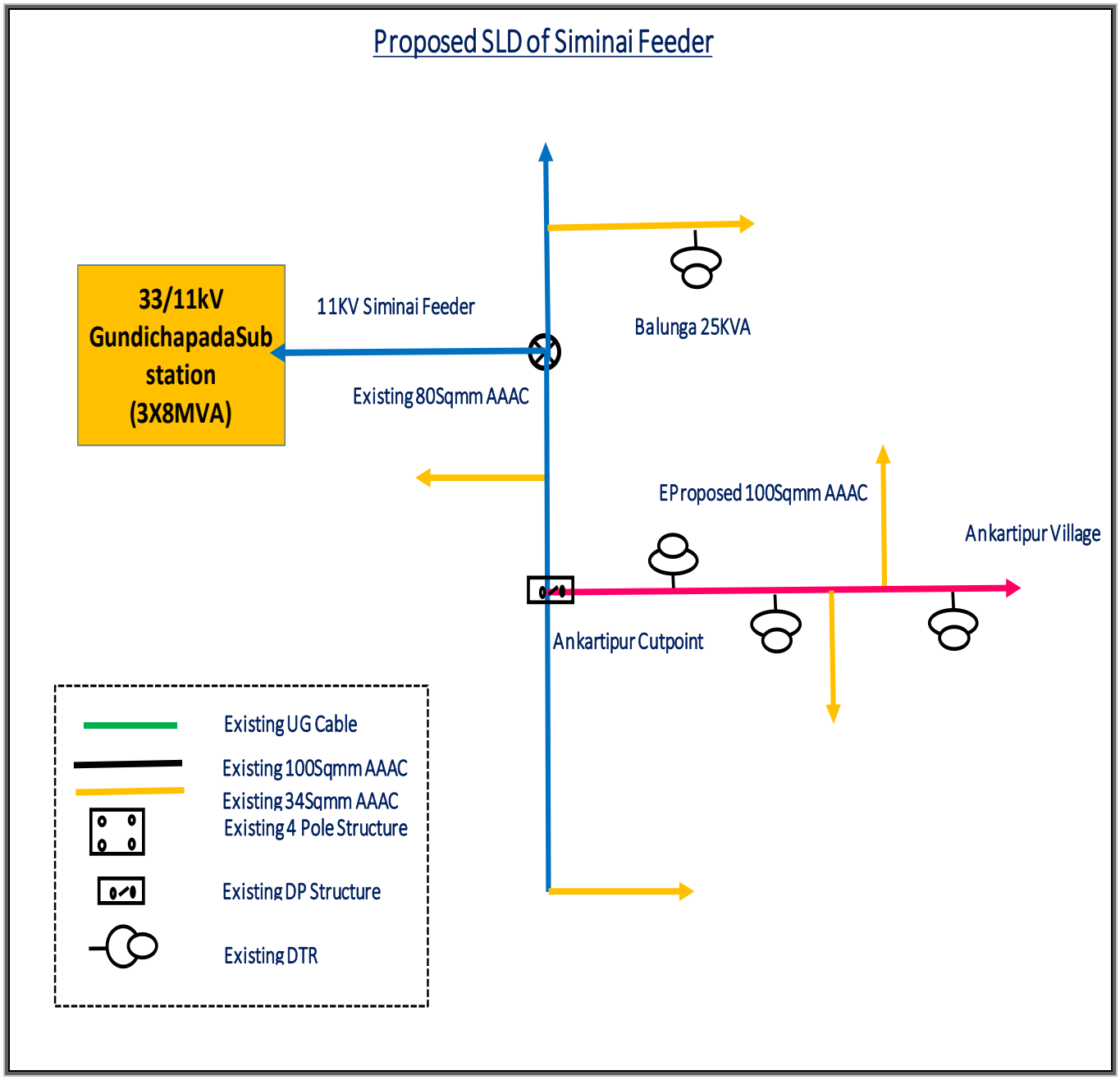


Proposed Scenario:

Proposal for Construction of 3km for augmentation of siminai feeder from Ankartipur Cut point to Ankartipur Village to mitigate overload condition

Loading Of Feeder after Proposal							
Name of the PSS	**11 kV kV Feeder Name**	**Feeder Capacity (MVA)**	**Peak Loading AS IS (MVA)**	**% Existing Loading of feeder**	**Summer 25 loading Considering 8% Load Growth for 2 Years**	**% Loading in Summer-25**	**Feeder Status**
Gundichapada	Siminai	5.19	3.51	68%	4.10	79%	OK

Proposed SLD (summer'25):



Detailed Scope of Work and Abstract of Estimate:

TPCODL	
Name of the Division :-	TED
Name of the Sub-Division : -	Dhenkanal
Name of the Section : -	Hatatota
Name of the Work :-	Proposal for Construction of 3km for augmentation of siminai feeder from Ankartipur Cut point to Ankartipur Village to mitigate overload condition
Names of Schemes: -	**CAPEX 24-25**

Abstract of Estimate

Sl. No.	Description	Gross
1	PART-A; Construction of 3KM of Augmentation using 11mtr long 160x152 ,30.44KG/MTR WPB Pole with 99 SQ.MM. -AAA Conductor from Ankartipur Cut point to Ankartipur Village	59,86,669.04
2	**Total Gross**	**59,86,669.04**
Total estimated cost is Rs. 0.60Cr.		

Cost Estimate: 0.60 cr. (For detailed BoQ refer Annexure 9.66)

Benefit:

- To maintain reliable Power Supply to rural consumers by strengthening the line & mitigation of overloading issue of 11kv Siminai feeder.
- The above arrangement will help to release power supply to upcoming potential consumers.
- Safety to the public & working personnel will be improved since conductor snapping because of overloading is adressed through above proposal.

67. Mitigation of N-1 issue of 11kv Kanheipal feeder, Barun feeder and Guda Feeder

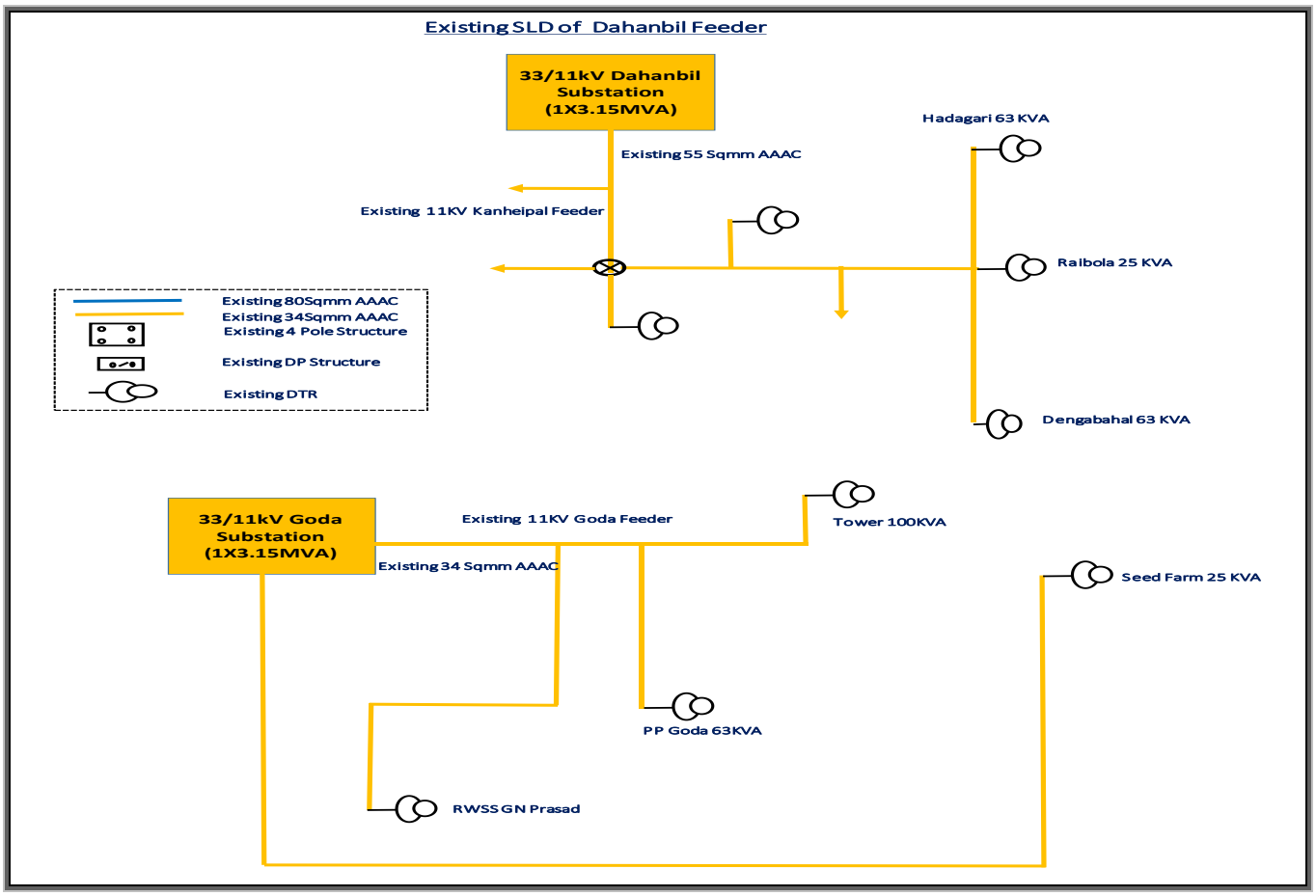
Proposal: Proposal for Construction of new linking line of 0.5km from OLIC 25KVA to Vodafone Tower 16KVA and 0.5km of linking line from seed farm DTR of barun feeder to Odisha bella 16KVA DTR of 11kv Kanheipal feeder.

Objective: To mitigate the N-1 issue of 11kV kanheipal feeder.

Existing Scenario:

- At present, 11kV kanheipal feeder is emanating from 33/11kV Dahanbil PSS.Total length of this feeder is 65.9km.11kv Guda feeder is eminating from Guda PSS of feeder length of 6.97km and Barun feeder eminating from Guda PSS of length 24km.
- This feeder is mainly feeding rural consumers, for improving the reliability and to mitigate the PTR overloading linking line has been proposed.

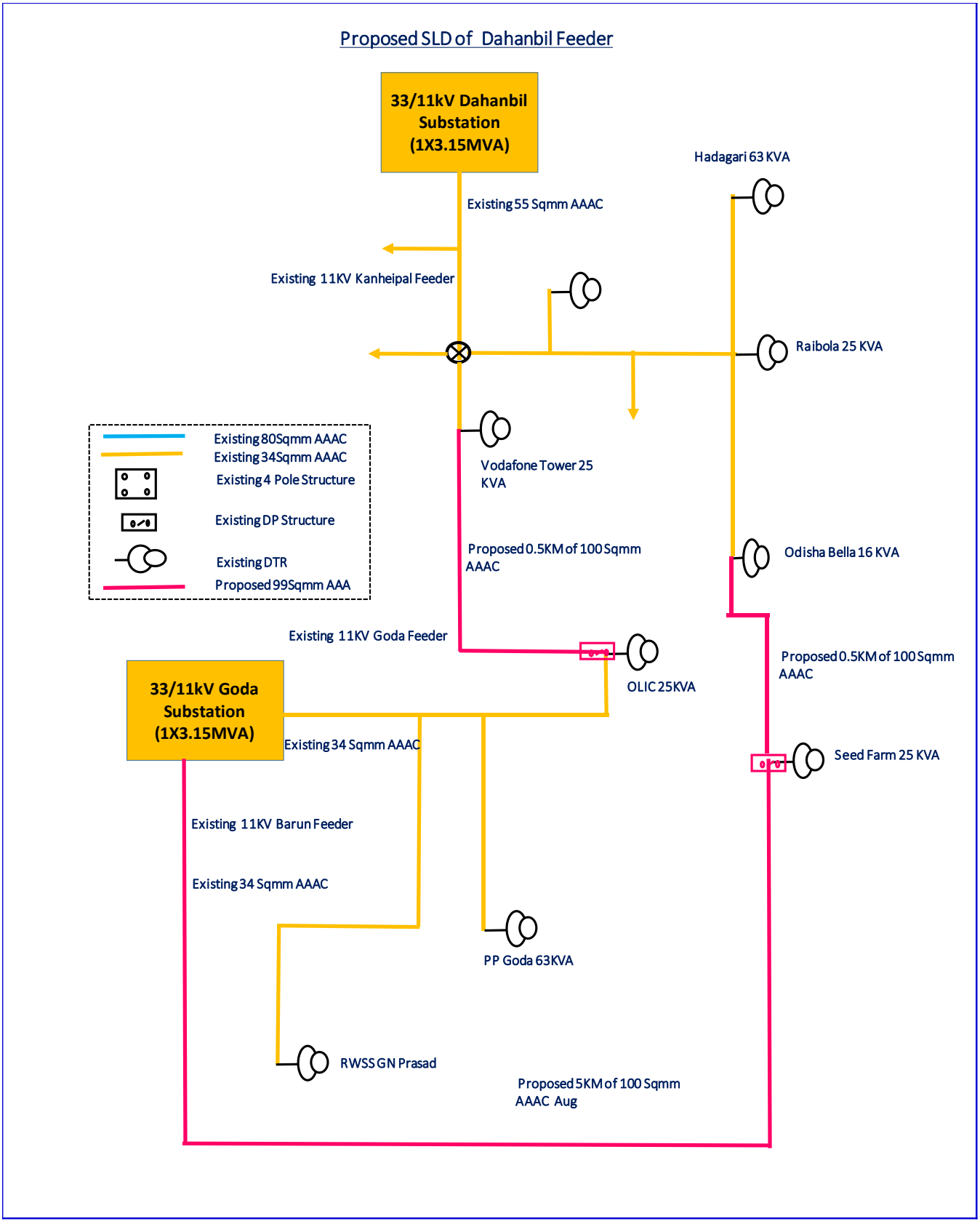
Existing SLD:



Proposed Scenario:

Proposal for Construction of new linking line of 0.5km from OLIC 25KVA to Vodafone Tower 16KVA and 0.5km of linking line from seed farm DTR of barun feeder to Odisha bella 16KVA DTR of 11kv Kanheipal feeder.

Proposed SLD:



Benefit:

- To maintain reliable Power Supply to rural consumers by interconnecting the feeders & mitigation of overloading issue of PTR.

Detailed Scope of Work and Abstract of Estimate:

TP CENTRAL ODISHA DISTRIBUTION LIMITED		
Name of the Division :-	DED	
Name of the Sub-Division : -	Kamakhyanagar	
Name of the Section : -	Mathkargola	
Name of the Work :-	Proposal for Construction of new linking line of 0.5km from OLIC 25KVA to Vodafone Tower 16KVA and 0.5km of linking line from seed farm DTR of barun feeder to Odisha bella 16KVA DTR of 11kv Kanheipal feeder	
Names of Schemes: -	**CAPEX 24-25**	
Abstract of Estimate		
Sl. No.	**Description**	**Amount**
1	Part A: Proposal for Construction of new linking line of 0.5km from OLIC 25KVA to Vodafone Tower 16KVA and 0.5km of linking line from seed farm DTR of barun feeder to Odisha bella 16KVA DTR of 11kv Kanheipal feeder and 5km Augmentaion of Guda feeder	15219148.79
2	**Total Gross**	15219148.79
Total estimated cost is Rs. 1.52Cr.		

Cost Estimate: 1.52cr. (For detailed BoQ refer Annexure 9.67)