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ANNEXURES

ANNEXURE A - CONSTRUCTION OF 33/11 KV SUBSTATION & ASSOCIATED 33 KV LINES & 11 KV LINES FOR STRENGTHENING OF DISTRIBUTION SYSTEM AND REDUCTION OF TECHNICAL LOSSES.

| FY 2013-14 | | | | | | | | | | | | | Amount in lacs | | | |
|------------|----------------------------|----------|----------------|----------|--------------|----------------------|----------------------|--------------------------------|---------------------|-------------------|--------------------|------------|-----------------------------|--------------|------------|--------|
| S. No. | Name of Sub Station | District | Name of Circle | Capacity | Capacity MVA | Length of 33 KV Line | Length of 11 KV Line | Approximate cost of substation | Cost of Civil works | Cost of 33KV Line | Cost of 11 KV Line | Total Cost | Total Cost after escalation | Cost of Land | Final Cost | |
| 1 | Nehru Colony (T) | Dehradun | Dehradun (U) | 1x10 | 10.00 | 3.00 | 8.00 | 273.52 | 80.00 | 29.70 | 44.00 | 427.22 | 506.26 | 35.00 | 541.26 | |
| 2 | MDDA Complex (T) | | | 2x10 | 20.00 | 4.00 | 16.00 | 277.04 | 80.00 | 39.60 | 88.00 | 484.64 | 574.30 | 20.00 | 594.30 | |
| 3 | LBS Mussoorie (H) | | | 2 x5 | 10.00 | 5.00 | 36.00 | 200.00 | 50.00 | 49.50 | 198.00 | 497.50 | 589.54 | 20.00 | 609.54 | |
| 4 | Selaqui-2 (R) | | Dehradun (R) | 2x10 | 20.00 | 15.00 | 32.00 | 277.04 | 80.00 | 148.50 | 176.00 | 681.54 | 807.62 | 20.00 | 827.62 | |
| 5 | Jollygrant/Shyamspur (R) | | | 2x5 | 10.00 | 16.00 | 24.00 | 218.00 | 48.00 | 158.40 | 132.00 | 556.40 | 659.33 | 18.00 | 677.33 | |
| 6 | Rudrapur (R) | | | 2x5 | 10.00 | 17.00 | 24.00 | 200.00 | 48.00 | 168.30 | 132.00 | 548.30 | 649.74 | 18.00 | 667.74 | |
| 7 | Coer Roorkee (T) | Haridwar | Roorkee | 2x5 | 10.00 | 10.00 | 12.00 | 200.00 | 50.00 | 99.00 | 66.00 | 415.00 | 491.78 | 20.00 | 511.78 | |
| 8 | Shiv Ganga Indl Estate (R) | | | 2x5 | 10.00 | 3.00 | 24.00 | 235.00 | 20.00 | 29.70 | 132.00 | 416.70 | 493.79 | 10.00 | 503.79 | |
| 9 | Sahdevpur (R) | | Haridwar | 2x5 | 10.00 | 15.00 | 24.00 | 200.00 | 50.00 | 148.50 | 132.00 | 530.50 | 628.64 | 23.00 | 651.64 | |
| 10 | Pipli (R) | | | 2x8 | 16.00 | 8.00 | 32.00 | 227.04 | 60.00 | 79.20 | 176.00 | 542.24 | 642.55 | 28.00 | 670.55 | |
| 11 | Deghat (H) | Almora | Ranikhet | 1x3 | 3.00 | 25.00 | 18.00 | 125.00 | 45.00 | 247.50 | 99.00 | 516.50 | 612.05 | 20.00 | 632.05 | |
| 12 | Takula (H) | | | 1x3 | 3.00 | 20.00 | 18.00 | 125.00 | 45.00 | 198.00 | 99.00 | 467.00 | 553.40 | 20.00 | 573.40 | |
| 13 | Karmi (H) | | | Bageshw | 1x3 | 3.00 | 25.00 | 18.00 | 125.00 | 45.00 | 247.50 | 99.00 | 516.50 | 612.05 | 20.00 | 632.05 |

| FY 2013-14 | | | | | | | | | | | | | Amount in lacs | | | |
|--------------|---------------------|----------|----------------|----------|---------------|----------------------|----------------------|--------------------------------|---------------------|-------------------|--------------------|----------------|-----------------------------|---------------|----------------|--|
| S. No. | Name of Sub Station | District | Name of Circle | Capacity | Capacity MVA | Length of 33 KV Line | Length of 11 KV Line | Approximate cost of substation | Cost of Civil works | Cost of 33KV Line | Cost of 11 KV Line | Total Cost | Total Cost after escalation | Cost of Land | Final Cost | |
| | | ar | | | | | | | | | | | | | | |
| Total | | | | | 135.00 | 166.00 | 286.00 | 2682.64 | 701.00 | 1643.40 | 1573.00 | 6600.04 | 7821.05 | 272.00 | 8093.05 | |

| FY 2014-15 | | | | | | | | | | | | | Amount in lacs | | | |
|------------|---------------------|------------|-------------------|-----------|--------------|----------------------|----------------------|--------------------------------|---------------------|-------------------|--------------------|------------|-----------------------------|--------------|------------|-------|
| S. No. | Name of Sub Station | District | Name of Circle | Capacity | Capacity MVA | Length of 33 KV Line | Length of 11 KV Line | Approximate cost of substation | Cost of Civil works | Cost of 33KV Line | Cost of 11 KV Line | Total Cost | Total Cost after escalation | Cost of Land | Final Cost | |
| 1 | Dhoran Khas (R) | Dehradun | EDC (Urban) | 2x10 | 20.00 | 12.00 | 32.00 | 288.00 | 25.00 | 130.68 | 193.60 | 637.28 | 755.18 | 21.00 | 776.18 | |
| 2 | Daniya (H) | Almora | Ranikhet | 1x3 | 3.00 | 20.00 | 18.00 | 135.00 | 50.00 | 217.80 | 108.90 | 511.70 | 606.36 | 21.00 | 627.36 | |
| 3 | Jalali (H) | | | 1x3 | 3.00 | 1.00 | 18.00 | 130.00 | 50.00 | 10.89 | 108.90 | 299.79 | 355.25 | 21.00 | 376.25 | |
| 4 | Jaiti (H) | | | 1x3 | 3.00 | 15.00 | 18.00 | 115.00 | 40.00 | 163.35 | 108.90 | 427.25 | 506.29 | 21.00 | 527.29 | |
| 5 | Sirkot (H) | | | Bageshwar | | 2x3 | 6.00 | 10.00 | 36.00 | 185.00 | 40.00 | 108.90 | 217.80 | 551.70 | 653.76 | 21.00 |
| 6 | Rima - Banlek (H) | 2x3 | 6.00 | | | 30.00 | 36.00 | 185.00 | 40.00 | 326.70 | 217.80 | 769.50 | 911.86 | 21.00 | 932.86 | |
| 7 | Pratappur (R) | U.S. Nagar | Kashipur | 2x5 | 10.00 | 0.50 | 24.00 | 200.00 | 30.00 | 5.45 | 145.20 | 380.65 | 451.06 | 10.00 | 461.06 | |
| 8 | Barhani (R) | | Kashipur (Bazpur) | 2x5 | 10.00 | 20.00 | 24.00 | 200.00 | 30.00 | 217.80 | 145.20 | 593.00 | 702.71 | 20.00 | 722.71 | |
| 9 | Jhankat (R) | | Rudrapur | 1x5 | 5.00 | 1.00 | 12.00 | 140.00 | 30.00 | 10.89 | 72.60 | 253.49 | 300.39 | 10.00 | 310.39 | |

| FY 2014-15 | | | | | | | | | | | | | Amount in lacs | | | |
|--------------|---------------------------------------|----------|----------------|----------|--------------|----------------------|----------------------|--------------------------------|---------------------|-------------------|--------------------|----------------|-----------------------------|---------------|----------------|--|
| S. No. | Name of Sub Station | District | Name of Circle | Capacity | Capacity MVA | Length of 33 KV Line | Length of 11 KV Line | Approximate cost of substation | Cost of Civil works | Cost of 33KV Line | Cost of 11 KV Line | Total Cost | Total Cost after escalation | Cost of Land | Final Cost | |
| | | | (Sitarganj) | | | | | | | | | | | | | |
| 10 | Kiccha Bye Pass, near Ganga Nagar (R) | | Rudrapur | 2x8 | 16.00 | 2.00 | 32.00 | 289.18 | 30.00 | 21.78 | 193.60 | 534.56 | 633.45 | 20.00 | 653.45 | |
| 11 | Dhudarkhal (H) | Kotdwar | EDC (Srinagar) | 1x3 | 3.00 | 20.00 | 18.00 | 150.00 | 55.00 | 217.80 | 108.90 | 531.70 | 630.06 | 20.00 | 650.06 | |
| 12 | Ukhraikhal (H) | | | 2x3 | 6.00 | 40.00 | 36.00 | 245.00 | 55.00 | 435.60 | 217.80 | 953.40 | 1129.78 | 20.00 | 1149.78 | |
| 13 | Jogi Patti (H) | Tehri | | 2x3 | 6.00 | 15.00 | 36.00 | 225.00 | 50.00 | 163.35 | 217.80 | 656.15 | 777.54 | 20.00 | 797.54 | |
| Total | | | | | 97.00 | 186.50 | 340.00 | 2487.18 | 525.00 | 2030.99 | 2057.00 | 7100.17 | 8413.70 | 246.00 | 8659.70 | |

| FY 2015-16 | | | | | | | | | | | | | Amount in lacs | | | |
|------------|---------------------|----------|----------------|----------|--------------|----------------------|----------------------|--------------------------------|---------------------|-------------------|--------------------|------------|-----------------------------|--------------|------------|--|
| S. No. | Name of Sub Station | District | Name of Circle | Capacity | Capacity MVA | Length of 33 KV Line | Length of 11 KV Line | Approximate cost of substation | Cost of Civil works | Cost of 33KV Line | Cost of 11 KV Line | Total Cost | Total Cost after escalation | Cost of Land | Final Cost | |
| 1 | Maldhan Chaur (R) | Nainital | Haldwani | 1x5 | 5.00 | 10.00 | 12.00 | 160.00 | 30.00 | 119.79 | 79.86 | 389.65 | 461.74 | 21.00 | 482.74 | |
| 2 | Choorgaliya (R) | | | 1x5 | 5.00 | 25.00 | 12.00 | 140.00 | 30.00 | 299.48 | 79.86 | 549.34 | 650.96 | 21.00 | 671.96 | |
| 3 | Patwa Daangar (R) | | | 2x5 | 10.00 | 25.00 | 24.00 | 220.00 | 25.00 | 299.48 | 159.72 | 704.20 | 834.47 | 21.00 | 855.47 | |

| FY 2015-16 | | | | | | | | | | | | | Amount in lacs | | | |
|--------------|--------------------------|-------------|----------------|----------|--------------|----------------------|----------------------|--------------------------------|---------------------|-------------------|--------------------|----------------|-----------------------------|----------------|---------------|----------------|
| S. No. | Name of Sub Station | District | Name of Circle | Capacity | Capacity MVA | Length of 33 KV Line | Length of 11 KV Line | Approximate cost of substation | Cost of Civil works | Cost of 33KV Line | Cost of 11 KV Line | Total Cost | Total Cost after escalation | Cost of Land | Final Cost | |
| 4 | Manpokhra (R) | | | 2x3 | 6.00 | 20.00 | 24.00 | 185.00 | 25.00 | 239.58 | 159.72 | 609.30 | 722.02 | 21.00 | 743.02 | |
| 5 | Jhajhra (R) | Dehradun | EDC (Rural) | 2x5 | 10.00 | 5.00 | 24.00 | 220.00 | 25.00 | 59.90 | 159.72 | 464.62 | 550.57 | 21.00 | 571.57 | |
| 6 | Sahastradhara - I (R) | | | 2x8 | 16.00 | 10.00 | 32.00 | 250.00 | 25.00 | 119.79 | 212.96 | 607.75 | 720.18 | 21.00 | 741.18 | |
| 7 | Sahastradhara - II (R) | | | 2x8 | 16.00 | 10.00 | 32.00 | 250.00 | 25.00 | 119.79 | 212.96 | 607.75 | 720.18 | 21.00 | 741.18 | |
| 8 | Mussorie Bypass Road (R) | | | 2x8 | 16.00 | 8.00 | 32.00 | 250.00 | 25.00 | 95.83 | 212.96 | 583.79 | 691.79 | 21.00 | 712.79 | |
| 9 | Malsi (R) | | | 2x8 | 16.00 | 8.00 | 32.00 | 250.00 | 25.00 | 95.83 | 212.96 | 583.79 | 691.79 | 21.00 | 712.79 | |
| 10 | Anarwala (R) | | | 2x8 | 16.00 | 4.00 | 32.00 | 250.00 | 25.00 | 47.92 | 212.96 | 535.88 | 635.01 | 21.00 | 656.01 | |
| 11 | Kulla (H) | Champawat | Ranikhet | 1x3 | 3.00 | 20.00 | 18.00 | 150.00 | 55.00 | 239.58 | 119.79 | 564.37 | 668.78 | 24.31 | 693.09 | |
| 12 | Chandak (H) | Pithoragarh | | 1x3 | 3.00 | 4.00 | 18.00 | 125.00 | 45.00 | 47.92 | 119.79 | 337.71 | 400.18 | 20.00 | 420.18 | |
| 13 | Harshil (H) | Uttarkashi | Uttarkashi | 1x3 | 3.00 | 15.00 | 18.00 | 150.00 | 40.00 | 179.69 | 119.79 | 489.48 | 580.03 | 21.00 | 601.03 | |
| Total | | | | | | 125.00 | 164.00 | 310.00 | 2600.00 | 400.00 | 1964.56 | 2063.05 | 7027.61 | 8327.71 | 275.31 | 8603.02 |

ANNEXURE B - INCREASING CAPACITY OF 33/11 KV SUBSTATIONS

| FY 2013-14 | | | | | | Amount in Lacs | |
|------------|----------------|------------------------------|-------------------|-------------------|-------|--|-----------------------|
| Sr. No | Division | Name and location of the S/S | Existing Capacity | Capacity proposed | Cost | Total Cost after escalation minus old transformer cost | Increase in Total MVA |
| 1 | EDC - Haldwani | Chilikiya - Ramnagar | 1x5 + 1x8 | 2x8 | 90.20 | 25.49 | 3 |
| 2 | | Sukhatal-Naintal | 2x5 | 2x8 | 90.20 | 34.29 | 6 |
| 3 | | Taragakhet - Naintal | 1x3 | 1x5 | 36.30 | 15.52 | 2 |
| 4 | | Dhula kheda - Haldwani | 1x5 + 1x8 | 2x8 | 90.20 | 25.49 | 3 |
| 5 | | Lal Kuwa | 2x5 | 1x5 + 1x8 | 81.40 | 15.06 | 3 |
| 6 | EDC - Kashipur | Kundeshwari | 2x5 | 2x8 | 90.20 | 34.29 | 6 |
| 7 | | Garhinegi | 2x5 | 2x8 | 90.20 | 34.29 | 6 |
| 8 | | Serwarkheda | 2x5 | 2x8 | 90.20 | 34.29 | 6 |
| 9 | | Mandi | 8+5 | 2x8 | 90.20 | 25.49 | 3 |
| 10 | | Fauzi Colony | 8+5 | 2x8 | 90.20 | 25.49 | 3 |
| 11 | | Pipaliya | 5+5 | 2x8 | 90.20 | 34.29 | 6 |
| 12 | | ND Nagar | 5+8 | 2x8 | 90.20 | 25.49 | 3 |
| 13 | | Manpur | 5+8 | 2x8 | 90.20 | 25.49 | 3 |

| FY 2013-14 | | | | | | Amount in Lacs | |
|--------------|----------------|------------------------------|-------------------|-------------------|--------|--|-----------------------|
| Sr. No | Division | Name and location of the S/S | Existing Capacity | Capacity proposed | Cost | Total Cost after escalation minus old transformer cost | Increase in Total MVA |
| 14 | | Jaspur | 2x5+8 | 3x8 | 135.30 | 42.63 | 6 |
| 15 | | Kelakhera | 5+5 | 2x8 | 90.20 | 34.29 | 6 |
| 16 | EDC - Ranikhet | Dharchula | 1x3 | 1x5 | 36.30 | 15.52 | 2 |
| 17 | | Dwarahat | 2x3 | 1x3+1x5 | 63.80 | 20.60 | 2 |
| 18 | | Ranikhet | 1x3 + 1x5 | 2x5 | 72.60 | 22.23 | 2 |
| 19 | | Bhikiyasand | 1x1.5 +1x3 | 2x3 | 55.00 | 23.93 | 1.5 |
| 20 | | Kosi | 1x3 | 1x5 | 36.30 | 15.52 | 2 |
| Total | | | | | | 529.64 | 74.50 |

| FY 2014-15 | | | | | | Amount in Lacs | |
|------------|----------------|------------------------------|-------------------|-------------------|--------|--|-----------------------|
| Sr. No | Division | Name and location of the S/S | Existing Capacity | Capacity proposed | Cost | Total Cost after escalation minus old transformer cost | Increase in Total MVA |
| 1 | EDC - Ranikhet | Thal | 1x3 | 1x5 | 39.93 | 17.07 | 2 |
| 2 | | Raiagar | 2x3 | 1x3+1x5 | 70.18 | 22.66 | 2 |
| 3 | | Pithorgarh | 2x8 | 1x8 + 1x10 | 110.11 | 31.26 | 2 |
| 4 | EDC Rudrapur | Danpur | 2 x 5 | 5 + 8 | 89.54 | 26.24 | 3 |
| 5 | | Gadarpur | 5 + 10 | 8 + 10 | 110.11 | 30.05 | 3 |

| FY 2014-15 | | | | | | Amount in Lacs | |
|--------------|------------------------|------------------------------|-----------------------|-------------------|--------|--|-----------------------|
| Sr. No | Division | Name and location of the S/S | Existing Capacity | Capacity proposed | Cost | Total Cost after escalation minus old transformer cost | Increase in Total MVA |
| 6 | | Chinimill | 5 + 8 | 2 x 5 + 8 | 129.47 | 63.88 | 5 |
| 7 | Srinagar | Shrinagar | 1x3 | 1x5 | 39.93 | 17.07 | 2 |
| 8 | | Buvakhal | 1x1.5 | 1x3 | 30.25 | 20.72 | 1.5 |
| 9 | | Chamoli | 1x7.5 | 2x7.5 | 99.22 | 67.97 | 7.5 |
| 10 | | Karnprayag | 2x3 | 1x3+1x5 | 70.18 | 22.66 | 2 |
| 11 | | Rangsi | 1x3 | 1x5 | 39.93 | 17.07 | 2 |
| 12 | | Satpuli | 1x3 | 1x5 | 39.93 | 17.07 | 2 |
| 13 | | Ballabhdrapur | 1x5 | 1x8 | 49.61 | 18.86 | 3 |
| 14 | | Kotdwar | 1x5 | 1x8 | 49.61 | 18.86 | 3 |
| 15 | | Jashodharpur | 1x5 | 1x8 | 49.61 | 18.86 | 3 |
| 16 | | EDC - Haldwani | Subhashnagar-Haldwani | 1x8 + 1x10 | 2x10 | 121.00 | 33.28 |
| 17 | Garampani-Nainital | | 1x1.5 + 3x0.3 | 1x3 + 3x0.3 | 60.50 | 41.44 | 1.5 |
| 18 | Betaal ghat - Nainital | | 2x1.5 | 2x3 | 60.50 | 41.44 | 3 |
| 19 | Padampuri - Nainital | | 1x3 | 1x5 | 39.93 | 17.07 | 2 |
| 20 | Ramnagar | | 1x5 + 1x8 | 2x8 | 99.22 | 28.04 | 3 |
| 21 | Kotabag - Ramanagar | | 1x3 | 1x5 | 39.93 | 17.07 | 2 |
| Total | | | | | | 588.62 | 56.50 |

| FY 2015-16 | | | | | | Amount in Lacs | |
|--------------|----------------|------------------------------|-------------------|-------------------|---------|--|-----------------------|
| Sr. No | Division | Name and location of the S/S | Existing Capacity | Capacity proposed | Cost | Total Cost after escalation minus old transformer cost | Increase in Total MVA |
| 1 | EDC - Kashipur | Patrapur | 2x5 | 2x8 | 109.14 | 41.49 | 6 |
| 2 | | Mahuwakheraganj | 2x5 + 1x8 | 3x8 | 163.71 | 51.58 | 6 |
| 3 | | Pakaakot | 5+8 | 2x8 | 109.14 | 30.84 | 3 |
| 4 | EDC - Rudrapur | Bara | 1 x 5 | 2 x 5 | 87.85 | 60.17 | 5 |
| 5 | | Sitarganj | 8 + 10 | 5 + 8 + 10 | 165.04 | 74.46 | 5 |
| 6 | | Jail camp | 2 X 5 | 8 + 5 | 98.49 | 28.87 | 3 |
| 7 | EDC - Ranikhet | Bagwalipokhar | 2x3 | 1x3 + 1x5 | 77.20 | 24.93 | 2 |
| 8 | | Tadikhet | 1x1.5+1x3 | 1x1.5+1x5 | 60.56 | 21.85 | 2 |
| 9 | | Siyalde | 2x1.5 | 1x1.5+1x3 | 49.9125 | 25.87 | 1.5 |
| 10 | | Salt | 2x1.5 | 1x1.5+1x3 | 49.9125 | 25.87 | 1.5 |
| 11 | | Lakshmeshwar | 1x3+1x5 | 2x5 | 87.85 | 26.90 | 2 |
| 12 | | Khatyadi | 2x3 | 1x5+1x3 | 77.20 | 24.93 | 2 |
| 13 | | Someshwar | 1x1.5+1x3 | 2x3 | 66.55 | 12.98 | 1.5 |
| 14 | | Kapkot | 1x3 | 1x5 | 43.92 | 18.77 | 2 |
| 15 | Loahaghat | 2x3 | 1x3+1x5 | 77.20 | 24.93 | 2 | |
| 16 | EDC - Srinagar | Ballabhdrapur | 1x5 | 1x8 | 54.57 | 20.74 | 3 |
| 17 | | Dugadda | 1x3 | 1x5 | 43.92 | 18.77 | 2 |
| 18 | | Jayharikhal | 1x3 | 1x5 | 43.92 | 18.77 | 2 |
| Total | | | | | | 552.73 | 51.50 |

ANNEXURE C - INSTALLATION OF COMPACT SUBSTATIONS (CSS) (11 KV/0.44 KV)

| Sr. No | FY | Distribution Circle | Distribution Division | Name of CSS | Capacity (KVA) | Cost (Rs Crores) | LT ABC cost | Total cost (Rs. Cr) | Final cost after escalation (Rs. Cr) | |
|--------|---------|---------------------|-----------------------|-------------------------------------|------------------------|------------------|-------------|---------------------|--------------------------------------|------|
| 1 | 2013-14 | Dehradun (Urban) | Dehradun (Central) | Gandhi Park | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 2 | | | | Dhobal wala | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 3 | | | | P.S. Arhat Bazar | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 4 | | | | Pashu Chikitsalya (Dispensary Road) | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 5 | | | | Devki Complex | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 6 | | | | Krishna Place | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 7 | | | Dehradun(South) | Saharanpur Chowk | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 8 | | | | Ballupur Chowk | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 9 | | | | Sabji Mandi, Mazra | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 10 | | | | Tibetan Colony, Turner Road | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 11 | | | Dehradun(North) | Hotel Shaleen, Mussoorie. | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 12 | | | | Shishu Mandir, Mussoorie | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 13 | | | | Landour, Mussoorie | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 14 | | | | Krickland, Mussoorie | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 15 | | | | Strawberry Bank, Mussoorie | 990 | 0.28 | 0.12 | 0.39 | 0.46 | |
| 16 | | | Dehradun(Rural):- | Dehradun(Rural) | Doiwala Tiraha | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 17 | | | | | Prem nagar Town | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 18 | | | | | Vidhan Sabha | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 19 | | | | Rishikesh | Nagar Palika Rishikesh | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 20 | | | | | Rishikesh Town | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 21 | | | Roorkee | Roorkee | Ram Nagar Chowk | 990 | 0.28 | 0.12 | 0.39 | 0.46 |

| Sr. No | FY | Distribution Circle | Distribution Division | Name of CSS | Capacity (KVA) | Cost (Rs Crores) | LT ABC cost | Total cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------------|----|---------------------|-----------------------|----------------------|----------------|------------------|-------------|---------------------|--------------------------------------|
| 22 | | | | Behind Jail Ramnagar | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 23 | | | | Near Garhwal Sabha | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 24 | | | | Near GIC | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 25 | | | | Near Neelam S/s | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 26 | | | | Near Ganeshpur S/o | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 27 | | | | Malviya Chowk | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 28 | | | | Avas Vikas | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 29 | | | | Purani Tehsil | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| 30 | | | | Dwarika Dheesh | 990 | 0.28 | 0.12 | 0.39 | 0.46 |
| Total | | | | | 29700 | 8.25 | 3.51 | 11.76 | 13.93 |

| Sr. No | FY | Distribution Circle | Distribution Division | Name of CSS | Capacity (KVA) | Cost (Rs Crores) | LT ABC cost | Total cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------|---------|---------------------|-----------------------|-------------------------|----------------|------------------|-------------|---------------------|--------------------------------------|
| 1 | 2014-15 | Rudrapur | Rudrapur | Bhagat singh Chowk | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 2 | | | | Transit Camp | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 3 | | | | Khera | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 4 | | | | Rampura | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 5 | | | | Badhaipura | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 6 | | | | Jagatpura | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 7 | | | Sitarganj | Shakti Farm | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 8 | | | | Main Choraha, Sitarganj | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 9 | | | | Bizti Choraha | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 10 | | | Bazpur | Anaaj Mandi | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 11 | | | | Chakarpur Choraha | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 12 | | | | Mundia | 990 | 0.30 | 0.13 | 0.43 | 0.51 |

| Sr. No | FY | Distribution Circle | Distribution Division | Name of CSS | Capacity (KVA) | Cost (Rs Crores) | LT ABC cost | Total cost (Rs. Cr) | Final cost after escalation (Rs. Cr) | |
|--------------|----|-----------------------|-----------------------|-----------------------------|---------------------------|------------------|-------------|---------------------|--------------------------------------|------|
| 13 | | | Kashipur | Main Choraha | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 14 | | Munsiram | | 990 | 0.30 | 0.13 | 0.43 | 0.51 | | |
| 15 | | Nagar Palika | | 990 | 0.30 | 0.13 | 0.43 | 0.51 | | |
| 16 | | Haldwani | Haldwani (Town). | Sargam Cinema, Rampur Road | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 17 | | | | Saurav Hotel, Nainital Raod | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 18 | | | Haldwani(Rural) | Panchayat Ghar | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 19 | | | | Koli Colony | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 20 | | | | Choti Mukhani | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 21 | | | Nainital | Dharamshala | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 22 | | | | Nainital Club Choraha | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 23 | | | Ramnagar | LIC, Ramnagar | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 24 | | | Roorkee | Haridwar | Brick market, Jwalapur | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 25 | | | | | Kassawan, Jwalapur | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 26 | | | | | Tapovan nagar, Jwalapur | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 27 | | | | | Ramleela ground, Jwalapur | 990 | 0.30 | 0.13 | 0.43 | 0.51 |
| 28 | | Seetapur, Jwalapur | | | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 29 | | Chowk bazaar, Kankhal | | | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| 30 | | Sanyasi Road, Kankhal | | | 990 | 0.30 | 0.13 | 0.43 | 0.51 | |
| Total | | | | | 29700.00 | 9.07 | 3.86 | 12.93 | 15.32 | |

ANNEXURE D - INSTALLATION OF METERS FOR GIVING NEW CONNECTIONS

| Sr. No | FY | No. of installation of single phase meters | Per meter Cost | No. of installation of three phase meters | Per meter Cost | Total Cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------|---------|--|----------------|---|----------------|---------------------|--------------------------------------|
| 1 | 2013-14 | 104820 | 1650 | 20000 | 4400 | 26.10 | 30.92 |
| 2 | 2014-15 | 108798 | 1815 | 25000 | 4840 | 31.85 | 37.74 |
| 3 | 2015-16 | 113426 | 1997 | 30000 | 5324 | 38.62 | 45.76 |

ANNEXURE E - INSTALLATION OF CAPACITOR BANK AT 33/11 KV SUBSTATIONS

| S. N. | Name of Circle | Name of Sub-Station | Capacity | Rating of Capacitor Bank (KVAR) |
|------------------|----------------|----------------------|----------------|---------------------------------|
| 1 | EDC Ranikhet | 33KV Kosi: | 3 MVA | 1500 |
| | | 33KV Lamgara | 1.5 MVA | 1500 |
| | | 33KV Someshwar : | 4.5 (3+1.5)MVA | 3000 |
| | | 33KV Bagwalipokhar : | 10 MVA | 3600 |
| | | 33KV Dwarahat : | 3 MVA | 1500 |
| | | 33KV Bhikiyasen: | 4.5 (3+1.5)MVA | 3000 |
| | | 33KV Salt | 3 MVA | 1500 |
| | | 33KV Masi | 6 MVA | 2400 |
| | | 33KV Syalde: | 1.5 MVA | 1500 |
| | | 33KV Kausani | 3 MVA | 1500 |
| | | 33KV Garur | 6 MVA | 2400 |
| | | 33KV Bageswar | 10 MVA | 3600 |
| | | 33KV Kanalichhina | 3 MVA | 1500 |
| | | 33KV Didi hat | 6 MVA | 2400 |
| | | 33KV Nachni | 1.5 MVA | 3000 |
| | | 33KV Jaulijivi | 4.5 (3+1.5)MVA | 3000 |
| | | 33KV Dharchula | 3 MVA | 1500 |
| | | 33KV Gangolihat | 6 MVA | 2400 |
| | | 33KV Berinaag | 3 MVA | 1500 |
| | | 33KV Bin | 10 MVA | 3600 |
| 33KV Khetikhan | 3 MVA | 1500 | | |
| Sub Total | | | | 47400 |
| 2 | EDC Rudrapur | 33KV Pipliya | 5+5 MVA | 4200 |
| | | 33KV Kilakhera: | 5+5 MVA | 4200 |

| S. N. | Name of Circle | Name of Sub-Station | Capacity | Rating of Capacitor Bank (KVAR) |
|--------------------------|----------------|-----------------------------|-------------|---------------------------------|
| | | 33KV Danpur : | 5+5 MVA | 4200 |
| | | 33KV N.D Nagar : | 8+5 MVA | 4500 |
| | | 33KV Kundeshwari: | 5+5 MVA | 4200 |
| | | 33KV Garinegi : | 5+5 MVA | 4200 |
| | | 33KV Dineshpur : | 5+5 MVA | 4200 |
| | | 33KV Mahuakhera | 8+8 MVA | 4800 |
| | | 33KV Pant Nagar(T V Sidcul) | 15+15 MVA | 12600 |
| | | 33KV Sector-7(Pantnagar) | 8+8 MVA | 4800 |
| | | 33KV Pulbhatta | 3+3 MVA | 3000 |
| Sub Total | | | | 54900 |
| 3 | EDC Haldwani | 33KV Dhaulakhera | 5+8 MVA | 4500 |
| | | 33KV Kamalwaganja | 8+8 MVA | 4800 |
| | | 33KV Kaladhungi | 10+10 MVA | 7200 |
| | | 33KV Lalkua | 5+5 MVA | 4200 |
| | | 33KV Garampani | 1.5+0.9 MVA | 3000 |
| | | 33KV Bhimtal | 5+5 MVA | 4200 |
| | | 33KV Sargakhet | 3.15 MVA | 1500 |
| | | 33KV Padmpuri | 3 MVA | 1500 |
| Sub Total | | | | 30900 |
| Total Kumaon Zone | | | | 133200 |

| S.No. | Name of Circle | Name of Sub-Station | Capacity | Rating of Capacitor Bank (KVAR) |
|-------|----------------|---------------------|----------|---------------------------------|
| 1 | EDC (R) D.Dun | 33KV_SS_Raiwala | 5MVA | 2100 |

| S.No. | Name of Circle | Name of Sub-Station | Capacity | Rating of Capacitor Bank (KVAR) |
|------------------|-----------------|------------------------|----------|---------------------------------|
| Sub Total | | | | 2100 |
| 2 | Haridwar | 33KV_SS_Bhattipur | 2x5 MVA | 4200 |
| | | 33KV_SS_IP4 | 2x5 MVA | 4200 |
| Sub Total | | | | 8400 |
| 3 | Srinagar | 33KV_SS_Gochar | 3MVA | 1500 |
| | | 33KV_SS_Thathur | 2x3MVA | 3000 |
| | | 33KV_SS_Muni Ki Reti | 2x5MVA | 4200 |
| | | 33KV_SS_Tapowan | 2x3MVA | 3000 |
| | | 33KV_SS_Narender Nagar | 2x3MVA | 3000 |
| | | 33KV_SS_Chamba | 2x5MVA | 4200 |
| | | 33KV_SS_Kamand | 1x3MVA | 1500 |
| | | 33KV_SS_Kirti Nagar | 5+3 MVA | 3600 |
| | | 33KV_SS_Simarkhal | 1x3MVA | 1500 |
| | | 33KV_SS_Syunsi | 5 MVA | 2100 |
| | | 33KV_SS_Jahrikhal | 5+3 MVA | 3600 |
| | | 33KV_SS_Kashyali | 1x3MVA | 1500 |
| | | 33KV_SS_Rikhnikhal | 1x3MVA | 1500 |
| | | 33KV_SS_Siggaddi | 2x8 MVA | 4800 |
| | | 33KV_SS_Jakholi | 1x5 MVA | 2100 |
| | | 33KV_SS_Bijni | 2x3 MVA | 3000 |
| | | 33KV_SS_Ghandiyal | 1x3MVA | 1500 |
| | | 33KV_SS_Chipalghat | 1x3MVA | 1500 |
| | | 33KV_SS_Mastkhal | 2x3 MVA | 3000 |
| 33KV_SS_Druvpur | 2x3 MVA | 3000 | | |
| Sub Total | | | | 53100 |

| S.No. | Name of Circle | Name of Sub-Station | Capacity | Rating of Capacitor Bank (KVAR) |
|-----------------------------|----------------|-----------------------|----------|---------------------------------|
| 4 | EDC Roorkee | 33KV_SS_Dada Jalalpur | 2x5 MVA | 4200 |
| | | 33KV_SS_Chudiyala | 2x5 MVA | 4200 |
| | | 33KV_SS_Jhabrera | 2x5 MVA | 4200 |
| | | 33KV_SS_Canal Bank | 3x8 MVA | 7200 |
| Sub Total | | | | 19800 |
| Total (Garhwal Zone) | | | | 83400 |

ANNEXURE F - R-APDRP, PART-A (SPILL OVER WORKS TO FY 2013-14)

Schematic Provisions of R-APDRP Part-A Sanctioned Schemes

(Rs. In Crore)

| SL.No. | Particulars | Sanctioned Cost (As per PFC Sanctioned Letter dated:11th Sep-2009) | Awarded Cost | | | | Total |
|---------------------------------|---|--|--|---|----------------------------------|--|--------------|
| | | | IT Consultant (M/s TCIL in consortium with M/s Vayam Tech Ltd.) | IT IA (M/s Infinite Computer Solutions (India) Ltd.) | NBSP (M/s Tulip Telecom Ltd.) | UPCL ** (Works funded from PFC but to be carried out by UPCL) | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8=4+5+6+7 |
| PFC Sanctioned Component | | | | | | | |
| A | IT Consultant deployment Cost | 4.58 | 0.30 | | | | 0.30 |
| B | Ring Fencing Cost | 2.95 | | | | 2.95 | 2.95 |
| C | Project Management Cost | 18.33 | | 4.78 | | | 4.78 |
| D | Data Center Cost | 26.37 | | 63.53 | | | 63.53 |
| E | Disaster Recovery Center Cost | 22.42 | | 25.86 | | | 25.86 |
| F | Customer Care Center Cost | 2.02 | | 3.07 | | | 3.07 |
| G | Sub-division Office Cost | 10.17 | | 10.97 | | | 10.97 |
| H | Other Office Cost | 13.56 | | 7.21 | | | 7.21 |
| I | GIS Survey Cost | 8.70 | | 2.29 | | | 2.29 |
| J | System Metering Cost | 3.26 | | | | 3.26 | 3.26 |
| K | Facility Management Cost (Initial 1 Yr after Go-Live) | 8.23 | | 1.13 | | | 1.13 |
| L | Network Connectivity Charges (Tentatively 1 Yr after Go-Live) | 5.22 | | | 4.07 | | 4.07 |

Schematic Provisions of R-APDRP Part-A Sanctioned Schemes

(Rs. In Crore)

| Sl.No. | Particulars | Sanctioned Cost (As per PFC Sanctioned Letter dated:11th Sep-2009) | Awarded Cost | | | | UPCL ** (Works funded from PFC but to be carried out by UPCL) | Total |
|----------------------------------|--|--|--|---|----------------------------------|-------------|--|-------|
| | | | IT Consultant (M/s TCIL in consortium with M/s Vayam Tech Ltd.) | IT IA (M/s Infinite Computer Solutions (India) Ltd.) | NBSP (M/s Tulip Telecom Ltd.) | | | |
| | Sub-Total (PFC Component) | 125.82 | 0.30 | 118.84 | 4.07 | 6.21 | 129.12 | |
| UPCL Sanctioned Component | | | | | | | | |
| A | Facility Management Cost (For 4 Yrs after 1 Yr of Go-Live) | 32.92 | | 4.52 | | | 4.52 | |
| B | Consumer Survey Cost to be borne by UPCL (For approx 209661 consumers) | 0.31 | | 1.08 | | | 1.08 | |
| C | Other costs to be borne by UPCL (DT-Metering) | 4.39 | | | | | | |
| | Sub-Total (UPCL Component) | 163.42 | 0.30 | 124.44 | 4.07 | 6.21 | 134.72 | |

** Complete Works Yet to be awarded by field Units of UPCL

ITIA : IT Implementation Agency

ANNEXURE G - R-APDRP, PART-B

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|--|-------------------------------|---|--|----------------------------------|---|---|-------------------------|-------------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 1 | Gadarpur | - | - | 6.991 Km. New Line for New DT, Reconductoring of 3.022 Km line | 58 No. New DT's | 14.799Km. LT ABC 95 sqm. | 58 No. for new DT | 40 New DT and conversion of 3.57 Km. LT line To HT using HT ABC | 249 No. 3phase meters | 997 No. 1phase meters | 2000 Nos. | | 383.06 |
| | Cost in Rs. Lac. | | | 42.39 | 100.66 | 44.61 | 4.29 | 69.7 | 23 | 15 | 69 | 14.41 | |
| 2 | Haldwani | two .no 11New KV &VCB New TERA BEEG -HA INDER NAGAS /R S WITH MV8*2 A CAPA | 2.50 Km. New line for New S/S | 5 New feeders of total length 3.90 km. & 29.62 km. new line for new DT, Reconductoring of 10 km. line | 285 no. New DT's & capacity enhancement of 1 no DT | 129.60 Km. LT ABC 95 sqm. | 285 for new DTs , 56 for existing DT & 7 nos. for S/s | 53 New DT and conversion of 6.81 Km. LT line To HT using HT ABC | 109 4 No. 3phase meters | 503 2 No. 1phase meters | 9846 nos | | 2631.07 |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|----------|-------------------------|---|---|---|--|----------------------------------|---|---|------------------------|---|---|-----------------------|----------------|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | Shifting of Meter to outside the consumer Premise | Cost for Miscellaneous Items in Rs. Lac. | | |
| | | CITY | | | | | | | | | | | |
| | Cost in Rs. Lac. | 242.68 | 25.9 | 343.44 | 703.14 | 392.34 | 101.45 | 117.17 | 102.37 | 75.4 | 377.41 | 149.77 | |
| 3 | Haridwar | 4 New S/s with 8MVA x2 capacity & Renovation & Modernisation of S/s & 15 nos. new 11 KV | 10 km new line for S/s & 8 km. new line for link line | 15 nos. New feeders of total length 21.7 km. , 2.92 km. new line for load shift & 67.03 km. new line for new DT, Reconductoring of 67.35 km. line | 619 nos. New DT's & capacity enhancement of 10 nos. DT | 227.945 Km. LT ABC 95 sqm. | 619 nos. for new DTs , 280 nos. for existing DT & 21 nos. for S/s | 91 nos. New DT and conversion of 11.56 Km. LT line To HT using HT ABC | 5629 No. 3phase meters | 14072 No. 1phase meters | 45030 nos & replacement of 8443 nos. (10 sqmm. Service cable) | | 8671.78 |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | | |
|----------|-------------------------|--|----------------------------|---|------------------|----------------------------------|--|--------|-----------------------|------------------------|---|-----------------------|--|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. | |
| | | VCB | | | | | | | | | | | | |
| | Cost in Rs. Lac. | 1321.39 | 186.5 | 715.11 | 1532.74 | 688 | 270.11 | 189.52 | 526.72 | 210.85 | 2177.81 | 853.03 | | |
| 4 | Jaspur | New S/s with 8MVA x2 capacity & Renovation & Modernisation of S/s, 2 no. new 11 KV VCB | 2 km. new line for new S/s | Two New feeders of total length 3.90 km. & 12.42 km. new line for new DT, Reconductoring of 4.45 km. line | 85 nos. New DT | 44.41Km. LT ABC 95 sqm. | 85 nos. for new DTs , 16 nos. for existing DT & 3 nos. for S/s | - | 615 No. 3phase meters | 1537 No. 1phase meters | 4610 nos & replacement of 615 no. 10 sqmm. Service line | | 1123.89 | |
| | Cost in Rs. Lac. | 247.7 | 20.72 | 140.74 | 210.74 | 122.9 | 40.52 | | 57.52 | 23.03 | 210.44 | 49.58 | | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|--|-----------|---|---------------------------------------|----------------------------------|--|---|-----------------------|-----------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 5 | Kashipur | Augmentation of one no. power T/f 5MVA to 8MVA at Kashipur S/s | - | 6 nos. New feeders of total length 10.512 km. & 15.695 km. new line for new DT, Reconductoring of 17.657 km. line | 142 nos. New DT's | 11.659 Km. LT ABC 95 sqm. | 142 nos. for new DTs , 53 nos. for existing DTs & 5 nos. for S/s | 2030 nos. New DT and conversion of 65.43 Km. LT line To HT using HT ABC | 115 No. 3phase meters | 577 No. 1phase meters | 14225 nos | | 4937.19 |
| | Cost in Rs. Lac. | 70.63 | | 127.92 | 313.95 | 32.69 | 63.86 | 3604.21 | 108.15 | 86.59 | 505.86 | 23.33 | |
| 6 | Khatima | 4 nos New 11 KV VCB | - | 4 nos. New feeders of total length 2.651 km. & Reconductoring of 2.11 km. line | capacity enhancement of one number DT | 1.06 Km.LT ABC 95 sqm. | 2 nos HT Capacitor bank at Kanza bag S/s | 436 nos. New DT and conversion of 24.69 Km. LT line To HT using HT ABC | 625 No. 3phase meters | 182 No. 1phase meters | 2210 nos | | 1000.2 |
| | Cost in Rs. Lac. | 20.09 | | 26.53 | 1.27 | 3.21 | 17.16 | 756.18 | 58.45 | 27.03 | 71.62 | 18.66 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|------------------|-----------|--|------------------|----------------------------------|---|--|-----------------------|------------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 7 | Kichha | - | - | 2 nos. New feeders of total length 3.70 km. & 5.00 km. new line for new DT, Reconductoring of 6.586 km. line | 45 nos. New DT's | 22.69 Km. LT ABC 95 sqm. | 45 nos. for new DTs , 97 nos. for existing DTs & 2 nos. for S/s | - | 685 No. 3phase meters | 1712 No. 1phase meters | 1712 nos | | 488.01 |
| | Cost in Rs. Lac. | | | 87.02 | 100.44 | 65 | 45.76 | | 64.1 | 25.65 | 59.12 | 40.92 | |
| 8 | Laksar | - | - | 2 nos. New feeders of total length 2.2 km. & Reconductoring of 10.57 km. line | - | 12.7 Km. LT ABC 95 sqm. | 2 nos. HT Capacitor bank at existing S/s | 223 nos. New DT and conversion of 15.20 Km. LT line To HT using HT ABC | 202 No. 3phase meters | 1011 No. 1phase meters | 690 nos | | 609.008 |
| | Cost in Rs. Lac. | | | 30.91 | | 38.608 | 19.69 | 440.54 | 18.93 | 15.15 | 40.25 | 4.93 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|---|----------------------------|--|------------------|----------------------------------|--|---|-----------------------|------------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 9 | Landhora | one no. new 11 KV VCB | - | 1 nos. New feeders of total length 4.00 km. & Reconductoring of 6.251 km. line | - | 3.17 Km. LT ABC 95 sqm. | 1 nos. HT Capacitor bank at existing S/s | 145 nos. New DT and conversion of 11.82 Km. LT line To HT using HT ABC | 70 No. 3phase meters | 1050 No. 1phase meters | 1120 nos & 140 nos. (10 sqm service cable) | | 430.00 |
| | Cost in Rs. Lac. | 5.02 | | 29.42 | | 9.542 | 9.84 | 287.93 | 6.55 | 15.73 | 51.69 | 14.28 | |
| 10 | Manglore | 33kV New Manglore of 2x5 MVA Capacity & 4 nos new 11 KV VCB | 4 km. new line for new S/s | 4 nos. New feeders of total length 1.92 km. & Reconductoring of 2.67 km. line | - | 1.32 Km. LT ABC 95 sqm. | 3 nos. HT Capacitor bank at S/s | 437 nos. New DT and conversion of 26.712 Km. LT line To HT using HT ABC | 345 No. 3phase meters | 1726 No. 1phase meters | 4833 nos | | 1402.52 |
| | Cost in Rs. Lac. | 236.09 | 41.44 | 13.08 | | 4 | 29.53 | 835.34 | 32.3 | 25.9 | 176.84 | 8 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|---|--|---|-------------------|----------------------------------|---|---|-----------------------|------------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 11 | Nainital | Augmentation of one no. power T/f 5MVA to 8MVA at Sukhatal S/s | 9.20 km. new line for interconnection of S/s | 5.259 km. new line for new DT& Reconductoring of 7.00 km. line | 29 nos. New DT's | 67.616 Km. LT ABC 95 sqm. | 29 nos. for new DTs , 24 nos. for existing DTs & 4 nos. for S/s | - | 50 No. 3phase meters | 500 No. 1phase meters | 3200 nos & 200 nos. (10.0 sqmm service cable) | | 688.29 |
| | Cost in Rs. Lac. | 40.53 | 91 | 96.51 | 63.72 | 171.17 | 9.86 | | 4.68 | 74.92 | 111.87 | 24.03 | |
| 12 | Ramnagar | Augmentation of one no. power T/f 5MVA to 8MVA & 8MVA to 10 MVA at ghasma | - | 2 nos. New feeders of total length 3.14 km., 0.145 km. new line for interconnection & 17.613 km. new line for new DT, Reconductoring of 3.03 km. Line | 157 nos. New DT's | 32.74 Km. LT ABC 95 sqm. | 157 nos. for new DTs & 3 nos. for S/s | 155 nos. New DT and conversion of 8.38 Km. LT line To HT using HT ABC | 577 No. 3phase meters | 2310 No. 1phase meters | 5000 nos and replacement of 1800 (4.0 sqmm)& 1200 (6.0sqmm) service cable | | 1165.82 |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | | |
|-----------|-------------------------|--|-----------|--|------------------|----------------------------------|--|------|------------------------|------------------------|---|-----------------------|--|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. | |
| | | ndi S/s & 2 nos. new 11 KV VCB | | | | | | | | | | | | |
| | Cost in Rs. Lac. | 92.54 | | 122 | 269 | 98.69 | 46.15 | 250 | 54 | 35 | 194.64 | 3.8 | | |
| 13 | Rishikesh | Renovation & Modernisation , Augmentation of one no. power T/f 8MVA to 10 MVA at | - | 4 nos. New feeders of total length 3.63 km. , 1.8 km. new line for loadshift & 15.69 km. new line for new DT, Reconductoring of 30.94 km. line | 136 nos. New DT | 74.49 Km. LT ABC 95 sqm. | 136 for new DTs & 2 HT capacitor bank at S/s | - | 1592 No. 3phase meters | 2388 No. 1phase meters | 3981 nos | | 1434.93 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | | |
|-----------|-------------------------|--------------------------------------|-----------|---|------------------|----------------------------------|---|--|-----------------------|------------------------|---|-----------------------|--|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. | |
| | | Nagarpalika S/s& 4 nos new 11 KV VCB | | | | | | | | | | | | |
| | Cost in Rs. Lac. | 82.2 | | 408.17 | 331.45 | 217.53 | 30.27 | | 149 | 35.79 | 156.54 | 23.98 | | |
| 14 | Sitarganj | – | – | 4.87 km. new line for new DT & Reconductoring of 2.7 km. line | 41 nos. New DT | 21.22 Km. LT ABC 95 sqm. | 41 nos. for new DTs & 18 nos. for existing DT | 36 nos. New DT and conversion of 3.00 Km. LT line To HT using HT ABC | 300 No. 3phase meters | 1157 No. 1phase meters | 1643 nos & 329 (10sqr) | | 423.77 | |
| | Cost in Rs. Lac. | | | 49.59 | 98.83 | 58.73 | 4.82 | 65.9 | 28.07 | 17.34 | 78.85 | 21.64 | | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|--|--|---|------------------|----------------------------------|---|---|-----------------------|-----------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 15 | Tehri | Renovation & modernisation of 33/11kv S/s | - | 13.785 km. new line for new DT | 109 nos. New DT | 34.27 Km. LT ABC 95 sqm. | 109 nos. for new DT, 20 nos. for existing DT & 1 HT capacitor bank at S/s | - | 50 No. 3phase meters | 750 No. 1phase meters | 825 nos | | 485.84 |
| | Cost in Rs. Lac. | 22.33 | | 72.1 | 223.57 | 101.79 | 20.05 | | 4.68 | 11.24 | 25.15 | 4.93 | |
| 16 | Roorkee | 2 New S/s with 2x8 MVA capacity & 10 nos. new 11KV VCB | 22 km. new line for new S/s & 4.3 km. underground line by 300 XLPE | 10 nos. New feeders of total length 13.008 km. , 2 km. underground line & Reconductoring of 12.331 km. line | - | 2.90 Km. LT ABC 95 sqm. | 45 nos. for Existing DTs & 10 nos. HT capacitor bank at S/s | 1099 nos. New DT and conversion of 79.99 Km. LT line To HT using HT ABC | 173 No. 3phase meters | 445 No. 1phase meters | 4466 nos | | 3319.51 |
| | Cost in Rs. Lac. | 515.24 | 296 | 106.52 | | 8 | 93.3 | 1891.76 | 162. | 66.7 | 162.1 | 17.75 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|-----------|-------------------------|---|-----------|---|------------------|----------------------------------|---|------|------------------------|------------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| | Lac. | | | | | | | | 07 | 7 | | | |
| 17 | Almora | Renovation & modernisation Augmentation of one no. power T/f 3MVA to 5MVA & 5MVA to 8 MVA at luxmeshwar S/s | - | 12.817 km. new line for new DT & Reconductoring of 3.8 km. line | 67 nos. New DT | 67.68 Km. LT ABC 95 sqm. | 67 for new DTs & 75 for existing ,6 nos. HT capacitor bank at S/s | - | 1260 No. 3phase meters | 3150 No. 1phase meters | 3630 nos | | 972.76 |
| | Cost in Rs. Lac. | 152.26 | | 81.9 | 162.51 | 211.73 | 61.53 | | 117.91 | 47.2 | 123.08 | 14.64 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|--|-----------|--|--|----------------------------------|--|-------|-----------------------|------------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 18 | Mussoorie | Renovation & modernisation, capacity enhancement of power T/f, 2 nos new 11 KV VCB | - | 2 nos. New feeders of total length 2.69 km. , spare feeder of length 2.16 km. , 23.63 km. new line for new DT & Reconductoring of 53.44 km. line | 178 nos. New DTs | 51.11 Km. LT ABC 95 sqm. | 178 for new DTs & 48 nos. for existing DT ,6 nos. HT capacitor bank at S/s | - | 330 No. 3phase meters | 1319 No. 1phase meters | 1648 nos | | 1757.48 |
| | Cost in Rs. Lac. | 254.4 | | 510.91 | 416.86 | 299.2 | 73.45 | 30.85 | 19.76 | 88.48 | 63.57 | | |
| 19 | Uttarkashi | Capacity enhancement of S/s 2X5M VA to 2X8M VA & one No. New 11 KV | - | 1 nos. New feeders of total length 2.5 km. , 16.84 km. new line for new DT & Reconductoring of 22.80 km. Line | 69 nos. New DT & capacity enhancement of 10 nos DT | 28.18 Km. LT ABC 95 sqm. | 81 nos LT capacitor bank & 3 nos. HT capacitor bank | - | 45 No. 3phase meters | 1700 No. 1phase meters | 1765 nos | | 646.01 |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | | |
|-----------|-------------------------|---|-----------|---|------------------|----------------------------------|--|------|-----------------------|-----------------------|---|-----------------------|--|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. | |
| | | VCB | | | | | | | | | | | | |
| | Cost in Rs. Lac. | 86.08 | | 117.59 | 175.6 | 84.11 | 35.71 | | 4.21 | 25.47 | 69.42 | 47.82 | | |
| 20 | Gopeshwar | Additional Transformer of capacity 5 MVA at Chamoli S/s | - | 2 feeder of length 10 km. & 2km. New line for new DT | 8 nos. New DT | 6.919 Km. LT ABC 95 sqm. | 8 nos LT capacitor bank & 2 nos. HT capacitor bank | - | 50 No. 3phase meters | 850 No. 1phase meters | 1025 nos | | 222.46 | |
| | Cost in Rs. Lac. | 76.14 | | 33.04 | 19.6 | 20.83 | 18.32 | | 5 | 13 | 31.1 | 5.43 | | |
| 21 | Joshimath | Additional Transformer of capacity 5 MVA | - | 4.324 km. new line for new DT & Reconductoring of 15 km. line | 21 nos. New DTs | 13.715 Km. LT ABC 95 sqm. | No Proposal | - | 124 No. 3phase meters | 620 No. 1phase meters | 1625 nos | | 277.84 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | | |
|-----------|-------------------------|-----------------------|-----------|--|---|----------------------------------|--|------|----------------------|-----------------------|---|-----------------------|--|---------------|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. | |
| | | at Marwadi S/s | | | | | | | | | | | | |
| | Cost in Rs. Lac. | 76 | | 47.78 | 35.15 | 41.34 | | | 12 | 9 | 49 | 7.57 | | |
| 22 | Tanakpur | one no. new 11 KV VCB | – | 1 nos. new feeder of length 0.22 km. , 1.157 km. new line for new DT & Reconductoring of 5.87 km. line | 13 nos. New DTs & 4km LT line for new DTS | 7.33 Km. LT ABC 95 sqm. | 13 for new DTs & 28 nos. for existing DT , 1 nos. HT capacitor bank at S/s | – | 75 No. 3phase meters | 750 No. 1phase meters | 772 nos | | | 242.21 |
| | Cost in Rs. Lac. | 5.02 | | 55.18 | 52.36 | 22.27 | 17.41 | | 7.02 | 11.24 | 23.74 | 47.97 | | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | | |
|------|-------------------------|---|-----------|---|------------------|----------------------------------|--|--|-----------------------|------------------------|---|-----------------------|--|----------------|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. | |
| 23 | Rudrapur | New Substation of 10x2 MVA Capacity | - | 7 nos. new feeder of length 6.24 km. , 16.192 km. new line for new DT & Reconductoring of 22.291 km. line | 146 nos New DTs | 46.184 Km. LT ABC 95 sqm. | 146 for new DTs & 13 HT capacitor bank at S/s | 591 nos. New DT and conversion of 29.90 Km. LT line To HT using HT ABC | 875 No. 3phase meters | 2626 No. 1phase meters | 1751 nos | | | 2157.85 |
| | Cost in Rs. Lac. | 259.88 | | 129.57 | 357.44 | 140.4 | 118.4 | 964.11 | 81.9 | 39.34 | 59.52 | 7.29 | | |
| 24 | Pithoragarh | Additional Transformer of capacity 8 MVA at S/s & one no. New 11 KV VCB | - | new feeder of length 3 km. , 7.67 km. new line for new DT & Reconductoring of 9.50 km. line | 21 nos New DTs | 42.64 Km. LT ABC 95 sqm. | 21 for new DTs & 51 nos. for existing DT , 3 nos. HT capacitor bank at S/s | - | 950 No. 3phase meters | 2500 No. 1phase meters | 5500 nos & 1711 (10 sqr) | | | 872.97 |
| | Cost in Rs. Lac. | 89.02 | | 90.45 | 49.98 | 126.28 | 36.96 | | 88.9 | 37.46 | 305.89 | 48.03 | | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|---|-----------|--|------------------|----------------------------------|---|------|----------------------|------------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 25 | Pauri | Capacity enhancement of S/s (3+5)MVA to 2X5MVA | - | new feeder of length 1.5 km. , 3.29 km. new line for new DT & Reconductoring of 40.363 km. line | 22 nos. New DTs | 21.654 Km. LT ABC 95 sqm. | 22 nos. for new DTs & 4 nos. HT capacitor bank at S/s | - | 30 No. 3phase meters | 500 No. 1phase meters | 520 nos | | 378.3 |
| | Cost in Rs. Lac. | 56.81 | | 112.51 | 53.22 | 65.79 | 36.29 | | 2.81 | 7.49 | 15.95 | 27.43 | |
| 26 | Ranikhet | Capacity enhancement of Power T/f 3.15 MVA to 5 MVA at Ranikhet S/s & 2 nos new 11 KV VCB | - | two new feeder of length 6.95 km. , 2.956 km. new line for new DT & Reconductoring of 22.29 km. line | 15 nos. New DT | 21.275 Km. LT ABC 95 sqm. | 15 nos. for new DTs & 3 nos. HT capacitor bank at S/s | - | 10 No. 3phase meters | 1540 No. 1phase meters | 600 nos & 48 nos (10sqr) | | 359.082 |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|-------------------------|--|-----------|--|------------------|----------------------------------|----------------|---|-----------------------|-----------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| | Cost in Rs. Lac. | 66.81 | | 87.77 | 37.68 | 71.79 | 27.042 | | 0.94 | 23.08 | 35.06 | 8.91 | |
| 27 | Kotdwar | Capacity enhancement of Power T/f 5 MVA to 8 MVA at kotdwar S/s & Additional T/F of 5MVA at sidhabli S/s | - | 3.284 km. new line for new DT & Reconductoring of 6.243 km. line | 13 nos. New DTs | 10.342 Km. LT ABC 95 sqm. | - | 300 nos. New DT and conversion of 20.045 Km. LT line To HT using HT ABC | 245 No. 3phase meters | 734 No. 1phase meters | 900 nos | | 747.16 |
| | Cost in Rs. Lac. | 116.66 | | 29 | 20.29 | 31.73 | | 472.98 | 22.89 | 11 | 27.98 | 14.63 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|--|-----------|---|------------------|----------------------------------|---|--|-----------------------|------------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 28 | Bazpur | - | - | new line of length 0.08 km. & Reconductoring of 3.47 km. line | 3 nos. New DTs | 3.88 Km. LT ABC 95 sqm. | 3 nos. HT capacitor bank at S/s | 359 nos. New DT and conversion of 28.35 Km. LT line To HT using HT ABC | 50 No. 3phase meters | 1225 No. 1phase meters | 768 nos | | 766.71 |
| | Cost in Rs. Lac. | | | 6.64 | 5.7 | 11.59 | 25.73 | 636.58 | 4.68 | 18 | 42.39 | 15.40 | |
| 29 | Srinagar | Capacity enhancement of Power T/f 3 MVA to 5 MVA at srinagar S/s | - | 3.631 km. new line for new DT & Reconductoring of 9.60 km. line | 14 nos. New DTs | 10.02 Km. LT ABC 95 sqm. | 14 for new DTs & 41 nos. for existing DT, 2 nos. HT capacitor bank at S/s | - | 267 No. 3phase meters | 765 No. 1phase meters | 1750 nos | | 275.34 |
| | Cost in Rs. Lac. | 56.8 | | 33.6 | 28.52 | 27.72 | 31.65 | | 25 | 11.5 | 58.05 | 2.5 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------|---|-----------|---|------------------|----------------------------------|---|------|----------------------|-----------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 30 | Vikas Nagar | Capacity enhancement of Power T/f 5 MVA to 8 MVA at S/s & one no. new 11 KV VCB | - | new line of length 1.43 km. , 10.48 km. new line for new DT & Reconductoring of 4.92 km. line | 72 nos. New DTs | 17.30 Km. LT ABC 95 sqm. | 75 nos. LT capacitor bank & 2 nos. HT capacitor bank at S/s | - | 40 No. 3phase meters | 350 No. 1phase meters | 450 nos | | 393.37 |
| | Cost in Rs. Lac. | 45.55 | | 87.87 | 155.58 | 52.47 | 23.4 | | 3.74 | 5.24 | 14.59 | 4.93 | |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|-------------------------------------|--|---|--|-------------------|----------------------------------|---|--|-----------------------|-----------------------|---|-----------------------|--|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribution T/F | Bare LT Conductor replace by ABC | Capacitor Bank | HVDS | Replacement of Meter | | Shifting of Meter to outside the consumer Premise | | Cost for Miscellaneous Items in Rs. Lac. |
| 31 | Dehradun (Proposal of SCADA) | one New S/s with 5MVA x2 capacity, two S/s of Capacity 2X10 MVA each, capacity enhancement, additional T/F 5MVA & Renovation & Modernisation of S/s, 32 nos. new 11 KV | 40.50 Km. New line for New S/S, 0.1 km. line for interconnection & reconductoring of 90.55 km. line | 29 nos. new feeder of length 44.52 km., 175.85 km. new line for new DT & Reconductoring of 279.03 km. 11 KV line and 40.43 km. 6.6 KV line | 1231 nos. New DTs | 639.84 Km. LT ABC 95 sqm. | 1231 nos for new DTs & 215 nos. for existing DT | 1881 nos. New DT and conversion of 173.37 Km. LT line To HT using HT ABC | 586 No. 3phase meters | 880 No. 1phase meters | 100000 nos | # | 23886.57 |

Major works proposal & Costing under R-APDRP Part-B for Reduction of AT&C Loss

| S.No | Project Area | Proposed Measure | | | | | | | | | | Total Cost in Rs Lac. | |
|------|------------------------------|------------------|----------------|----------------|-------------------|-----------------------------------|-----------------|-----------------|-----------------------|---|--|-----------------------|--------------|
| | | 33 /11KV S/s | 33KV Line | 11KV Line | Distribu tion T/F | Bare LT Conduc tor replace by ABC | Capaci tor Bank | HVDS | Replaceme nt of Meter | Shifting of Meter to outside the consumer Premise | Cost for Miscellaneous Items in Rs. Lac. | | |
| | | VCB | | | | | | | | | | | |
| | Cost in Rs. Lac. | 2761.29 | 985.4 | 2283.21 | 2872.41 | 2711.6 | 170.52 | 2908.7 | 549.07 | 131.88 | 3454 | 5058.49 | |
| | Total Cost in Rs. Lac | 6999.16 | 1646.96 | 6118.47 | 8392.41 | 5975.66 | 1483.072 | 13490.62 | 2357.51 | 1172.05 | 8867.44 | 6647.648 | 63151 |

** In Dehradun town for Scada purpose 44 nos. APFC panel, 2nos. 3way & 2 nos. 4way RMU at 33KV, 44 sets 33 KV FPI ,29 nos. 3way & 10 nos. 4way RMU at 11KV,312 nos Sectionalizer, 258 sets 11 KV FPI,14 nos. new motorized 33 KV VCB, # include the cost of items for SCADA

ANNEXURE H - SHIFTING OF 1 PHASE & 3 PHASE METER OUTSIDE THE PREMISES OF THE CONSUMERS

| Sr. No | FY | No. of single phase meter shifting | Cost | No. of three phase whole current meter shifting | Cost | Total Cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------|---------|------------------------------------|------|---|------|---------------------|--------------------------------------|
| 1 | 2013-14 | 17500 | 770 | 2500 | 1320 | 1.68 | 1.99 |
| 2 | 2014-15 | 17500 | 847 | 2500 | 1452 | 1.85 | 2.19 |
| 3 | 2015-16 | 17500 | 932 | 2500 | 1597 | 2.03 | 2.41 |

**ANNEXURE I - REPLACEMENT OF MECHANICAL METERS WITH ELECTRONIC METERS AND
INSTALLATION OF ELECTRONIC METERS IN UN-METERED CONNECTIONS**

| Sr. No | FY | No. of replacement of single phase meters | Per meter Cost | No. of replacement of three phase meters | Per meter Cost | Total Cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|---------------|-----------|--|-----------------------|---|-----------------------|----------------------------|---|
| 1 | 2013-14 | 25000 | 1650 | 1000 | 4400 | 4.57 | 5.41 |
| 2 | 2014-15 | 25000 | 1815 | 0 | 0 | 4.54 | 5.38 |
| 3 | 2015-16 | 25000 | 1997 | 0 | 0 | 4.99 | 5.91 |

ANNEXURE J - DT METERING IN INDUSTRIAL AND COMMERCIAL HUBS

| Sr. No | FY | Rating (KVA) | No. of meters to be installed | Per meter Cost | Total Cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------|--------------|--------------|-------------------------------|----------------|---------------------|--------------------------------------|
| 1 | 2013-14 | 100 | 150 | 27500 | 0.41 | 0.49 |
| | | 250 | 150 | 27500 | 0.41 | 0.49 |
| | | 400 | 50 | 27500 | 0.14 | 0.16 |
| | Total | | 350 | | 0.96 | 1.14 |
| 2 | 2014-15 | 100 | 150 | 30250 | 0.45 | 0.54 |
| | | 250 | 150 | 30250 | 0.45 | 0.54 |
| | | 400 | 50 | 30250 | 0.15 | 0.18 |
| | Total | | 350 | | 1.06 | 1.25 |
| 3 | 2015-16 | 100 | 150 | 33275 | 0.50 | 0.59 |
| | | 250 | 150 | 33275 | 0.50 | 0.59 |
| | | 400 | 50 | 33275 | 0.17 | 0.20 |
| | Total | | 350 | | 1.16 | 1.38 |

ANNEXURE K - REPLACEMENT OF DEFECTIVE SINGLE PHASE AND THREE PHASE METERS

| Sr. No | FY | No. of replacement of single phase meters | Per meter Cost | No. of replacement of three phase meters | Per meter Cost | Total Cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------|---------|---|----------------|--|----------------|---------------------|--------------------------------------|
| 1 | 2013-14 | 70000 | 1650 | 700 | 4400 | 11.86 | 14.05 |
| 2 | 2014-15 | 60000 | 1815 | 700 | 4840 | 11.23 | 13.31 |
| 3 | 2015-16 | 50000 | 1997 | 700 | 5324 | 10.36 | 12.27 |

ANNEXURE L - ADDITIONAL TRANSFORMERS INSTALLATION

| Sr. No | FY | No. of additional transformers | Rating of additional transformers (KVA) | Per unit Cost | 11 KV line length (km) | Per unit Cost | LT line length (km) | Per unit Cost | Total Cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------|--------------|--------------------------------|---|---------------|------------------------|---------------|---------------------|---------------|---------------------|--------------------------------------|
| 1 | 2013-14 | 200 | 16 | 0.88 | 40.0 | 5.25 | 20 | 3.30 | 4.52 | 5.36 |
| | | 2000 | 25 | 1.43 | 400.0 | 5.25 | 200 | 3.30 | 56.20 | 66.60 |
| | | 850 | 63 | 2.057 | 170.0 | 5.25 | 85 | 3.30 | 29.21 | 34.62 |
| | | 1000 | 100 | 2.541 | 200.0 | 5.25 | 600 | 3.30 | 55.71 | 66.02 |
| | | 350 | 250 | 5.5 | 70.0 | 5.25 | 350 | 3.30 | 34.48 | 40.85 |
| | | 195 | 400 | 7.15 | 39.0 | 5.25 | 234 | 3.30 | 23.71 | 28.10 |
| | Total | 4595 | | | | | | | | 241.54 |
| 2 | 2014-15 | 200 | 16 | 1 | 40.0 | 5.51 | 20 | 3.63 | 4.87 | 5.77 |
| | | 2000 | 25 | 2 | 400.0 | 5.51 | 200 | 3.63 | 60.77 | 72.01 |
| | | 850 | 63 | 2 | 170.0 | 5.51 | 85 | 3.63 | 31.69 | 37.55 |
| | | 800 | 100 | 3 | 160.0 | 5.51 | 480 | 3.63 | 48.60 | 57.60 |
| | | 300 | 250 | 6 | 60.0 | 5.51 | 300 | 3.63 | 32.35 | 38.33 |
| | | 150 | 400 | 8 | 30.0 | 5.51 | 180 | 3.63 | 19.99 | 23.68 |
| | Total | 4300 | | | | | | | | 234.94 |

| Sr. No | FY | No. of additional transformers | Rating of additional transformers (KVA) | Per unit Cost | 11 KV line length (km) | Per unit Cost | LT line length (km) | Per unit Cost | Total Cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------|--------------|--------------------------------|---|---------------|------------------------|---------------|---------------------|---------------|---------------------|--------------------------------------|
| 3 | 2015-16 | 200 | 16 | 1 | 40.0 | 5.79 | 20 | 3.99 | 5.24 | 6.21 |
| | | 2000 | 25 | 2 | 400.0 | 5.79 | 200 | 3.99 | 65.74 | 77.91 |
| | | 850 | 63 | 2 | 170.0 | 5.79 | 85 | 3.99 | 34.39 | 40.75 |
| | | 700 | 100 | 3 | 140.0 | 5.79 | 420 | 3.99 | 46.40 | 54.98 |
| | | 250 | 250 | 7 | 50.0 | 5.79 | 250 | 3.99 | 29.51 | 34.97 |
| | | 150 | 400 | 9 | 30.0 | 5.79 | 180 | 3.99 | 21.90 | 25.95 |
| | Total | 4150 | | | | | | | | 240.78 |

ANNEXURE M - SAFETY & PROTECTION RELATED – INSTALLATION OF POLES AND GUARD WIRES, RECONDUCTORING OF LINES, ETC

| Sr. No | FY | Replacement of old poles with high length poles | Per unit Cost | Total Cost | Final cost after escalation (Rs. Cr) |
|--------|---------|---|---------------|------------|--------------------------------------|
| 1 | 2013-14 | 500 | 44000.00 | 2.20 | 2.61 |
| 2 | 2014-15 | 500 | 48400.00 | 2.42 | 2.87 |

| Sr. No | FY | Installation of additional poles (type) | Installation of additional poles (numbers) | Per unit Cost | Total Cost | Final cost after escalation (Rs. Cr) |
|--------|--------------|---|--|---------------|-------------|--------------------------------------|
| 1 | 2013-14 | | | | | |
| | | SP-10 (LT lines) | 2000 | 11000.00 | 2.20 | 2.61 |
| | | PCC | 2000 | 13200.00 | 2.64 | 3.13 |
| | | SP-23 (11 KV) | 2000 | 16500.00 | 3.30 | 3.91 |
| | | SP-33 (33 KV) | 500 | 27500.00 | 1.38 | 1.63 |
| | Total | | | | 9.52 | 11.28 |

| | | | | | | |
|---|--------------|------------------|------|----------|--------------|--------------|
| 2 | 2014-15 | | | | | |
| | | SP-10 (LT lines) | 2000 | 12100.00 | 2.42 | 2.87 |
| | | PCC | 2000 | 14520.00 | 2.90 | 3.44 |
| | | SP-23 (11 KV) | 2000 | 18150.00 | 3.63 | 4.30 |
| | | SP-33 (33 KV) | 500 | 30250.00 | 1.51 | 1.79 |
| | Total | | | | 10.47 | 12.40 |

| Sr. No | FY | Provision of guard wires under HT lines at crossings and over residential buildings (KM) | Per unit Cost | Total Cost | Final cost after escalation (Rs. Cr) |
|--------|---------|--|---------------|------------|--------------------------------------|
| 1 | 2013-14 | 200 | 1.65 | 3.30 | 3.91 |
| 2 | 2014-15 | 200 | 1.82 | 3.63 | 4.30 |

| Sr. No | FY | Strengthening of lines/ Re-conductoring of lines (type) | Strengthening of lines/ Re-conductoring of lines (km) | Per unit Cost | Total Cost | Final cost after escalation (Rs. Cr) |
|--------|---------|---|---|---------------|------------|--------------------------------------|
| 1 | 2013-14 | | | | | |
| | | LT line | 400 | 3.30 | 13.20 | 15.64 |

| | | | | | | |
|---|--------------|------------|-----|------|--------------|--------------|
| | | 11 KV line | 100 | 5.50 | 5.50 | 6.52 |
| | Total | | | | 18.70 | 22.16 |
| 2 | 2014-15 | | | | | |
| | | LT line | 200 | 3.63 | 7.26 | 8.60 |
| | | 11 KV line | 50 | 6.05 | 3.03 | 3.58 |
| | Total | | | | 10.29 | 12.19 |

ANNEXURE N - PRE-PAID METERING

| Sr. No | FY | No. of replacement of single phase meters | Per meter Cost | No. of replacement of three phase meters | Per meter Cost | Total Cost (Rs. Cr) | Final cost after escalation (Rs. Cr) |
|--------|---------|---|----------------|--|----------------|---------------------|--------------------------------------|
| 1 | 2013-14 | 3000 | 5500 | 2000 | 8800 | 3.41 | 4.04 |
| 2 | 2014-15 | 3000 | 6050 | 2000 | 9680 | 3.75 | 4.44 |