



**SAVE ENERGY TODAY FOR
A BETTER TOMORROW**

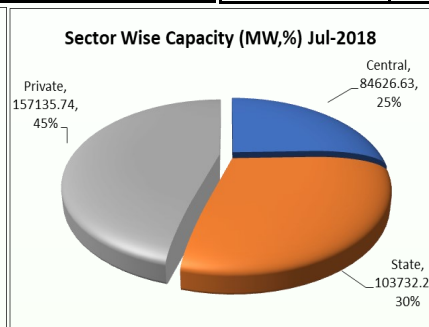
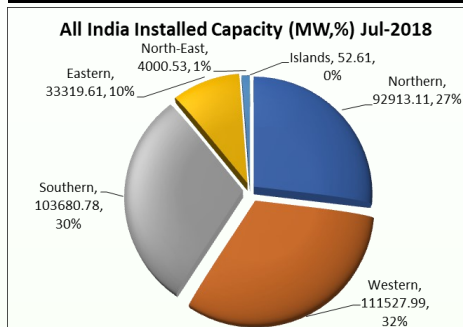


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OVERVIEW OF INDIAN POWER SYSTEM FOR JUL-2018

All India Installed Capacity (MW) as on 31-07-2018						All India Installed Capacity (MW) as on 31-07-2018		Peak Demand of DD & DNH				
Region	Thermal	Nuclear	Hydro	RES	Total	Sector	Generation (MW)	Utility	Jul-18			
Northern	58626.46	1620.00	19653.77	13012.88	92913.11				Central	84626.63	Peak Demand (MW)	Peak Met (MW)
Western	81415.11	1840.00	7547.50	20725.38	111527.99	State	103732.25	DD		342		
Southern	53017.26	3320.00	11808.03	35535.49	103680.78		Private		157135.74	DNH	797	797
Eastern	27301.64	0.00	4942.12	1075.85	33319.61	Total		345494.62				
North-Eastern	2262.07	0.00	1452.00	286.46	4000.53							
Islands	40.05	0.00	0.00	12.56	52.61							
ALL	222662.59	6780.00	45403.42	70648.62	345494.63							



All India Plant Load Factor (PLF) in (%)

Sector	Jul-17	Jul-18
Central	67.27	67.60
State	42.61	49.44
Private	61.76	60.94
ALL India	53.70	55.45

Highlights of WR Grid for July-2018

- Maximum Peak Demand Met:** 46314 MW
- Energy Consumption:** Total Energy Consumption in the month of July-2018 was 30384 MUs at an average of 980 MUs/day & Maxi-mum was 1059 MUs on 31.07.2018.
- Unrestricted Demand:** Maximum Unrestricted demand was 46314 MW and Average Peak Unrestricted demand was 40861 MW.
- Frequency Profile:** System frequency as per IEGC band is 49.90 Hz to 50.05 Hz. Maxi-mum, Minimum & Average Frequencies 50.24 Hz, 49.62 Hz & 49.98 Hz were respectively observed in the month of July-2018.
- Voltage Profile:** All 765KV nodes except Tamnar, Durg, Kotra and Vadodara (high voltage node) of WR were within the IEGC limit. High Voltage (greater than 420 KV) at 400KV substations were observed at Khandwa, Damoh, Nagda, Indore, Raipur, Raigarh, Wardha, Dhule, Parli, Boisar, Amreli, Karad, Kalwa, Dehgaon, Kasor, Jetpur, Kala Vapi, Mapusa and Magarwada. Highest of 97.08% of time above 420KV observed at Dhule.
- Hydro Generation:** Total hydro generation of Western Region was 573 MUs at an average of 18.48 MUs/day in the month of July-2018.
- Wind Generation:** Total wind generation was 3798 MUs at an average of 122.5 MUs/day in the month of July-2018.
- Solar Generation:** Total Solar generation was 370 MUs at an average of 12 MUs/day in the month of July-2018.
- Open Access Transaction Details for July-2018:**
 - ⇒ No. of approvals & Energy Approved in Intra-regional: 173 & 693.26 MUs.
 - ⇒ No. of approvals & Energy Approved in Inter-regional: 46 & 143.11 MUs.

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List of Transmission Lines Commissioned/Ready for Commissioning During Jul-2018

Sector	Central				Pvt.			State				Total
	800	765	400	220	765	400	220	765	400	230	220	
Voltage Level (KV)												
No. of Lines	0	0	1	0	1	1	0	0	4	0	11	18

List of Substations Commissioned/Ready for Commissioning During Jul-2018

Sector	Central				Pvt.			State				Total
	765	400	230	220	765	400	220	765	400	230	220	
Voltage Level (KV)												
No. of Substations	0	3	0	0	0	0	0	0	2	3	13	21

Region-wise Power Supply Position (Demand & Availability) in Jul-2017 & Jul-2018

Region	Energy (MUs)				Deficit /Surplus (%)	
	Demand		Energy Met		Jul-17	Jul-18
	Jul-17	Jul-18	Jul-17	Jul-18		
Northern	36168	38266	35653	37771	(1.4)	(1.3)
Western	26580	29364	26562	29361	(0.1)	(0.0)
Southern	26755	27553	26744	27513	(0.0)	(0.1)
Eastern	11742	13533	11686	13518	(0.5)	(0.1)
North Eastern	1517	1623	1471	1574	(3.0)	(3.0)
All India	102762	110339	102116	109737	(0.6)	(0.5)

Region-wise Peak Demand / Peak Met in Jul-2017 & Jul-2018

Region	Power (MW)				Deficit /Surplus (%)	
	Peak Demand		Peak Met		Jul-17	Jul-18
	Jul-17	Jul-18	Jul-17	Jul-18		
Northern	56398	61812	55865	59897	(0.9)	(3.1)
Western	41325	44879	41280	44574	(0.1)	(0.7)
Southern	42678	44844	42404	44719	(0.6)	(0.3)
Eastern	19221	21442	19141	21442	(0.4)	0.0
North Eastern	2507	2899	2429	2798	(3.1)	(3.5)
All India	156750	170165	154302	167798	(1.6)	(1.4)

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POWER TRADING

⇒ Emergence of IT has helped to create massive E-Commerce platforms in every walk of life. One such E-Commerce platform for transiting electricity for physical delivery, fine tuning daily requirements, sale of residual generation, optimal utilization of generating resources at marginal cost of production etc. has been made possible through the commencement of Power Exchanges.

⇒ For more information about IEX visit (www.iexindia.com); For more information about PXIL visit (www.powerexindia.com)

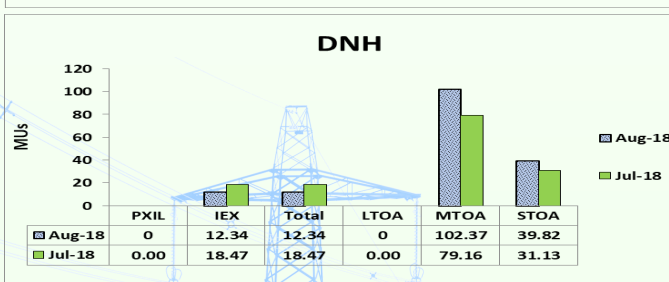
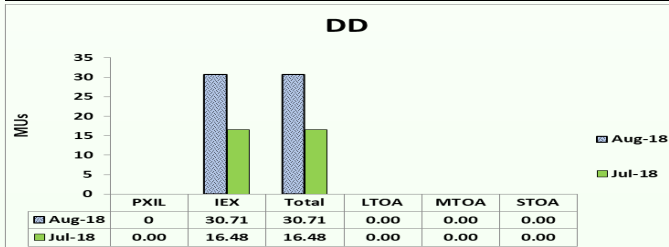


⇒ PXIL & IEX Trading summary

AUG-2018	PXIL					IEX				
	Buy Bid (MWh)	Sell Bid (MWh)	MCP (₹/MWh)	Cleared Volume (MWh)	Marginal Clear Volume (MWh)	Buy Bid (MWh)	Sell Bid (MWh)	MCP (₹/MWh)	Cleared Volume (MWh)	Marginal Clear Volume (MWh)
Total	50872.0	204680.0	-	19779.5	19779.5	4899160.3	7336797.3	-	4019357.8	4026235.8
Min	1.5	0.0	2650.0	0.0	0.0	3825.3	5718.9	1749.2	3575.1	3575.1
Max	165.0	170.0	3870.0	14.0	14.0	10536.3	15479.2	8750.4	7544.6	7544.6
Avg	17.1	68.8	3183.4	6.6	6.6	6584.9	9861.3	3340.2	5402.4	5411.6

JUL-2018	PXIL					IEX				
	Buy Bid (MWh)	Sell Bid (MWh)	MCP (₹/MWh)	Cleared Volume (MWh)	Marginal Clear Volume (MWh)	Buy Bid (MWh)	Sell Bid (MWh)	MCP (₹/MWh)	Cleared Volume (MWh)	Marginal Clear Volume (MWh)
Total	122688.0	292504.0	-	117056.0	105784.0	4981169.7	7337044.8	-	4054408.8	4061238.3
Min	1.5	0.0	0.0	0.0	0.0	3506.9	5689.6	1796.8	3229.0	3229.0
Max	138.5	247.0	5950.0	137.0	125.0	11506.5	15326.7	8975.6	8729.7	8733.4
Avg	41.2	98.3	3360.8	39.3	35.5	6695.1	9861.6	3461.5	5449.5	5458.7

DD & DNH: OPEN ACCESS DETAILS



REC Trading Session Aug-2018

Trader Company	PXIL		IEX	
	Particular	Non-Solar	Solar	Non-Solar
Total Sell Bid (REC's)	59,074	940,011	428,575	1,458,702
Total Buy Bid (REC's)	297,870	269,906	668,060	216,223
Clearing Price (₹/Certificate)	1,101	1,000	1,200	1,000
Cleared Volume (REC's)	41,891	269,906	291,588	216,223

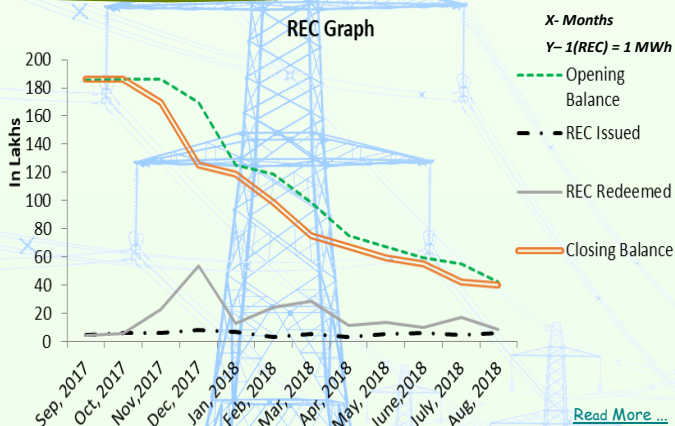
POWER MARKET UPDATE: August 2018 Spot Power Market Trades 3,975 MU at Rs. 3.34 per unit

The average Market Clearing Price (MCP) discovered in the day-ahead market was at Rs. 3.34 per unit, was decline with the price of July-18 which was Rs. 3.46 per unit and 6.81% above with the price of Aug-17.

The average MCP during different time-periods of the month was:

- * Morning (07:00 to 10:00 Hrs): Rs. 3.11 per unit
- * Day (11:00 to 17:00 Hrs): Rs. 2.87 per unit
- * Evening peak (18:00 to 23:00 Hrs): Rs. 4.55 per unit
- * Night (01-06 Hrs and 24 Hrs): Rs. 2.91 per unit
- * A total of 3975 MU were cleared, which is decline with the 4028 MU traded last month and almost at par with 3982 MU traded in Aug-17. On a daily average basis about 128 MU were traded.
- * With average daily sell and buy bids were 237 MU and 158 MU respectively.
- * The One Nation, One Price was realized for 27 days in the month of August-18.
- * On daily average basis 654 participants traded in the day-ahead power market in August-18.

RENEWABLE ENERGY CERTIFICATE MECHANISM (REC) FROM Sep-17 TO Aug-18



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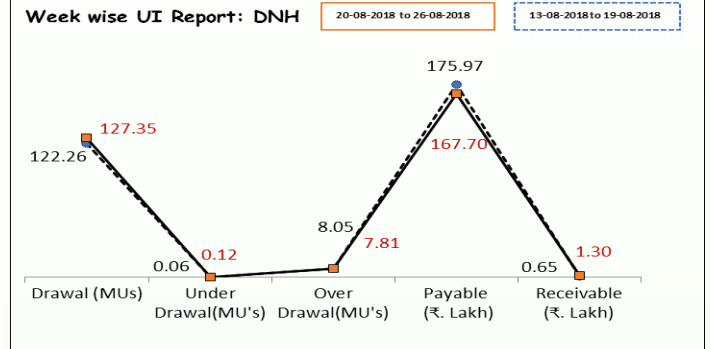
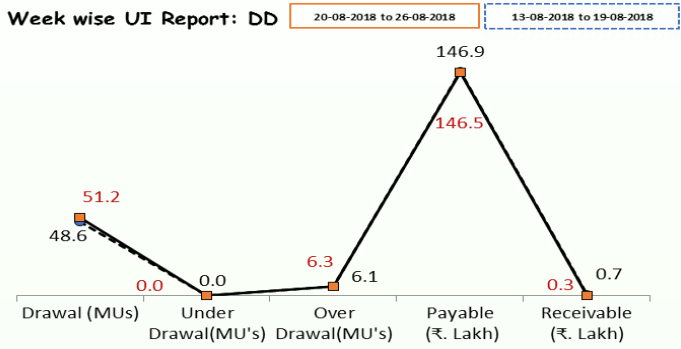
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DEVIATION CHARGES

[DD User Click to get UI Report](#)
[DNH User Click to get UI Report](#)

DD-Deviation Charges						
FY 2018-19	Drawl (MUs)	Schedule (MUs)	UI Drawl (MUs)		UI Charges (₹. Lakh)	
			Under Drawl	Over Drawl	Payable	Receivable
Cumulative Total up to Jul-18	886.96	784.55	1.25	103.66	2938.52	25.87
20-08-2018 to 26-08-2018	51.17	44.89	0.02	6.30	146.50	0.33
20-08-2017 to 26-08-2017	48.89	44.67	0.08	4.29	99.51	1.46
13-08-2018 to 19-08-2018	48.63	42.53	0.03	6.14	146.88	0.68
13-08-2017 to 19-08-2017	47.37	41.96	0.00	5.41	127.20	0.11

DNH-Deviation Charges						
FY 2018-19	Drawl (MUs)	Schedule (MUs)	UI Drawl (MUs)		UI Charges (₹. Lakh)	
			Under Drawl	Over Drawl	Payable	Receivable
Cumulative Total up to Jul-18	2135.28	2059.09	4.28	80.48	2145.63	87.09
20-08-2018 to 26-08-2018	127.35	119.65	0.12	7.81	167.70	1.30
20-08-2017 to 26-08-2017	118.10	115.47	1.05	3.68	82.78	18.35
13-08-2018 to 19-08-2018	122.26	114.28	0.06	8.05	175.97	0.65
13-08-2017 to 19-08-2017	114.31	112.84	1.01	2.49	51.56	16.26



DD						
Month	FY 2017-18 (All Freq Hz)			FY 2018-19 (All Freq Hz)		
	Under Drawl in MU's	Over Drawl in MU's	UI Rate in ₹/Unit	Under Drawl in MU's	Over Drawl in MU's	UI Rate in ₹/Unit
April	1.29	(11.30)	(2.48)	0.30	(19.56)	(2.79)
May	0.87	(15.28)	(2.19)	0.57	(27.91)	(3.43)
June	1.09	(17.98)	(2.16)	0.23	(24.82)	(2.61)
July	0.97	(15.89)	(2.26)	0.16	(31.37)	(2.54)
Aug	0.19	(24.00)	(2.3)	-	-	-
Sep	0.39	(24.70)	(2.64)	-	-	-
Oct	0.13	(29.42)	(2.79)	-	-	-
Nov	0.22	(22.01)	(2.71)	-	-	-
Dec	0.66	(16.60)	(2.50)	-	-	-
Jan	1.04	(18.20)	(2.63)	-	-	-
Feb	1.33	(12.58)	(2.58)	-	-	-
Mar	0.99	(19.63)	(2.99)	-	-	-
Total	9.18	(227.6)	(2.55)	1.25	(103.66)	(2.84)

DNH						
Month	FY 2017-18 (All Freq Hz)			FY 2018-19 (All Freq Hz)		
	Under Drawl in MU's	Over Drawl in MU's	UI Rate in ₹/Unit	Under Drawl in MU's	Over Drawl in MU's	UI Rate in ₹/Unit
April	1.91	(21.52)	(2.31)	0.39	(22.51)	(2.70)
May	13.54	(2.97)	(1.49)	2.03	(16.76)	(3.40)
June	9.26	(3.65)	(1.98)	1.43	(15.89)	(2.57)
July	6.71	(6.66)	(0.96)	0.43	(25.32)	(2.37)
Aug	3.50	(14.68)	(2.15)	-	-	-
Sep	2.06	(22.87)	(2.74)	-	-	-
Oct	1.53	(28.73)	(2.67)	-	-	-
Nov	2.23	(17.81)	(2.87)	-	-	-
Dec	1.09	(21.60)	(2.53)	-	-	-
Jan	0.47	(26.01)	(2.45)	-	-	-
Feb	0.28	(22.83)	(2.46)	-	-	-
Mar	1.03	(26.07)	(2.73)	-	-	-
Total	43.61	(215.4)	(2.65)	4.28	(80.48)	(2.70)

REACTIVE ENERGY CHARGES FOR DD & DNH

FY 2018-19	DD-High Voltage				DD-Low Voltage				DNH-High Voltage			DNH-Low Voltage		
	GUJARAT		ISTS		GUJARAT		ISTS		ISTS			ISTS		
	Dok-diu	Una-diu	Mgr-Vap HV	Total	Dok-diu	Una-diu	Mgr-Vap LV	Total	Kpd-Vap HV	Kdl-Vap HV	Total	Kpd-Vap LV	Kdl-Vap LV	Total
Cumulative Total MVARh till Jul-2018	-2148.0	-1373.8	63800.5	60278.7	0.0	0.3	-5.5	-5.2	50596.7	28810.0	79406.7	903.9	-134.7	769.2
Cumulative Total Charges in (₹) till Jul-18	151212.5	14445.5	-1359859.0	-1194201.0	0.0	43.0	-770.0	-727.0	-4321607.0	-1639789.5	-5961396.5	126546.0	-18858.0	107688.0
13-08-2018 to 19-08-2018	-60.5	0.0	5623.2	5562.7	0.0	0.0	0.0	0.0	7546.1	2977.9	10524.0	0.0	0.0	0.0
Charges in (₹)	8470.0	0.0	-787248.0	-778778.0	0.0	0.0	0.0	0.0	-1056454.0	-416906.0	-1473360.0	0.0	0.0	0.0
20-08-2018 to 26-08-2018	31.7	32.7	8209.2	8273.6	0.0	0.0	0.0	0.0	8477.4	3415.3	11892.7	0.0	0.0	0.0
Charges in (₹)	-4438.0	-4578.0	-1149288.0	-1158304.0	0.0	0.0	0.0	0.0	-1186836.0	-478142.0	-1664978.0	0.0	0.0	0.0

Note: The REC chargers has been revised to 13.5 paisa/KVARh from Apr-2017 as per clause of 6.6 of revised IEGC.

Note: Bracket Value () indicates the negative value(-ve). Note: For REC table -Ve Value indicates Receivable & +Ve Value indicates Payable.



POWER SECTOR ACTIVITIES



* MNRE

- NIWE, Chennai is planning to organize International Workshop and Conference on Small Wind Turbine during Nov-Dec 2018 at Kayathar and Chennai. - Brochure.
- NIWE, Chennai is planning to organize International Workshop and Conference on Small Wind Turbine during Nov-Dec 2018 at Kayathar and Chennai. - Registration Form.
- Registration open for 19th , 5-Day Skill Development Program On Solar PV system Design using "PVSYSY & PVSOL" software with cost economic and Policies on dated 24th to 28th September 2018.
- Programme on Solar Resource ,Measurement, Assessment and Calibration, 9-10, Oct.2018.
- Recruitment of Nine (09) posts of Scientist 'B' (Group 'A' Gazetted) in the Ministry of New and Renewable Energy (MNRE).

* MOP

- Scheme on 'Flexibility in Generation and Scheduling of Thermal Power Stations to reduce the cost of power to the consumer'.
- Direction to the CERC under section 107 of the Electricity Act, 2003 for allowing pass-through under "Change in Law".

* CEA

- Comments of Stakeholders and Public on the draft of "Guidelines on availability of Communication System".
- Standard Operating Procedure for management of silt in Hydro Electric Project.
- Draft Central Electricity Authority (Technical Standards for Communication System in Power Sector Operation) Regulations, 2018- Invitation of Public Comments.

* CERC

- Discussion Paper on "Re-Designing Ancillary Services Mechanism in India".
- Public Notice for reg. filing hard copy.

* JERC

- JERC MYT (Generation, Transmission and Distribution) Regulations, 2018.
- Public Notice for Draft JERC (Supply Code) Regulations, 2018 inviting suggestions/comments on the Draft Regulations, which may be sent to the undersigned latest by 25th Sept, 2018.
- Public Notice for approval of Business Plan for the MYT Control Period from FY 2019-20 to 2021-22 under Section Section 61,62 and 64 of the Electricity Act, 2003 filed by Electricity Department, Daman & Diu, Interested persons may file objections/suggestion on or before 25.09.2018.
- Public Notice for approval of Business Plan for the MYT Control Period from FY 2019-20 to 2021-22 under Section 61, 62 and 64 of the Electricity Act, 2003 filed by DNH Power Distribution Corporation Limited, Interested persons may file objections/suggestions on or before 25.09.2018.

* NISE

- Corrigendum-Request for Tender for Supply, installation and commissioning of (01) one number each of grid

connected and stand-alone 32 kW rice husk based biomass gasifier power plants at sites located in Guyana, South America.

- Suryamitra Training Center Details for FY 2018-19.

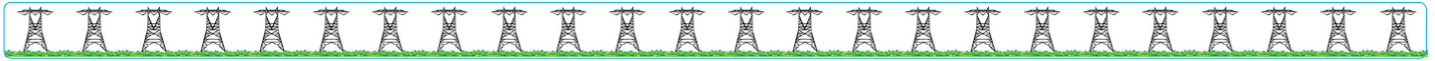
* SECI

- Meeting With State Administration Of Chhattisgarh : Selection Of Solar Power Developers For Setting Up Of 10GW ISTS Connected Solar PV Power Plant Linked With 3GW (Per Annum) Solar Manufacturing Plant Under Global Competitive Bidding (Phase-I).
- Meeting With State Administration Of Andhra Pradesh : Selection Of Solar Power Developers For Setting Up Of 10GW ISTS Connected Solar PV Power Plant Linked With 3GW (Per Annum) Solar Manufacturing Plant Under Global Competitive Bidding (Phase-I).
- Extension Of Bid Submission Deadline-V : Selection Of Solar Power Developers For Setting Up Of 150MW (50MW X 3) Grid Connected Floating Solar Power Projects To Be Installed At Rihand Dam, Up

* MISCELLANEOUS

- Plan for procurement of electric buses in four months: Delhi govt to SC.
 - ⇒ Delhi Integrated Multi-Modal Transit System (DIMTS), appointed as a consultant for procurement of 1,000 low-floor electric buses here, has sought four months time to come out with a plan on it.
- Haryana chief minister announces cut in power tariffs.
 - ⇒ Manohar lal Khattar announced to reduce the power tariff on monthly consumption of up to 200 units from Rs 4.50 per unit to Rs 2.50 per unit.
- Tata Power Delhi Distribution chips in to restore power in Kerala.
 - ⇒ Tata PowerDelhi Distribution (Tata Power-DDL) has dispatched 473 km length of cables to assist in the restoration of electricity in Kerala, that was devastated by floods last month August.
- Tamil Nadu faces power cuts as coal shortage hits plants.
- Supreme Court to 57 power plants: Clean up act within 28 months.
 - ⇒ Fifty-seven units of the Centre-owned thermal power plants in the country have been given a deadline of 28 months to meet the emission norms for sulphur oxide and particulate matter. These plants are based in dense and 'critically polluted areas'.
- Dharmendra Pradhan seeks early approval of NTPC 1,320-MW project in Odisha.
 - ⇒ The PSU has proposed to set up an additional state-of-the-art, latest environmental norms compliant power station of 1,320 MW at the existing location of NTPC, Talcher.
- Rupee hits lifetime low for second straight day, falls 25 paise to 72.70.
- India rolls out world's largest UPS project based on lithium-ion battery.
 - ⇒ This project requires a 24-hour operation of the camera installed on poles in key areas across the state, which needs an assured power supply.

Note: Click on Head lines for More Info



- **California aims to drop fossil fuels for electricity by 2045.**
⇒ The renewable energy measure would require California's utilities to generate 60 percent of their energy from wind, solar and other specific renewable sources by 2030.
- **Modi, Hasina launch rail, power projects in Bangladesh via video link.**
⇒ The projects are 500 MW additional power supply from India to Bangladesh through the existing Bheramara (Bangladesh)-Baharampur (India) interconnection; Akhaura-Agartala rail link; and rehabilitation of the Kaula-Shahbazpur section of Bangladesh Railways.
- **Power Mech wins orders worth Rs 247 crore for Gujarat, Haryana and Maharashtra.**
- **Blueprint in place to boost EVs, take share to 15% in 5 years: Nitin Gadkari.**
⇒ "The demand for electric vehicles is huge in India. Our expectation is to take the number of electric vehicles to 15 per cent of the total vehicles in India in the next five years," the Road Transport, Highways, Shipping, Water Resources, River Development and Ganga Rejuvenation Minister told.
- **Tata Power to offer suite of services in rooftop solar drive.**
⇒ India's Tata Power Company plans to offer a range of services from advice and financing to installation and maintenance as it strives to increase its share of the market for rooftop solar panels.
- **Australia states power ahead with renewables after national policy collapses.**
- **Chandigarh: Govt delay in subsidy disbursement affecting rooftop solar plants.**
- **Chandigarh power regulator yet to fix solar rates, gross-metering connections on hold.**
- **Sony Corporation to source 100% renewable power.**
- **Vidarbha's biggest solar power plant to be set up in Chandrapur.**
⇒ As a part of its plan to create 2,500MW solar power capacity, Mahagenco has decided to build a 100MW plant at Chandrapur. It will be the biggest solar plant in Vidarbha.
- **Wind, solar farms could bring rains to Sahara Desert.**
⇒ "Previous modeling studies have shown that large-scale wind and solar farms can produce significant climate change at continental scales," said Yan Li, a postdoctoral researcher at the University of Illinois in the US.
- **India's first solar bicycle track corridor to open by next March.**
⇒ The public works department (PWD), which will execute the project under the 26-point green budget scheme, estimates that it will be able to generate 6MW of clean electricity when the entire stretch becomes operational.
- **Barefoot college to organize graduation ceremony for Solar Mamas.**
⇒ In 2018, 45 mamas from ten countries have completed the college's solar engineering program.
- **Solar rooftop power plants' installation yet to pick up pace in Punjab.**
- **Leap Green Energy to expand renewable power capacity to 2 GW by 2020.**
- **Vikram Solar commissions 10-MW project for ONGC in Gujarat.**
- **World's largest offshore wind farm opens off northwest England.**
⇒ The wind farm has a capacity of 659 MW, enough to power almost 600,000 homes, and overtakes the London Array off England's east coast which has a capacity of 630 MW.
- **MNRE proposes reduced commissioning period for solar power projects.**
⇒ The commissioning schedule for a solar project is currently 21 months from date of execution of the PPA for those being set up within a solar park, and 24 months for projects of over 250 MW elsewhere.
- **Karnataka's fuel tax revenue falls despite 2% increase in sales levy.**
- **Russia says getting closer to deal on new gas route to China.**
- **Government asks farmers to use crop residue for biogas production.**
- **13 projects for coal extraction identified, says CIL Chief Anil Kumar Jha.**
- **UltraTech, Mahindra and Godrej join global initiative on energy productivity.**
- **Income-tax department sells more shares of Cairn Energy to recover retrospective tax.**
- **Coal import bill down Rs 1 lakh crore in four years.**
⇒ The internal assessment paper of the coal ministry says imports by the power sector rose by nearly 10 percent annually between 2010-11 and 2014-15.
- **Coal India, Singareni Collieries Company offer power firms option to swap fuel sources.**
- **Coal India supplied 12 percent more coal than last year to the power sector.**
⇒ Coal stock position at power plants with supply contract from Coal India stood at 14.69 million tonnes on August 30.
- **Delhi, UP, 3 other states may face power disruption due to coal supply issues.**
- **Goa: Group of Ministers, state leaders to meet in Delhi to talk about mining.**
- **India's coal import rises 12% to 79 million tonnes in April-July, 2018.**

List of Abbreviations

• CEA :Central Electricity Authority	• MW :Megawatt
• CERC :Central Electricity Regulatory Commission	• MYT :Multi Year Tariff
• CIL :Coal India Limited	• NISE :National Institute of Solar Energy
• DNH :Dadra Nagar Haveli	• NIWE :National Institute of Wind Energy
• EV :Electric Vehicle	• NTPC :National Thermal Power Corporation
• GERC :Gujarat Electricity Regulatory Commission	• ONGC :Oil Natural Gas Corporation
• GST :Good & Services Tax	• PSU :Public Sector Unit
• GW :Giga Watt	• PV :Photovoltaic
• ISTS :Inter-State Transmission System	• PVSOL :PV Solution
• JERC :Joint Electricity Regulatory Commission	• PVSYST :PV System
• JV :Joint Venture	• SC :Supreme Court
• KW :Killo Watt	• SECI :Solar Energy Corporation of India Limited
• MERC :Maharashtra Electricity Regulatory Commission	• UP :Uttarpradesh
• MNRE :Ministry of New & Renewable energy	• UPS :uninterrupted power Supply
• MOP :Ministry of Power	• US :United States

ALL INDIA LIST OF ELEMENTS COMMISSIONED DURING THE FY 2018-19

All India List of Substations, Transmission Lines & Generators Commissioned during July-2018

◆ Substations

- * 400/220 KV Tumkur (Pavagada) PS ICT-III (500 MVA)
- * 400/220 KV Parli Switching Station (Extn.) (1000 MVA)
- * 400/220 KV Nirmal S/S (630 MVA)
- * 400/220 KV Julurupadu S/S (630 MVA)
- * 400/220 KV Parli PG ICT-I (500 MVA)
- * 400/220 KV Parli PG ICT-II (500 MVA)
- * 400/220 KV Pavagada ICT-III (MVA)
- * 400/220 KV Julurupadu ICT-II (MVA)
- * 400/132 KV Silcher ICT-III (315 MVA)
- * 230/110 KV Pudukkottai (Aug) (160-100) (60 MVA)
- * 230/110 KV Porur GIS (100 MVA)
- * 230/110 KV Sembatty (Aug)(160-100) (GEC-I) (60 MVA)
- * 220/66 KV Bhat (Aug) (2x160-100) (220 MVA)
- * 220/66 KV Jamnagar (Aug)(160-100) (60 MVA)
- * 220/66 KV Tappar (Aug) (160 MVA)
- * 220/66 KV Hoshiarpur (160 MVA)
- * 220/66 KV Radhanpur (Aug) (160 MVA)
- * 220/33 KV Parbhani (Addl) (50 MVA)
- * 220/33 KV Barsaitha Desh ICT-II (100 MVA)
- * 220/33 KV Ramnagar Pahad ICT-I (100 MVA)
- * 220/33 KV Naranpur ICT-II (150 MVA)

- * 220/33 KV Naranpur ICT-I (150 MVA)
- * 220/132 KV Borjhara (160 MVA)
- * 220/132 KV Kawardha s/s (160 MVA)
- * 220/132 KV Limbdi (Aug) (150-50) (100 MVA)
- * 220/132 KV Mohana (Aug) (100 MVA)
- * 220/132 KV Jalkot ICT-II (100 MVA)
- * 220/132 KV Bansi (New) ICT-II (100 MVA)
- * 220/132 KV Rukhi (New) ICT-I (160 MVA)
- * 132/33 KV Kohima (24 MVA)

◆ Transmission Lines

- * 765 KV Champa (Pool) - Dharamiaygarh (Quad) (C-WRTL - TBCB)
- * 765 KV Dharamjaygarh-Champa (CKT No. II)
- * 400 KV LILO of Farakka - Jeerat line at Sagahdighi
- * 400 KV Anta-Chhabra TPS
- * 400 KV Chittorgarh-Bhilwara
- * 400 KV Gani/ Panyam - Kurnool (GEC-II)
- * 400 KV LILO of Jaipur - Nirmal at Sundilla LI (Ckt.-I)
- * 400 KV Suratgarh TPS- Bikaner
- * 400 KV Anta-Kota (PG) (CKT No. I)
- * 400 KV LILO of Khandwa-Rajgarh Ckt-I at Khar-gone NTPC
- * 400 KV Essar Mahan-Bilaspur (CKT No. II)
- * 400 KV Singareni-Sundilla (CKT No.I)

- * 220 KV Guindy - Porur GIS (Cable)
- * 220 KV Hapur (765) - Simbhaoli
- * 220 KV Kayathar - Tuticorin
- * 220 KV LILO of Amreli - Dhasa line at Botad
- * 220 KV LILO of Bhugaon - Warora-I at Warora
- * 220 KV LILO of Harduaganj - Jahangirabad Ckt.-I at Rukhi
- * 220 KV LILO of Loni - Muradnagar line at Ator
- * 220 KV LILO of Narendra-Haveri at Bidnal (GEC-I)
- * 220 KV LILO of Shoolagiri - Karimanagalam at Uddanapalli
- * 220 KV Mungeli - Kawardha
- * 220 KV Veeranam-Tirunelveli (PG)(GEC-I)
- * 220 KV LILO of Madanpur-Kunihar at Pinjore (CKT No. I)
- * 220 KV Rewa-Ramnagar Pahad (CKT No. II)
- * 220 KV Rewa-Barsaitha Desh (CKT No. II)
- * 220 KV Bhachau-Naranpar (CKT No. II)
- * 220 KV Bhachau-Naranpar (CKT No. II)
- * 132 KV Ranganadi-Itanagar (CKT No.I)
- * 132 KV Ranganadi-Pare (CKT No.II)
- * 132 KV Pare-Itanagar (CKT No.I)

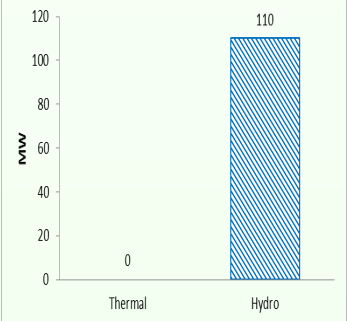
◆ Generators

- ◆ Thermal , Hydro and Nuclear
- * Nil

All India No. of Generators Commissioned during FY 2018-19 (till July-2018)

Month	Thermal					Hydro					Nuclear				
	WR	NR	NER	ER	S R	WR	NR	NER	ER	SR	WR	NR	NER	ER	SR
Apr-18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-18	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Jun-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0

Additional Generation Capacity During FY 2018-19(Till July-2018)



All India No. of Line Reactors (LR), Transmission Lines (T/L), Substations (S/S) and Bus Reactors (BR) Commissioned for FY 2018-19 (till July-2018)

Month	800 KV		765 KV			400 KV			230 KV			220 KV			Total							
	T/L	S/S	LR	T/L	S/S	BR	LR	T/L	S/S	BR	LR	T/L	S/S	BR	LR	T/L	S/S	BR				
Apr-18	0	0	0	4	4	0	0	14	10	0	0	0	0	0	0	8	5	0	0	26	19	0
May-18	0	0	0	0	2	0	0	19	12	0	0	3	0	0	0	10	8	0	0	32	22	0
Jun-18	0	0	0	4	1	0	0	8	9	0	0	0	0	0	0	15	8	0	0	27	18	0
Jul-18	0	0	0	2	0	0	0	10	9	0	0	3	0	0	0	16	17	0	0	28	29	0
Total	0	0	0	10	7	0	0	51	40	0	0	3	3	0	0	49	38	0	0	113	88	0

Note 1: Data is taken from CEA and NLDC websites.

Note 2: No data for Branch Reactors (BR) and Line Reactors (LR) for the month of July-2018.

* Tabulated Data is up to 220 KV level.

CEA : [Read more...](#)

NLDC: [Read more...](#)



POWER SYSTEM SOLUTIONS THAT WORK FOR YOUR BUSINESS

Can You Imagine a World Without Power? ...Because, we can't.

We, at Panacean Energy Solution are committed to our core values integrity, excellence, enriched innovation and stand committed to nurture our talented work force and continually enhance our local insights and global perspective to bring about paradigm shift in the Indian Power Sector, through providing real solution.

We assist you to understand impact of Electricity Regulations applicable to you by providing tailor made gist of the new regulatory developments on case to case basis. With nation-wide experience of our team, and also with the valuable experience of handling overseas projects, we can assist you in planning and operations of your system.



Why Panacean?

Because....We Can Energize Your Business

We're extremely serious about being your power solution advocate. We envision an Indian Power Sector enriched with solutions to enhance its capability to ensure quality power to end consumers with reliability, efficiency and economy on ethical grounds through providing "IT and network" solutions to different segments of Indian Power Sector. Maximize long-term return to Owner.

Our Clients Prefer Working Directly With Us

Because we arm them with valuable resources for contract negotiation. We help them manage the minutest detail behind their big business decisions.

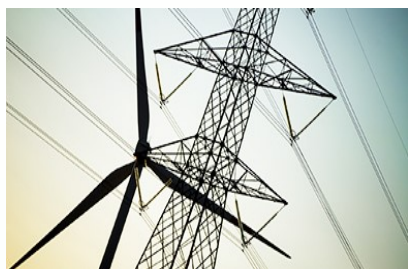
Panacean Energy Solution



PanaCean[®]
(An ISO 9001:2015 Company)
More Power to You



Area of Services



Power Services



- ◆ Power System Studies
- ◆ Utility Load Forecast
- ◆ Transmission and distribution planning
- ◆ Reactive Power Optimization
- ◆ Fault MVA calculation and improvements
- ◆ GPS/GIS Asset Mapping
- ◆ Load survey
- ◆ Street light survey
- ◆ Policy making
- ◆ Implementation of Electricity Act 2003 and State Regulations
- ◆ Operation and maintenance of substation
- ◆ Power System Training
- ◆ PSS@E Training
- ◆ Power Procurement under Case-I and Case-II bidding
- ◆ Tender Preparation and Management
- ◆ Project Management Consultant
- ◆ DSM Management
- ◆ Drawl and Generation schedule optimization
- ◆ Regulatory Support
- ◆ DPR preparation for submission to JERC / CEA.
- ◆ IPDS Scheme
- ◆ UDAY Scheme
- ◆ Smart city Implementation
- ◆ Techno commercial feasibility of substation
- ◆ Techno-commercial feasibility of transmission line
- ◆ T&D CAPEX optimization
- ◆ Distribution business optimization
- ◆ Transmission business optimization
- ◆ Optimal power scheduling for system operators

- ◆ Open Access implementation, operation and management
- ◆ Resources optimization in transmission and distribution business
- ◆ Training in system operation
- ◆ Support in Regulatory matters
- ◆ Energy Accounting

Renewable Energy



- ◆ Detailed Project Report preparation
- ◆ Feasibility Study for Renewable Power Generation
- ◆ EPC of Solar Power
- ◆ O&M of Renewable Power Plant Operation

Energy Efficiency

- ◆ Energy Audit
- ◆ Development of State Designated Agency
- ◆ Development of State Nodal Agency
- ◆ Power Quality Management



IT Services

- ◆ Software for Transmission and Distribution Companies
- ◆ Regulatory Information Management System
- ◆ Complaint Management System
- ◆ Customer Care Centre
- ◆ Standard of Performance
- ◆ Document Management System
- ◆ ERP for Power Company
- ◆ Energy management system
- ◆ Optimal Power Schedule

Area of Clients

Distribution Sector

- ◆ Electricity Department of Daman and Diu
- ◆ DNH Power Distribution Corporation Ltd.

Transmission Sector

- ◆ Maharashtra State Electricity Transmission Company Ltd.
- ◆ Reliance Infrastructure Ltd.
- ◆ Electricity Department of Dardra and Nagar Haveli
- ◆ Uganda Electricity Transmission Company Ltd.

Generation Sector

- ◆ Essar M.P. Power Ltd.
- ◆ Ind-Barath Power

Others

- ◆ Indian Institute of Technology, Bombay
- ◆ Alok Industries
- ◆ Abhijeet Ferrotech Ltd.
- ◆ Reliance Industries Ltd.
- ◆ Macquarie Infrastructure
- ◆ IXORA Construction
- ◆ ICRA Management and Consultancy Services
- ◆ CLP India Pvt. Ltd., Mumbai

Reach us at

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Corporate Office

Mumbai

Gala No. 209, 2nd Floor, Nikisha Ind. Estate, Premises No 2, Pandurang Wadi, Mira Road (East), Thane- 401107.

Silvassa

Flat No:A1/8, 2nd Floor, above Om Sai medical store, Opp Jalaram Temple, Kilvani naka, Silvassa - 396230.

Daman

1/320, Bhidbhajan Mahadev Chawl, Wadi Falia, New Vegetable Market, Nani Daman, Daman - 396210.

Surat

206, Santiniketan Flora Business Hub, Nr. Sanskartirth Gyanpith School, Abrama Road, Mota Varachha, Surat - 394105.



PANACEAN AT WORK FOR YOU

CONNECTING YOUR POWER NEEDS TO THE PANACEAN RESOURCES

IT SUPPORT TO YOUR POWER SOLUTIONS

- INFRASTRUCTURE MANAGEMENT (MAPS)
- COMPLAINT MANAGEMENT SYSTEM (CMS)
- REGULATORY INFORMATION MANAGEMENT SYSTEM (RIMS)
- MAINTENANCE MANAGEMENT SYSTEM (MMS)
- INVENTORY MANAGEMENT (STORE)
- OPTIMAL POWER SCHEDULE

ONLINE ACCESS BROWSER COMPATIBILITY



INDEPENDENT OF DATABASE



The software is compatible with Oracle, Microsoft SQL, and MySQL database.

SECURITY



FLEXIBLE SOLUTIONS FOR YOUR POWER NEEDS

Introduction

Power UI (Power System User Interface) is a cloud-based application specifically designed for power sectors organizations mainly, Transmission Utilities and Distribution Utilities. Presently, Power UI integrates various power system utilities such as Infrastructure management (MAPS), Complaint Management (CMS), Maintenance Management System (MMS), Regulatory Information Management system (RIMS), Inventory Management (Store).

Simple and Intuitive UI

We have kept in mind simplest ever user interface while designing the software. The user interface is so intuitive that, anyone having basic knowledge of operating computer will be able to handle various applications with ease. The technical modules only require basic training for successful operation. The software will have inbuilt guiding system for assuring hassle free completion of almost all activities.

Cloud Based:

The software run from cloud and is accessible over internet / intranet. This avoids installation of copies of software in each system. Management and upgradation of this cloud based application can become easier than ever.

Auto Backup:

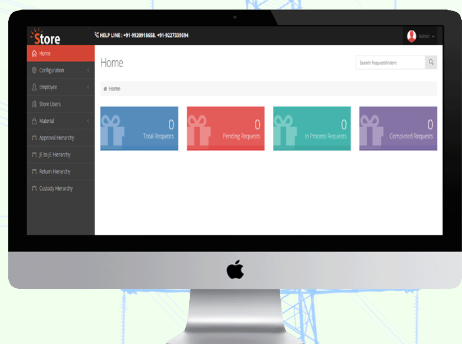
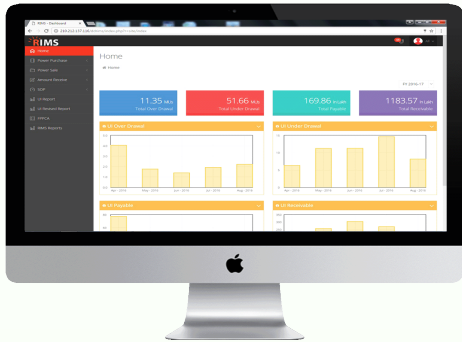
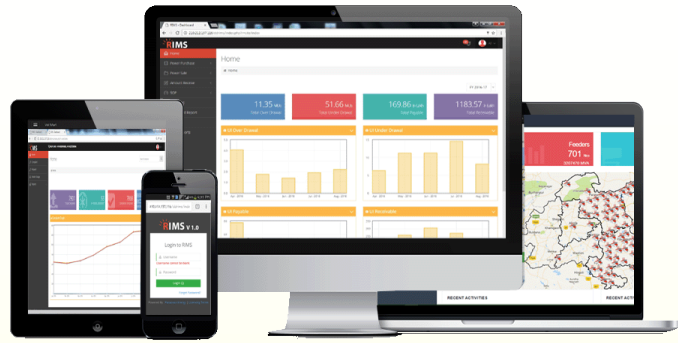
The data of all enterprise applications is of utmost importance. Power UI comes with Auto Backup facility where an authorized person can schedule auto backup of full / partial data of the software. In case of data lost or hardware failure, no or minimal data is lost.

Event Notification:

The user and/or administrator will not be unaware of activities and events being carried out by the members. All activity updates will be delivered to the concerned person via appropriate notification. Apart from inbuilt notification system, such alerts can also be combined with Email and SMS notification.



LAPTOP, Tablet & Mobile



RIMS REGULATORY INFORMATION MANAGEMENT SYSTEM

RIMS keeps track of power purchase, power sale, trading, DSM (formerly known as “UI”), SEM data, Reliability Indices etc. It translates every bit of information for successful derivation various reports as intended by State Electricity Regulatory Commission.

CMS COMPLAINT MANAGEMENT SYSTEM

CMS enables utility to get in touch with its consumers. At one end it provides feedback and complaints of consumers, and on the other end it provides analytical tools for identifying time-bound resolving consumer complaints and improving consumer satisfaction.

STORE INVENTORY MANAGEMENT SYSTEM (STORE):

Full proof inventory management is ensured by Store. With self-auditing feature of the software, it is ensured that no material is lost unknowingly. It ensures accountability at every step right from receipt of the material to usage of the material. It also provides handful information for material usage pattern, consumption of various material and its category, material expenses many more at micro level as well as macro level. This helps in improving our planning procedures and material management. Readily available audit reports enhances applicability of the module for financial compliances.

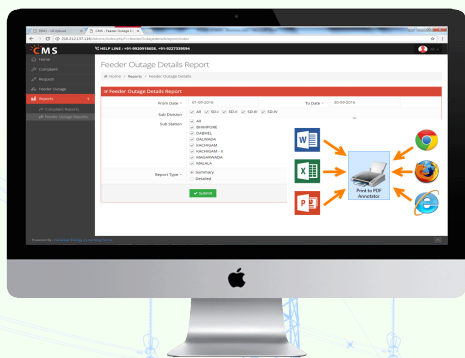
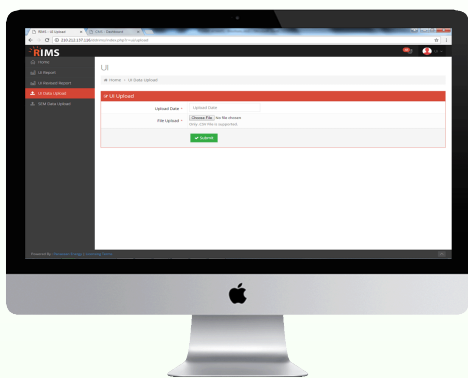
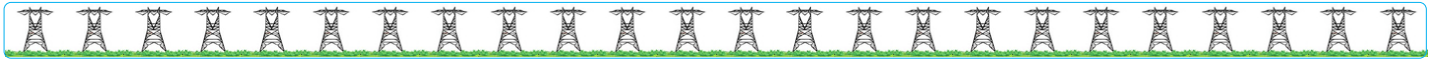


Transmission

Best Suitable Utilities

Distribution





M AINTENANCE MANAGEMENT SYSTEM (MMS)

MMS is designed to improve inbuilt maintenance management facilities and hence reduce the failure rates of equipment. With equipment being part of MMS, the concerned person is reminded for inspection and taking corrective actions. The module supports maintenance routines in various categories such as preventive maintenance, breakdown maintenance, event based maintenance, and routine maintenance. The software will ensure accountability of maintenance team and improves reliability of equipment in service.

This module contains all functionalities involved in maintenance management of a utility. Specific provisions for this objective are provided in this module as given below;

- ◆ Preventive & Routine Maintenance Operations
- ◆ Breakdown and Event based Operations

D ATA HANDLING:

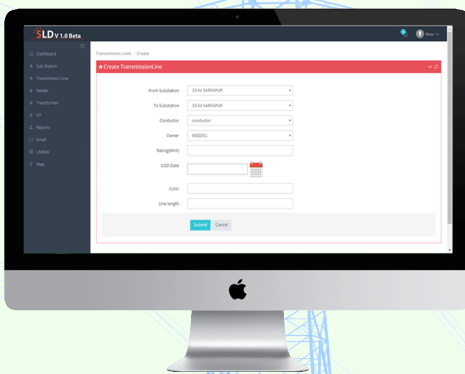
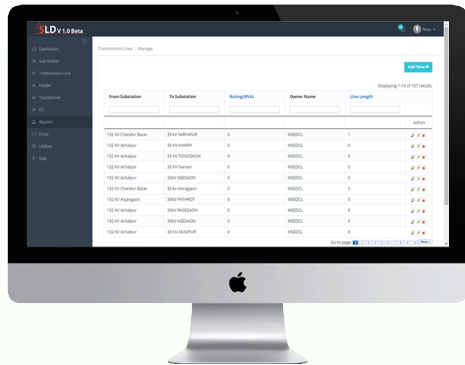
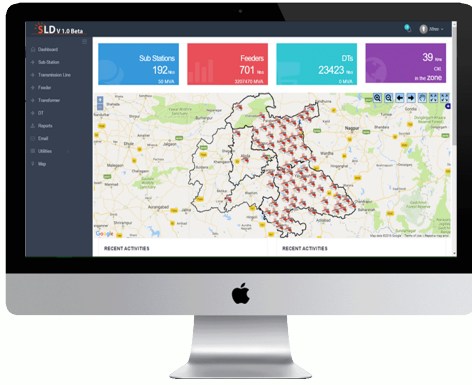
The software shall have a provision to handle huge volumes of data. Features such as import of excel files and import of data from databases shall be provided to facilitate bulk data entry and its corresponding map location display. Given below is a sample bulk data entry feature in POWERUI.

D ATA / REPORT EXPORT AND PRINTING FACILITIES:



O NLINE COMPLAINT AND FEEDBACK REPORTING

We are always listening to your feedback in terms of feature request, bug reporting, complaint, suggestion or any such thing for improving our service for your satisfaction. All such activities are only click away. User can report feedback online or by calling us on our helpline numbers.



MAPS includes infrastructure mapping of various assets of a utility. All assets with geotag (Longitude and Latitude) can be displayed and managed with ease.

POWERUI - MAPS

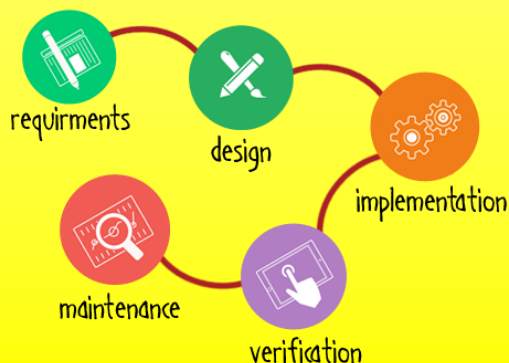
POWERUI MAPS is a map based application where all important assets and infrastructure of a Distribution company and transmission company are displayed on maps using their exact geographic coordinates. Display of all mapped distribution equipment on google maps, along with establishment of comprehensive database maintaining dynamic data of all attributes of major equipment in the distribution network is the core objective of this application. The map will be loaded with several customized user interactive features which aid in day to day monitoring and supervision of operations of the distribution network. Along with this, features facilitating operations such as assignment of O & M tasks to personnel based on equipment monitoring on map, tracking work status and review of operations on a large scale are provided in this application.

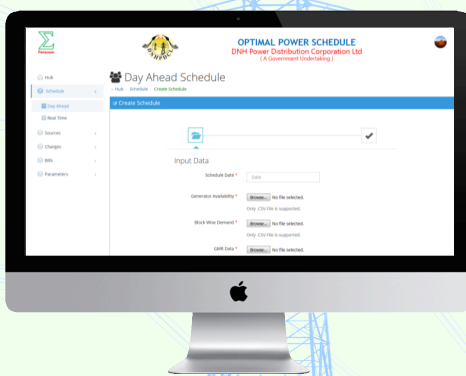
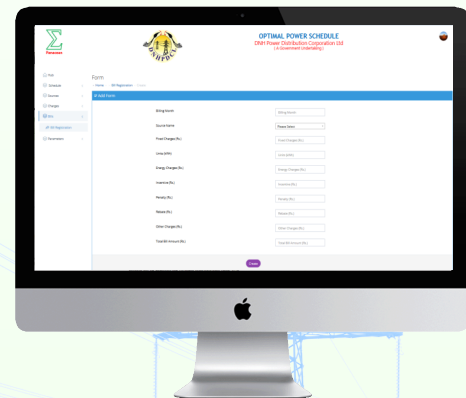
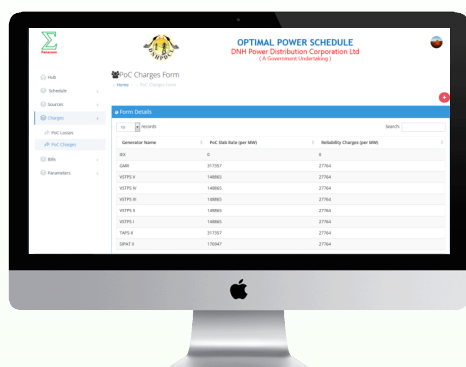
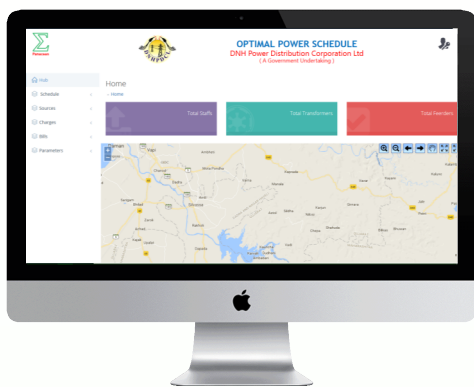
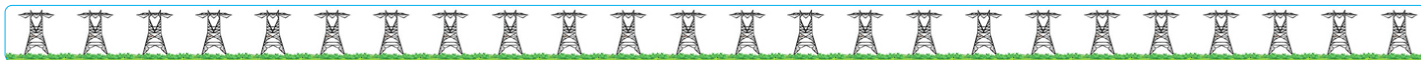
LAYER FACILITY:

LGiven a large and a highly dense network as that of MSEDCL, selective viewing of different components of maps is required. The Layer facility enables the user to turn ON/OFF display of certain elements on the map. This feature provides greater clarity of viewing and ease of operation of the software.

DATABASE - MAP COMMUNICATION:

DProvision for any element to be inserted into the database or updation of any element in the database can be done through both map means and database means.

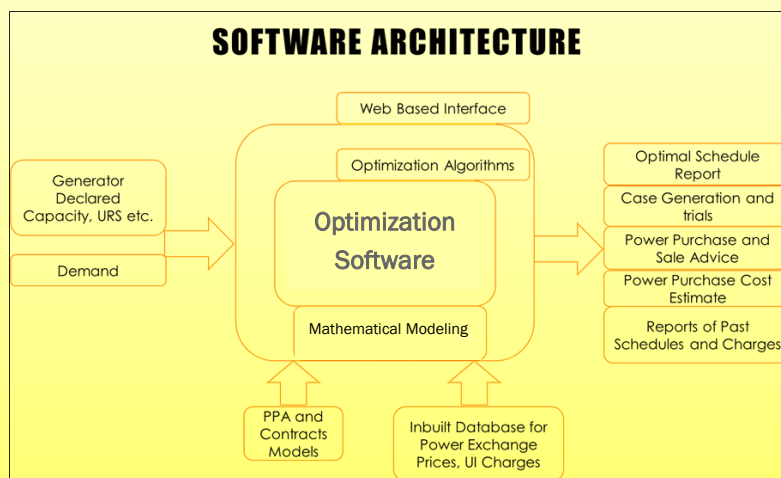




OPTIMAL POWER SCHEDULING SOFTWARE

The primary objective of this software shall be to provide Cost optimal generator wise day ahead schedule (MW) based on block wise demand of the utility and declared capacity of the generator; subject to all major constraints, with an account of all possible factors in determining the merit order of generators for each block.

Introduction: Optimal Power Scheduling is a custom made software for Power Distribution companies and load dispatch centres. Based on the principles of optimization, this software models complex issues of power purchase such as Power purchase agreements (PPA), Power Exchange, Un-scheduled Interchange (UI), and Un-requisitioned Surplus (URS) etc. into a single integrated platform using a industrial popular software to get an optimal power purchase solution. The schematic diagram of Optimal Power Scheduling Software is shown below,



FEATURES

- ◆ Day ahead and Intra-day optimal solutions for bidding.
- ◆ PPA Modelling concept, governing all PPA terms and Conditions.
- ◆ Analysis of Power Exchange and DSM prices based on Historical data.
- ◆ Indicative Power Purchase and Sale Solutions to bid optimally at the Power Market.
- ◆ Block wise Power Purchase cost estimation to explore all possible options to limit power purchase expenditure.
- ◆ Reports to analyse and summarize power scheduling over a period of time.