Panacean®
(An ISO 9001: 2015 Company)

POWER BULLETIN

MAR
2020

Volume 6, Issue 12

STAY HOME, STAY SAFE

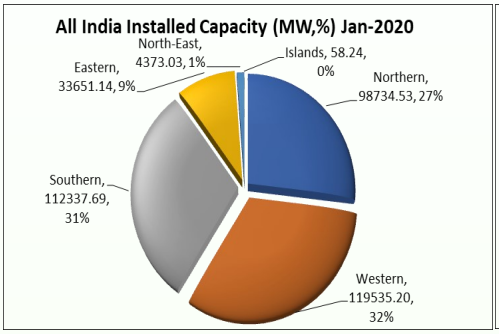
Inside

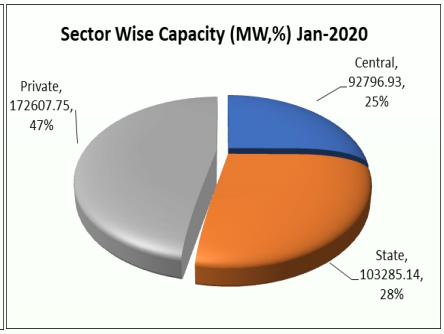
OVERVIEW OF INDIAN POWER SYSTEM FOR JAN-2020

All India Installed Capacity (MW) as on 31-01-2020					
Region	Thermal	Nuclear	Hydro	RES	Total
Northern	60351.05	1620.00	20010.77	16752.71	**98734.53**
Western	84621.61	1840.00	7547.50	25526.09	**119535.20**
Southern	55079.98	3320.00	11774.83	42162.88	**112337.69**
Eastern	27515.05	0.00	4639.12	1496.97	**33651.14**
North-Eastern	2581.83	0.00	1427.00	364.20	**4373.03**
Islands	40.05	0.00	0.00	18.19	**58.24**
ALL	**230189.57**	**6780.00**	**45399.22**	**86321.04**	**368689.83**

All India Installed Capacity (MW) as on 31-01-2020	
Sector	Generation (MW)
Central	92796.93
State	103285.14
Private	172607.75
Total	**368689.82**

Peak Demand of DD & DNH				
Utility	Jan-20			
	Peak Demand (MW)	Peak Met (MW)	Surplus/Deficit (-)	
			(MW)	(%)
DD	347	347	0	0
DNH	816	816	0	0





All India Plant Load Factor (PLF) in (%)		
Sector	Jan-19	Jan-20
Central	74.51	66.37
State	56.24	51.54
Private IPP	51.79	55.84
Private UTL	48.19	61.75
ALL India	59.65	57.61

Highlights of WR Grid for Jan-2020

- **Maximum Peak Demand Met:** 58643 MW
- **Energy Consumption:** Total Energy Consumption in the month of Jan-2020 was 34618 MUs at an average of 1117 MUs/day & Maxi-mum was 1185 MUs on 28.01.2020.
- **Unrestricted Demand:** Maximum Unrestricted demand was 58643 MW and Average Peak Unrestricted demand was 46531 MW.
- **Frequency Profile:** System frequency as per IEGC band is 49.90 Hz to 50.05 Hz. Maxi-mum, Minimum & Average Frequencies 50.27 Hz, 49.65 Hz & 50.00 Hz were respectively observed in the month of Jan-2020.
- **Voltage Profile:** All 765KV nodes except Wardha, Durg Kotra and Gwalior (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, Raipur, Raigarh,Wardha, Bhilai, Dhule, Dehgaon, Parli, Kalwa, Karad, Boisar, Kasor, Amreli, Vapi, Mapusa, Kala and Magarwada. Highest of 95.62% of time above 420KV observed at Raigarh.
- **Hydro Generation:** Total hydro generation of Western Region was 1015.90 MUs at an average of 34.40 MUs/day in the month of Jan-2020.
- **Wind Generation:** Total wind generation was 1606 MUs at an average of 51.8 MUs/day in the month of Jan-2020.
- **Solar Generation:** Total Solar generation was 855 MUs at an average of 28 MUs/day in the month of Jan-2020.
- **Open Access Transaction Details for Jan-2020:**

  ⇒ No. of approvals & Energy Approved in Intra-regional: 86 & 604.72 MUs.

  ⇒ No. of approvals & Energy Approved in Inter-regional: 60 & 899.68 MUs.

Read More...

List of Transmission Lines Commissioned/Ready for Commissioning During Jan-2020												
Sector	Central				Pvt.			State				Total
Voltage Level (KV)	800	765	400	220	765	400	220	765	400	230	220	
No. of Lines	0	2	0	0	0	1	0	0	1	0	8	**12**

List of Substations Commissioned/Ready for Commissioning During Jan-2020												
Sector	Central				Pvt.			State				Total
Voltage Level (KV)	800	765	400	220	765	400	220	765	400	230	220	
No. of Sub-stations	0	1	1	1	0	0	0	0	1	2	29	**35**

Region-wise Power Supply Position (Demand & Availability) in Jan-2019 & Jan-2020						
Region	Energy (MUs)				Deficit /Surplus (%)	
	Demand		Energy Met			
	Jan-19	Jan-20	Jan-19	Jan-20	Jan-19	Jan-20
Northern	29559	30015	29125	29521	(1.5)	(1.6)
Western	32251	33352	32244	33352	0.0	0.0
Southern	27582	29930	27570	29926	0.0	0.0
Eastern	10992	10633	10912	10633	(0.7)	0.0
North Eastern	1329	1358	1309	1326	(1.5)	(2.4)
All India	**101713**	**105288**	**101160**	**104758**	**(0.5)**	**(0.5)**

Region-wise Peak Demand / Peak Met in Jan-2019 & Jan-2020						
Region	Power (MW)				Deficit /Surplus (%)	
	Peak Demand		Peak Met			
	Jan-19	Jan-20	Jan-19	Jan-20	Jan-19	Jan-20
Northern	47779	51338	47210	50780	(1.2)	(1.1)
Western	52737	58643	53544	58643	(0.4)	0.0
Southern	44754	50026	44615	50022	(0.3)	0.0
Eastern	18783	19288	18702	19288	(0.4)	0.0
North Eastern	2575	2746	2552	2588	(0.9)	(5.8)
All India	**164018**	**171655**	**162349**	**170976**	**(1.0)**	**(0.4)**

Read More...

POWER TRADING

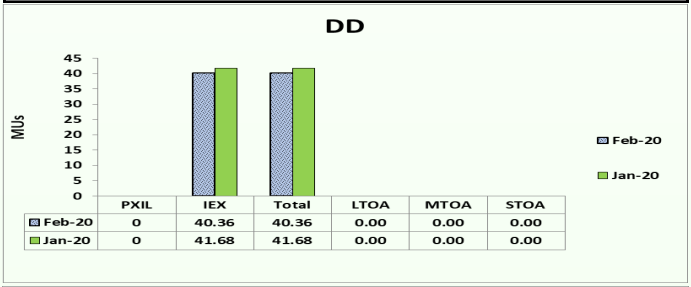
⇒ Emergence of IT has helped to create massive E-Commerce platforms in every walk of life. One such E-Commerce platform for transiting electricity for physical delivery, fine tuning daily requirements, sale of residual generation, optimal utilization of generating resources at marginal cost of production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

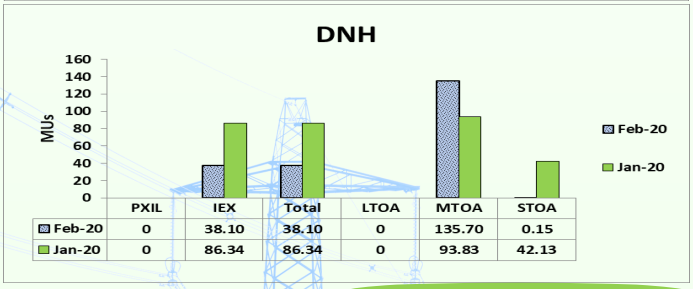
⇒ For more information about IEX visit (www.iexindia.com); For more information about PXIL visit (www.powerexindia.com)

⇒ PXIL & IEX Trading summary

FEB-2020	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	**8893.8**	**213327.0**	**-**	**1098.6**	**1098.6**	**5233370.3**	**10371512.5**	**0.0**	**4289153.2**	**4291184.6**
Min	0.0	0.0	--	0.0	0.0	3399.9	8936.9	996.8	3184.7	3184.7
Max	60.0	401.9	--	12.5	12.5	14708.3	27750.9	4559.6	11245.1	11245.1
Avg	3.3	79.4	--	0.4	0.4	7519.2	14901.6	2914.1	6162.6	6165.5
JAN-2020	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	**16978.2**	**512872.2**	**-**	**3578.2**	**3578.2**	**5715908.1**	**11669784.1**	**-**	**4791993.5**	**4815331.1**
Min	0.0	0.0	--	0.0	0.0	3679.5	9253.7	1000.7	3220.7	3220.7
Max	325.0	1653.4	--	100.0	100.0	15369.1	28338.8	5000.4	11480.2	11451.2
Avg	6.3	190.8	--	1.3	1.3	7682.7	15685.2	2860.3	6440.9	6472.2

DD & DNH: OPEN ACCESS DETAILS

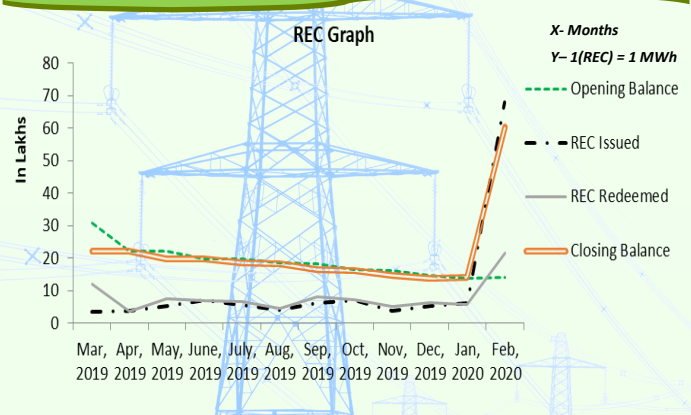




REC Trading Session February-2020

Trader Company	PXIL		IEX	
Particular	Non-Solar	Solar	Non-Solar	Solar
Total Sell Bid (REC's)	8,43,886	3,32,042	27,79,466	10,14,459
Total Buy Bid (REC's)	4,98,335	3,65,463	6,61,976	10,94,700
Clearing Price (₹/Certificate)	2,050	2,400	1,800	2,400
Cleared Volume (REC's)	3,35,520	3,15,580	5,07,153	9,84,157

RENEWABLE ENERGY CERTIFICATE MECHANISM (REC) FROM MAR-19 TO FEB-20



Read More ...

POWER MARKET UPDATE: February 2020
Day Ahead Market Trades 4289 MU in February MCP at Rs. 2.91 per unit

- The day-ahead market traded 4289 MU with average market clearing price at only Rs.2.91 per unit vs price of Rs. 3.08 in February 2019, a 6% decline in price.
- The electricity market at IEX recorded a total trade of 4516 MU in February 2020. The market observed a 57% Y-on-Y increase in traded volumes
- The increase in trade volume was mainly due to distribution utilities opting for replacement of their costlier power with Exchange based procurement.
- The total sell bids during the month at 10,372 MU were twice the buy bids at 5,233 MU which ensured lower clearing price and brought significant savings to both the distribution utilities as well as the commercial and industrial consumers.
- One Nation One Price prevailed for 28 days during the month. However, the day-ahead market saw volume loss of 2.03 MU.
- The volumes in the term-ahead market (TAM) grew 168% YoY to 226 MU signifying the increasing preference of TAM contracts by the distribution utilities for meeting their intra-day to weekly requirements.

Read More..

DEVIATION CHARGES

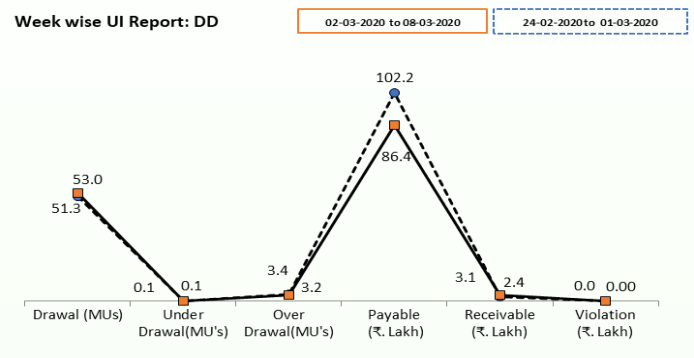
DD User Click to get UI Report
DNH User Click to get UI Report

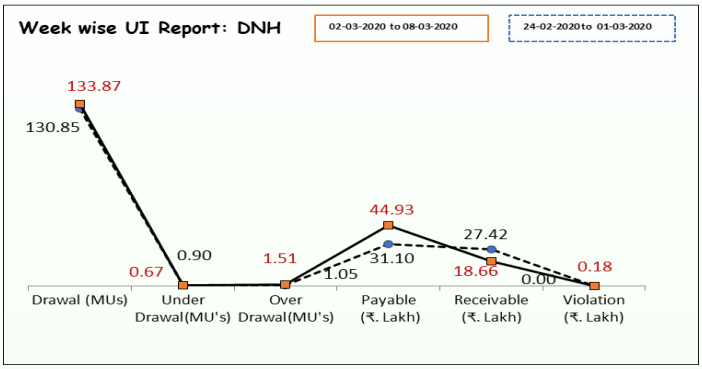
DD-Deviation Charges

FY 2019-20	Drawl (MUs)	Schedule (MUs)	UI Drawl (MUs)		UI Charges(₹. Lakh)		
			Under Drawl	Over Drawl	Payable	Receivable	Violation
Cumulative Total up to Feb-20	**2370.21**	**2240.40**	**19.92**	**149.73**	**4448.84**	**543.43**	**115.57**
02-03-2020 to 08-03-2020	53.02	49.99	0.11	3.15	86.42	3.13	0.00
02-03-2019 to 08-03-2019	49.22	46.98	0.49	2.73	105.82	14.48	0.00
24-02-2020 to 01-03-2020	51.34	48.05	0.10	3.38	102.23	2.44	0.00
24-02-2019 to 01-03-2019	41.59	40.29	0.61	1.91	50.00	11.04	0.86

DNH-Deviation Charges

FY 2019-20	Drawl (MUs)	Schedule (MUs)	UI Drawl (MUs)		UI Charges (₹. Lakh)		
			Under Drawl	Over Drawl	Payable	Receivable	Violation
Cumulative Total up to Feb-20	**6090.42**	**6091.14**	**56.12**	**55.38**	**1856.97**	**1447.57**	**95.30**
02-03-2020 to 08-03-2020	133.87	133.03	0.67	1.51	44.93	18.66	0.18
02-03-2019 to 08-03-2019	126.95	125.98	1.00	1.98	78.04	31.26	5.51
24-02-2020 to 01-03-2020	130.85	130.71	0.90	1.05	31.10	27.42	0.00
24-02-2019 to 01-03-2019	109.53	108.77	0.84	1.61	42.13	13.50	0.93





DD

Month	FY 2018-19 (All Freq Hz)			FY 2019-20 (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	0.30	(19.56)	(2.79)	1.62	(16.55)	(3.28)
May	0.57	(27.91)	(3.43)	2.73	(11.4)	(3.65)
June	0.23	(24.82)	(2.61)	2.91	(7.78)	(3.71)
July	0.16	(31.37)	(2.54)	2.38	(13.25)	(3.17)
Aug	0.10	(28.24)	(2.52)	2.76	(12.06)	(3.35)
Sep	0.14	(33.75)	(2.92)	3.45	(8.9)	(2.67)
Oct	0.37	(25.13)	(2.58)	1.07	(17.66)	(2.56)
Nov	0.65	(19.69)	(2.48)	0.85	(17.1)	(2.54)
Dec	0.20	(23.87)	(2.57)	0.7	(17.54)	(2.93)
Jan	2.25	(6.69)	(4.20)	0.84	(12.93)	(2.99)
Feb	2.46	(7.70)	(3.85)	0.61	(14.56)	(3.05)
Mar	2.21	(13.41)	(3.69)	--	--	--
Total	**9.63**	**(262.14)**	**(2.82)**	**19.92**	**(149.73)**	**(3.01)**

DNH

Month	FY 2018-19 (All Freq Hz)			FY 2019-20 (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	0.39	(22.51)	(2.70)	3.06	(10.9)	(3.62)
May	2.03	(16.76)	(3.40)	5.29	(9.45)	(5.39)
June	1.43	(15.89)	(2.57)	7.51	(5.14)	(0.81)
July	0.43	(25.32)	(2.37)	6.86	(3.91)	(1.25)
Aug	0.33	(35.64)	(2.35)	5.28	(3.62)	(0.90)
Sep	0.50	(33.89)	(2.73)	4.20	(3.47)	(0.47)
Oct	1.76	(26.70)	(2.64)	7.46	(2.84)	(2.02)
Nov	2.36	(18.13)	(2.67)	4.73	(2.61)	(2.37)
Dec	0.57	(27.12)	(2.56)	3.86	(3.85)	(2.85)
Jan	2.68	(7.65)	(3.84)	4.37	(4.22)	(0.34)
Feb	2.99	(8.68)	(3.68)	3.50	(5.37)	(4.01)
Mar	5.37	(8.02)	(5.90)	--	--	--
Total	**20.84**	**(246.31)**	**(2.72)**	**56.12**	**(55.38)**	**(2.18)**

REACTIVE ENERGY CHARGES FOR DD & DNH

FY 2019-20	DD-High Voltage				DD-Low Voltage				DNH-High Voltage			DNH-Low Voltage		
	GUJARAT		ISTS	Total	GUJARAT		ISTS	Total	ISTS		Total	ISTS		Total
	Dok-diu	Una-diu	Mgr-Vap HV		Dok-diu	Una-diu	Mgr-Vap LV		Kpd-Vap HV	Kdl-Vap HV		Kpd-Vap LV	Kdl-Vap LV	
Cumulative Total MVARh till Feb-2020	278.0	1084.8	226237.0	**227599.8**	0.2	-5.1	0.0	**-4.9**	266332.7	104993.4	**371326.1**	1.4	697.0	**698.4**
Cumulative Total Charges in (₹) till Feb-20	116.0	-91205.0	-27227984.0	**-27319073.0**	29.0	-739.5	0.0	**-710.5**	-38618241.5	-15224043.0	**-53842284.5**	203.0	101065.0	**101268.0**
24-02-2020 to 01-03-2020	0.7	0.0	4490.6	**4491.3**	0.0	0.0	0.0	**0.0**	4265.5	-1782.2	**2483.3**	0.0	0.0	**0.0**
Charges in (₹)	-101.5	0.0	-651137.0	**-651238.5**	0.0	0.0	0.0	**0.0**	-618497.5	258419.0	**-360078.5**	0.0	0.0	**0.0**
02-03-2020 to 08-03-2020	-0.1	0.0	3890.0	**3889.9**	0.2	0.0	0.0	**0.2**	2981.5	-1055.2	**1926.3**	0.0	0.0	**0.0**
Charges in (₹)	14.5	0.0	-564050.0	**-564035.5**	29.0	0.0	0.0	**29.0**	-432317.5	153004.0	**-279313.5**	0.0	0.0	**0.0**

Note: 1. The REC chargers has been revised to 14.5 paisa/KVARh from Apr-2019 as per clause of 6.6 of revised IEGC.
2. Cumulative total of REC is except 1st week of Sep-19 as data not available.

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

POWER SECTOR ACTIVITIES

CERC

- Central Electricity Regulatory Commission (Sharing of Revenue Derived from Utilization of Transmission Assets for Other business) Regulations, 2020 .

CEA

- Plant wise details of Renewable Energy Projects
- RE Generation (MUs)-Statewise-sourcewise_two years
- Mandatory use of treated sewage water by the Thermal Power Plants as per the provisions of the Tariff Policy 2016
- First Draft Amendment to Central Electricity Authority (Furnishing of statistics, returns and information)Regulations, 2007 - Invitation of Public comments"

BEE

- The OM intimating Go Live of the new PATNet portal.
- For Renewal of Certification, Form-V is accepted only through E-Mail (certificaterenewal@em-ea.in) e-Certificate and e-ID can be downloaded by SMS notified candidates.
- 19th National Certification Examination Results- Download e-Provisional Certificate from 22.04.2019 (Click Downloads)

WRLDC

- Amended dates of provisions under Regulation 7(10)(b), Regulation 7(10)(a)
- Grid Events List Updated_24.03.2020
- Implementation Plan for RPS on MB Power wef 17.03.2020

WRPC

- Due to prevailing conditions in Mumbai the weekly accounts are differed and would be uploaded shortly
- DSM RRAS REC accounts for the week from 09.03.20 to 15.03.20 issued

MISCELLANEOUS

- PM says social distancing is the most effective way of fighting against COVID-19; urges countrymen to protect themselves and their families.
- Prime Minister Narendra Modi has said that social distancing is the most effective way of fighting against COVID-19 and by complying with the lockdown, people can protect themselves.
- Appeal to generously donate to 'PM's Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund)'.
  - ⇒ The pandemic of COVID-19 has engulfed the entire world and has posed serious challenges for the health and economic security of millions of people worldwide.
- Extraordinary Virtual G20 Leaders' Summit.
  - ⇒ An Extraordinary Virtual G20 Leaders' Summit was convened on 26 March 2020 to discuss the challenges posed by the outbreak of the COVID-19 pandemic and to forge a global coordinated response.
- India's electricity use falls to lowest in five years due to lockdown.
  - ⇒ India used 2.59 billion units of electricity on March 27 - the third day of the three week national lockdown ordained by Prime Minister Narendra Modi.
- Rooftop solar developers may approach state regulator for connectivity.
  - ⇒ The Distributed Solar Power Association told ET it is likely to soon file a petition before the Haryana Electricity Regulatory Commission protesting the power discoms' reluctance
- SBI raises $100 million via green bonds amid COVID-19 scare.
  - ⇒ Those bonds have been priced after adding 80 basis points over three-month London-Interbank Offered Rate, which is now at about 1.450 percent.
- MNRE announces scheme for 100% solarization of Suntemple town Modhera in Gujarat.
  - ⇒ The electricity needs of all the households of Modhera are planned to be fulfilled with solar energy, setting up a pilot demonstration project for a village or town running completely on solar.
- MNRE officers, staff working from home through e-office platform.
  - ⇒ RK Singh, Minister for New and Renewable Energy, also took review meetings with all officers yesterday and today in which it was decided that MNRE will issue uniform combined guidelines for procurement of Renewable Energy (solar, wind, hybrid).
- COVID-19: Renewable industry gives thumbs up to MNRE notification on free passage of material, staff.
- MNRE asks states to allow free movement of material and engineers.
  - ⇒ Besides allowing permission for staff, vehicles and associated workforce to move around, the ministry also asked states for a waiver under Section 144, nationwide lockdown, curfew or any other limitation.
- India's renewable energy generation capacity has grown 72 per cent in six yrs: R K Singh.
  - ⇒ Of the renewable energy sources, excluding large hydro above 25 MW, installed capacity of solar energy capacity registered the highest growth.
- Renewable energy certificate sales up 64 per cent in February.
  - ⇒ Renewable Energy Certificates are a type of market-based instrument and one REC is created when one megawatt hour of electricity is generated from an eligible renewable energy resource.
- Coronavirus: Govt allows renewable energy supply chain disruption to be treated as Force Majeure.
  - ⇒ Earlier in the day, FICCI had said a lack of communication from MNRE, SECI and states related to applicability of Force Majeure on business disruption caused by the spread of Coronavirus is creating confusion.
- No meter reading, so give average power bills, fix glitches: MERC.
  - ⇒ MERC has also made it mandatory for power firms to attend to all complaints from consumers for power restoration and safety.

Note: Click on Head lines for More Info

- **Coronavirus: Industrial power consumers seek concessions in Maharashtra.**
  - ⇒ Committee convener Pratap Hogade has stated that all the industrial units in the state were closed for an indefinite period,
- **Coronavirus: Gujarat estimates Rs 4,000 cr hit to revenue from GST, power duty.**
  - ⇒ The lockdown for the Covid-19 pandemic may lead to a revenue loss of Rs 3,000-4,000 crore to the state, sources in the government.
- **Peak power demand down 26 per cent to 120 GW within a week.**
  - ⇒ The peak demand met was down mainly due to lower demand from industry and state power distribution companies (discoms) across the country due to the lockdown.
- **NTPC's installed capacity touches 58,816 MW.**
  - ⇒ With this, the total installed capacity of Khargone Super Thermal Power Project, NTPC stands at 50355 mw and NTPC group at 58,816 mw, an official statement said .
- **Home cooking during lockdown pushes up LPG demand.**
  - ⇒ In the month of March, when sale of auto fuels petrol and diesel and even aviation turbine fuel (ATF) has fallen by upto 15-20 per cent, oil companies are witnessing a surge in demand for LPG cooking gas cylinders that has risen by almost the same margin.
- **GST Return filing date extended, relief from late fee, penalties.**
  - ⇒ To provide relief to businesses grappling with the economic impact of Covid 19, the government on Tuesday said it is extending the filing of Return for the month of March, April and May 2020 and composition returns under GST June 30.
- **Labour Ministry allows EPF withdrawal amid lockdown.**
  - ⇒ The decision is taken in view of lockdown across the country to fight COVID-19. The COVID-19 has been declared pandemic and therefore employees working in establishments and factories across entire India, who are members of the EPF Scheme, 1952 are eligible for the benefits of non-refundable advance.
- **Cost of Coronavirus lockdown on Indian economy.**
  - ⇒ With 75% of the economy in a 21-day lockdown to halt the spread of Covid-19, investment bank Nomura tracks the cost.
- **Working to ensure critical coal supplies during lockdown: Coal minister.**
  - ⇒ The minister informed that various steps have been taken to ensure the easy and adequate availability of coal to every coal dependent industry/Power Sector.
- **Coal India to set up 500 bed COVID hospital in Odisha.**
  - ⇒ "Coal India will be responsible for compensating and reimbursing the costs of the SUM Hospital in the management of Odisha COVID hospitals.
- **Tamil Nadu: No power connection to be snapped for non-payment of bills till April 14.**
  - ⇒ Some power connections in Tiruvannamalai district, which were disconnected a few days ago for non-payment of bills, had been restored based on instruction from senior.
- **Singapore, Japanese companies join to explore hydrogen as energy source.**
- **Tata Power starts commercial operations of Georgia hydro plant.**
- **California sets goal to double clean energy by 2030.**
  - ⇒ Environmental groups had pressed for a more aggressive target of 30 MMT that would get the state closer to its 2045 goal of sourcing electricity exclusively from carbon-free sources. They favor a rapid shift away from fossil fuels to fight global climate change.
- **RE projects to get extension of time: MNRE Secretary**
  - ⇒ In this context, Kumar said, the announcement of the extension of time will provide great relief to all the stakeholders in Renewable Energy sector.
- **Large and lumpy wind market ahead in India: Report.**
  - ⇒ It added that an influx of capital and technology initiated a downward slide in prices, with the levelized cost of wind energy declining by 40 per cent from 2015 to 2019.
- **Mumbai: No delivery breaks people's backs as they lug 14kg LPG cylinders home.**
  - ⇒ "Not everyone owns a car or two-wheeler; many are forced to carry an empty cylinder to the truck to exchange it for a filled one," said Sewri resident Rohini Chaturvedi.
- **Barclays sets 'net zero' goal by 2050 in climate policy.**
  - ⇒ Barclays had faced criticism from investors ahead of its annual general meeting in May for having a weaker climate policy than some rivals.
- **Rouble weakens to 80 vs dollar as oil drop bites.**
  - ⇒ At 0740 GMT, the rouble had shed 1.6 per cent of its value against the dollar to 80.06, moving closer to the 81.97 hit earlier this month, its weakest since early 2016.
- **Offshore wind firm Orsted sticks to outlook despite virus uncertainty.**
  - ⇒ The Danish company is in the midst of a $30 billion investment programme in green energy as it seeks to become one of a handful of future "renewable majors".
- **Commercial power rates to see a big drop in Maharashtra from April 1.**
  - ⇒ Those below poverty line will also benefit from the huge drop in bills, from 17-19 per cent, and it will mainly benefit slum-dwellers.
- **Maharashtra: No demand charge from power bills.**
  - ⇒ The body has also urged that industries should be charged on the basis of the actual power consumed by them.
- **Petrol, diesel prices remain unchanged for 15th day.**
  - ⇒ Domestic prices of petrol and diesel have not trailed international benchmarked commodity prices as government-owned Oil Marketing Companies (OMCs) try to recoup inventory losses and fall in demand.
- **Falling oil price good news for India, but lockdown may hurt refiners' margin: Azlin Ahmad.**

List of Abbreviations

- **BEE** :Bureau of Energy Efficiency
- **CEA** :Central Electricity Authority
- **CERC** :Central Electricity Regulatory Commission
- **Cr.** :Crore
- **COVID-19**:Corona Virus Dieses 2019
- **DISCOM** :Distribution Company
- **EPF** :Employee Provident Fund
- **Govt.** :Government
- **GMT** :Greenwich Mean Time
- **GST** :Good and Services Tax
- **LPG** :Liquid Petroleum Gas
- **MERC** :Maharashtra Electricity Regulatory Commission.
- **MNRE** :Ministry of New & Renewable energy
- **MUs** :Million Units
- **MW** :Megawatt
- **NTPC** :National Thermal Power Corporation
- **OM** :Office Memorandum
- **PAT** :Perform Archieve and Trade
- **PM** :Prime Minister
- **RE** :Renewable Energy
- **RPS** :Regulation of Power Supply
- **WRLDC** :Westren Region Load Dispatch Centre
- **WRPC** :Western Region Power Corporation

ALL INDIA LIST OF ELEMENTS COMMISSIONED DURING THE FY 2019-20

All India List of Substations, Transmission Lines & Generators Commissioned during Jan-2020

♦ Substations

* 765/440 KV Chilakaluripeta S/S (PSITL - TBCB) (3000 MVA)
* 400/220 KV Repl. of 1x315 MVA ICT with 1x500 MVA ICT atPusauli s/s (ICT-II) (185 MVA)
* 400/220 KV Ramadugu s/s (1000 MVA)
* 400/220 KV Mendasal (ICT - III) (315 MVA)
* 400/220 KV BgTPP (ICT-I) (315 MVA)
* 230/110 KV Nimmeli Thippiakudi (Addl T/F) (100 MVA)
* 230/110 KV Thiruchuli (Addl T/F) (50 MVA)
* 220/66 KV Jamla (Aug) (1x160 2x100 1x50) - (2x100 1x50) (160 MVA)
* 220/66 KV Jetpur (Aug) (1x160 2x100) - (3x100) (60 MVA)
* 220/66 KV Morbi (Aug) (2x160 2x100) - (1x160 3x100) (60 MVA)
* 220/66 KV Motigop T/F-II (160 MVA)
* 220/66 KV Otha (Aug) (1x160 2x100) - (2x100) (160 MVA)
* 220/66 KV Vadavi (Aug) (1x160 3x100) - (3x100) (160 MVA)
* 220/66 KV Vallabhipur (Aug) (1x160 2x100) - (2x100) (160 MVA)
* 220/66 KV Wangtoo (2x100 MVA T/F of 220/66 kV) (200 MVA)
* 220/33 KV Uppalwadi (220/33 kV 50 MVA T/F) (50 MVA)
* 220/22 KV Chardava (Aug) (1x160 2x100) - (2x100) (160 MVA)
* 220/132/33 KV Karanja (1x25 MVA 220/33 kV T/F) (25 MVA)
* 220/132/33 KV Narangwadi (100 MVA ICT-II and 25 MVA 220/33 (150 MVA)
* 220/132 KV Dhanbad (Auto-Xmer) T/F-I (160 MVA)
* 220/132 KV Up-gradation of existing 132 kV Pandharkawda substation to 220 kV level (100 MVA)
* 220/132 KV Jaypatna T/F-II (160 MVA)
* 220/132 KV Banda (Aug) T/F-II (200-160) (40 MVA)
* 220/132 KV Deoria (Aug) T/F-II (160-100) (60 MVA)
* 220/132 KV Gonda (Aug) T/F-I (200-160) (40 MVA)
* 220/132 KV Hathras (Aug) T/F-II (200-160) (40 MVA)
* 220/132 KV Jhunsi Prayagraj (Aug) T/F-II (200-160) (40 MVA)
* 220/132 KV Kursi Road (Aug) (Additional T/F) (160 MVA)
* 220/132 KV Muradnagar-II (Aug) T/F-II (100 MVA)
* 220/132 KV Pratap Vihar Ghaziabad (New) T/F-I (160 MVA)
* 220/132 KV Rewa Road Prayagraj (Aug) T/F-II (200-160) (40 MVA)
* 220/132 KV Unnao (Aug) T/F-II (160-100) (60 MVA)
* 220/132 KV Malanpur S/s (Addl. X-mer) (160 MVA)
* 220/132 KV Morena S/s (Addl. X-mer) (160 MVA)
* 220/132 KV Jaora S/s (Balance 2nd X-mer)) (160 MVA)
* 220/132 KV Satna S/s (Addl. X-mer) (160 MVA)
* 220/132 KV Georai S/S (ICT-II) (100 MVA)

♦ Transmission Lines

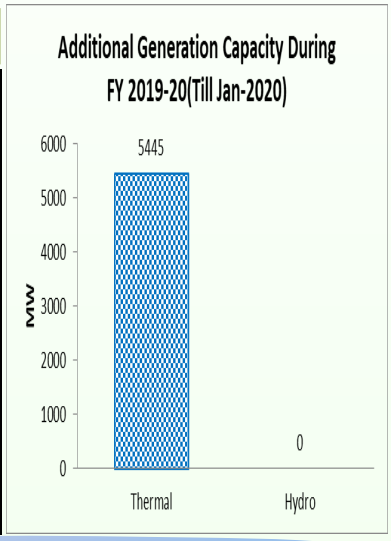
* 765 KV Chilkaluripeta - Cudappah (PSITL - TBCB)
* 765 KV Vemagiri - Chilkaluripeta (PSITL -TBCB)
* 400 KV Nirmal - Dichpally at Jangaon (QM) line
* 400 KV Ghatampur - Kanpur line
* 400 KV Alipurduar - Binaguri (Ckt. No. 3&4)
* 220 KV Balimela - Malkangiri 2nd Ckt
* 220 KV LILO of existing KTS - Shapurnagar at Waddekothapally (Jangaon District)
* 220 KV LILO of existing KTS-Shapurnagar proposed line at Jangaon
* 220 KV LILO of existing Waddekothapally - Bhongir (Both Ckts.) to proposed at Jangaon (Jangaon District)
* 220 KV LILO of Savarkundla - Sagapara line at Gariyadhar S/s
* 220 KV Makhu - Rashiana
* 220 KV Sabalgarh - Sheopurline (1st Ckt.)
* 220 KV Shivarampally - Asifnagar (2nd Ckt.)

♦ Generators

* Nil

All India No. of Generators Commissioned during FY 2019-20 (till Jan-2020)

Month	Thermal					Hydro					Nuclear				
	WR	NR	NER	ER	S R	WR	NR	NER	ER	SR	WR	NR	NER	ER	SR
Apr-19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jun-19	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul-19	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Aug-19	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
Sep-19	1	1	0	0	1	0	1	1	1	0	0	0	0	0	0
Oct-19	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nov-19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dec-19	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Jan-20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**6**	**1**	**0**	**4**	**2**	**0**	**1**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**



All India No. of Line Reactors (LR), Transmission Lines (T/L), Substations (S/S) and Bus Reactors (BR) FY 2019-20 (till Jan-2020)

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	LR	T/L	S/S	BR
Apr-19	0	0	0	0	1	0	0	2	9	0	0	0	0	0	0	7	13	0	0	9	23	0
May-19	0	0	0	0	0	0	0	7	8	0	0	0	0	0	0	6	6	0	0	8	12	0
Jun-19	0	0	0	0	0	0	0	2	5	0	0	1	1	0	0	7	12	0	0	10	18	0
Jul-19	0	0	0	1	1	0	0	6	1	0	0	0	2	0	0	6	10	0	0	13	14	0
Aug-19	0	0	0	1	3	0	0	0	5	0	0	2	1	0	0	10	10	0	0	13	19	0
Sep-19	1	0	0	1	1	0	0	5	2	0	0	0	1	0	0	10	16	0	0	17	20	0
Oct-19	0	0	0	0	1	0	0	4	9	0	0	0	1	0	0	11	11	0	0	15	22	0
Nov-19	0	1	0	0	1	0	0	8	16	0	0	1	1	0	0	8	22	0	0	17	41	0
Dec-19	0	0	0	0	1	0	0	6	3	0	0	1	0	0	0	7	8	0	0	14	12	0
Jan-20	0	0	0	2	1	0	0	3	4	0	0	0	2	0	0	8	30	0	0	13	37	0
Total	**1**	**1**	**0**	**5**	**10**	**0**	**0**	**43**	**62**	**0**	**0**	**5**	**9**	**0**	**0**	**80**	**138**	**0**	**0**	**134**	**220**	**0**

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

Note 2: No data for Branch Reactors (BR) & Line Reactors (LR) for the month of Jan-2020.

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 Enterprise 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 Enterprise Pvt. Ltd.

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 Dadra and Nagar Haveli
- Uganda Electricity Transmission Company Ltd.
- Power Grid Company of Bangladesh Limited (PGCB)

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
- Essar Bulk Power Terminal Limited

Reach us at

Registered Office

203, Antartica – D, Lodha Aqua CHS Ltd., Opp. to Thakur Mall, Mahajanwadi, Mira Road (E) Thane – 401107, Maharashtra.

Corporate Office

Mumbai

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

Daman

A2-603, Fortune DP Nanp-1, Somnath Kachigam Road, Nr. Vidyut Bhavan, Daman – 396210.

IT SUPPORT TO YOUR POWER SOLUTIONS

- INFRASTRUCTUTR 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.

FLEXIBLE SOLUTIONS FOR YOUR POWER NEEDS

PANACEAN AT WORK FOR YOU

CONNECTING YOUR POWER NEEDS TO THE PANACEAN RESOURCES

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.

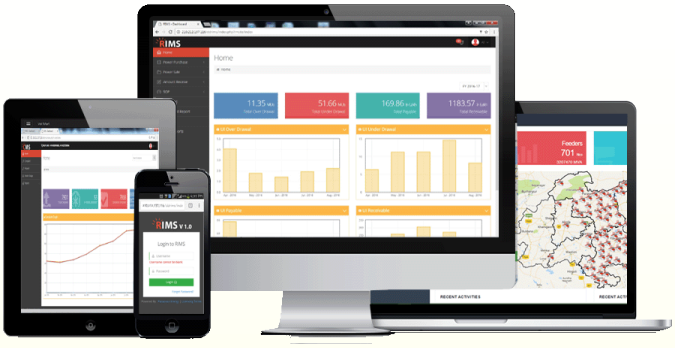
Auto Backup:

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 friendly

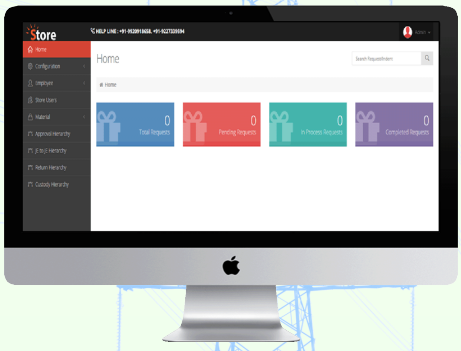


REGULATORY INFORMATION MANAGEMENT SYSTEM
RIMS

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.

COMPLAINT MANAGEMENT SYSTEM
CMS

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.

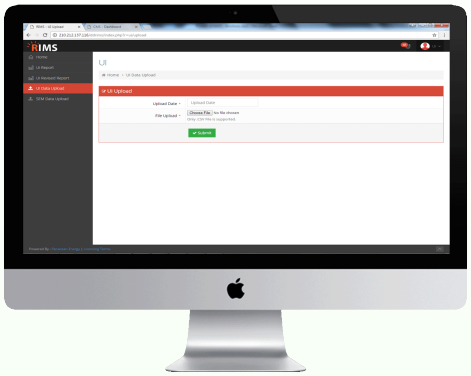


INVENTORY MANAGEMENT SYSTEM (STORE):

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.

Maintenance Management System (MMS)

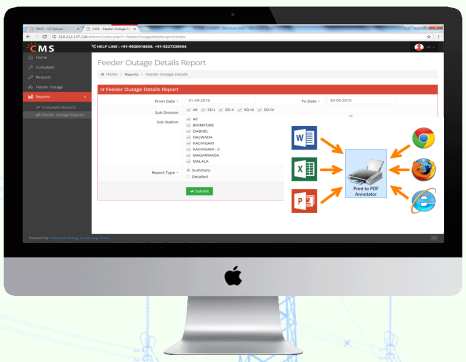
MMS it designed to improve inbuilt maintenance management facilities and hence reduce the failure rates of equipment. With equipment being part of MMS, the concerned person is reminded for inspection and taking corrective actions. The module supports maintenance routines in various categories such as 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

Data Handling:



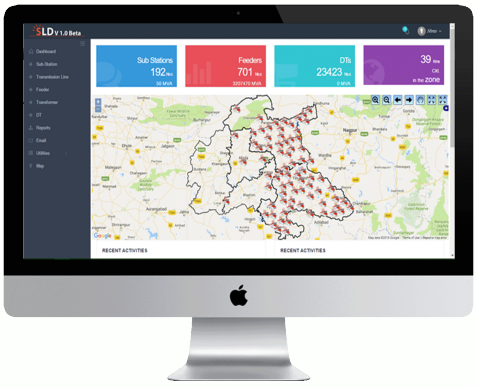
The software shall have a provision to handle huge volumes of data. Features such as import of excel files and import of data from databases shall be provided to facilitate bulk data entry and its corresponding map location display. Given below is a sample bulk data entry feature in POWERUI.

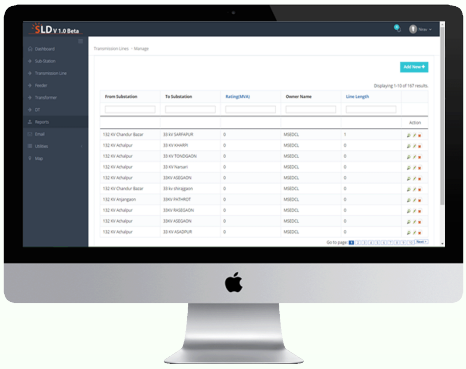
Data / Report Export and Printing Facilities:

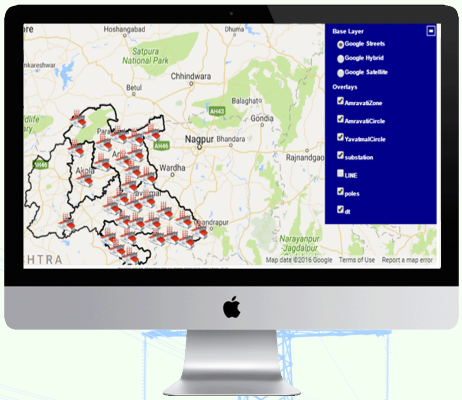


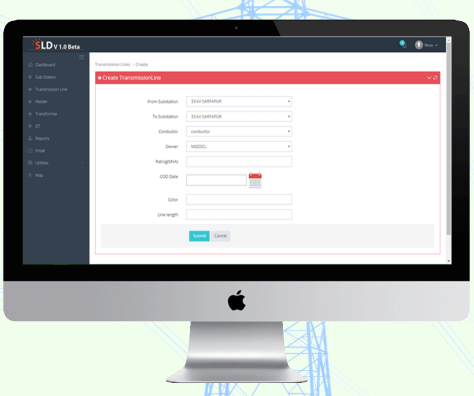
Online Complaint and Feedback Reporting

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

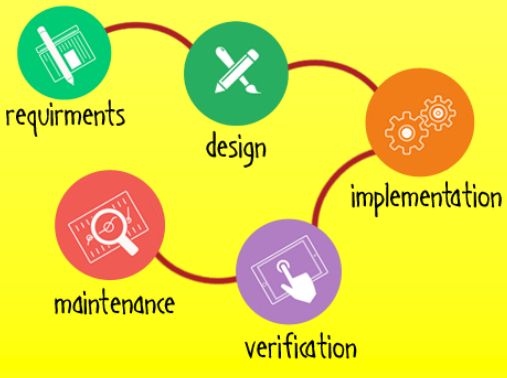
POWERUI MAPS is a map based application where all important assets and infrastructure of a Distribution company and transmission company are displayed on maps using their exact geographic coordinates. Display of all mapped distribution equipment on google maps, along with establishment of comprehensive 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.

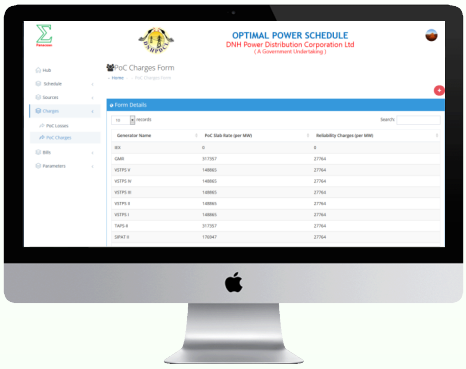
LAYER FACILITY:

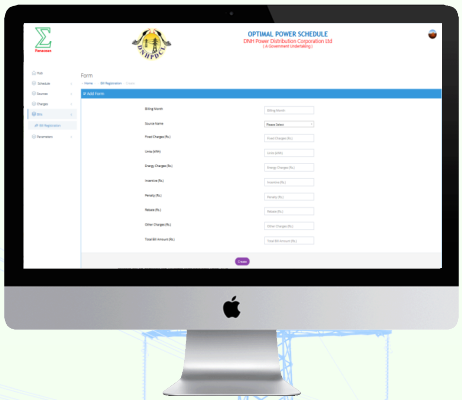
Given a large and a highly dense network as that of MSEDCL, selective viewing of different components of maps is required. The Layer facility enables the user to turn ON/OFF display of certain elements on the map. This feature provides greater clarity of viewing and ease of operation of the software.

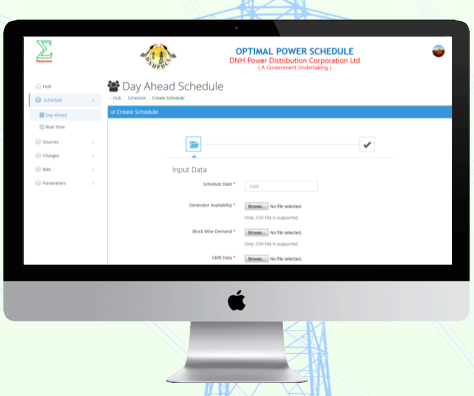
DATABASE – MAP COMMUNICATION:

Provision 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.





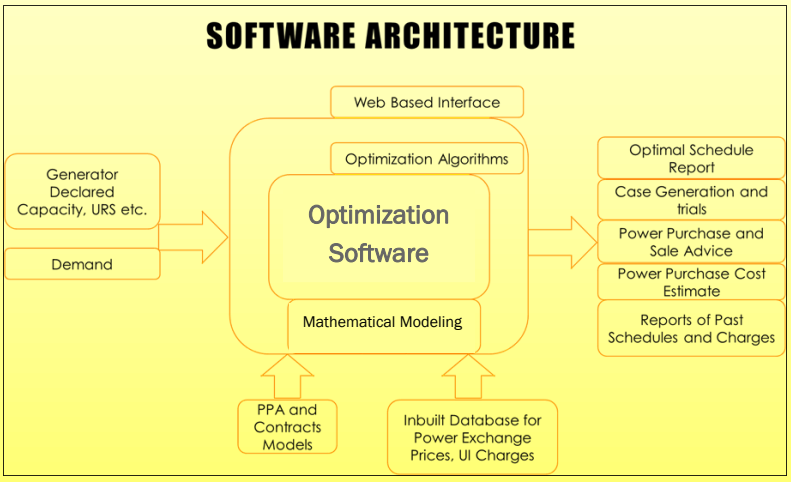




OPTIMAL POWER SCHEDULING SOFTWARE

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, Unscheduled 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.