

#insight

Power Load Forecast for Andhra Pradesh from FY'2023-24 to FY'2028-29



#### #insight

# 01

Short Term Load Forecast from FY'2023-24 to FY'2028-29 The ex-bus energy requirement in the state of Andhra Pradesh is anticipated to reach 111379 Mus & the peak power demand to reach 19913 MW by 2029

The consolidated Sales and Load forecast is prepared by aggregating the Discoms sales forecast by taking into account growth in cities Vizag, Vijayawada , Guntur ,Tirupati , Kurnool and growth due to Vizag Chennai Industrial Corridor (VCIC), Kakinada SEZ, Sri City SEZ ,Vizag Tech Park , Lift Irrigation schemes, new airports & new seaports etc. Transmission losses are anticipated to reduce from 2.75% in FY2022-23 to 2.70% by FY2028-29. T & D losses will follow downtrend from 11.5% (including PGCIL Losses of 0.8%) in FY 2023-24 to 10.98% (including PGCIL Losses of 0.95%) by FY2028-29 due to efficiency gains and measures like HVDS (High voltage distribution system) undertaken by AP Discoms.



Consumption Categories	2024	2025	2026	2027	2028	2029
Energy Consumption (MUs)						
Domestic	18329	19468	20670	21771	22933	24160
Commercial	5650	5954	6275	6613	6971	7351
Public Lighting	328	340	353	366	379	392
Public Water Works	1348	1461	1583	1716	1861	2020
Irrigation	16892	18320	19806	20841	21948	23107
LT Industries	1623	1677	1734	1793	1855	1919
HT Industries	21021	23086	24470	29556	31155	32877
Railway Traction	2200	2347	2510	2693	2901	3524
Bulk Supply	1212	1261	1312	1364	1417	1473
Others	1757	1855	1961	2078	2206	2327
Total Energy Consumption	70361	75768	80674	88792	93626	99150
T&D losses – in%	10.7%	10.4%	10.4%	10.2%	10%	10.3%
Energy requirement – MU	78760	84602	90011	98678	104068	110203
Annual Load Factor	66%	64%	63.8%	63.85%	63.85%	63.8%
Peak Demand - MW	13622	15090	16093	17642	18606	19703
Energy Requirement (Ex bus – MU)	79471	85364	90924	99731	105179	111379
Peak Demand MW (Ex. Bus)	13746	15226	16256	17830	18805	19913

Source: APTRANSCO

### powered by whY

#insight

 $\left( \right)$ 

### Short Term Load Forecast from FY'2023-24 to FY'2028-29



#### **Anticipated Growth in Energy Requirement & Peak Demand in** Andhra Pradesh

Ê

Ê







### Long Term Load Forecast from FY'2023-24 to FY'2028-29

995846887

#insight

03



#### T & D losses (including PGCIL Losses) will follow similar trends from 11.5% in FY 2023-24 to 10.98% by FY2028-29 and further come down 10.8% by FY2033-34

The consolidated Sales and Load forecast is prepared using trend method and End user method in view of demand expected to come up due to growth in cities Vizag, Vijayawada, Guntur, Tirupati, Kurnool, Vizag Chennai Industrial Corridor (VCIC), Kakinada SEZ, Sri City SEZ, new airports, and new seaports.

New lift irrigation schemes i.e. Chintalapudi, & Hiramandalam, 24x7 power supply to all consumers and 9 hrs. supply to agriculture consumers during daytime will further contribute in increasing demand. Transmission losses will be reduced from present level of 2.75% (FY2022-23) to 2.7% by FY2028-29 and will further come down to 2.6% by FY 2033-2034. T & D losses (including PGCIL Losses) will follow similar trends from 11.5% in FY 2023-24 to 10.98% by FY2028-29 and further come down 10.8% by FY2033-34 due to efficiency gains and measures like HVDS (High voltage distribution system) undertaken by AP Discoms. The category wise sales forecast and state level energy and peak demand forecast from FY2029-30 to FY2033-34 as submitted in the Resource plan to APERC is as below:



Consumption Categories	2030	2031	2032	2033	2034
Energy Consumption (MUs)					
Domestic	25453	26816	28255	29773	31374
Commercial	7756	8187	8647	9140	9669
Public Lighting	405	418	431	445	460
Public Water Works	2191	2380	2584	2806	3047
Irrigation	24340	25656	27066	28572	30184
LT Industries	1986	2056	2130	2206	2286
HT Industries	34731	36732	38893	41226	43753
Railway Traction	3727	3966	4395	4730	5114
Bulk Supply	1531	1591	1653	1692	1733
Others	2476	2647	2837	3047	3280
Total Energy Consumption	104596	110449	116890	123636	130899
T&D losses – in%	10.0%	10.0%	10.0%	9.9%	9.9%
Energy requirement – MU	116271	122759	129885	137292	145331
Annual Load Factor	63.75%	63.65%	63.60%	63.50%	62.40%
Peak Demand - MW	20820	22017	23313	24681	26587
Energy Requirement (Ex bus – MU)	117512	124069	131271	138755	146880
Peak Demand MW (Ex. Bus)	21042	22252	23562	24944	26870

#### Source: APTRANSCO

### powered by whY

#### #insight

# 03

### Long Term Load Forecast from FY'2023-24 to FY'2028-29 (Contd.)



# District wise demand forecast for FY 2022-23 & FY 2023-24 is shown in the below table

Circle wise demand (MW)	FY' 2022-23	FY'2023-24
Srikakulam	336	352
Vizianagaram	508	545
Visakhapatnam	1482	1582
East Godavari	1010	1071
West Godavari	1366	1443
APEPDCL	4702	4993
Krishna	996	1026
Guntur	785	809
Prakasam	800	824
APCPDCL	2581	2658
NELLORE	813	878
CHITTOOR	1566	1858
KADAPA	1114	1069
ANANTHAPUR	1624	1594
KURNOOL	976	1214
APSDCL	6093	6612

Source: APTRANSCO

powered by whY

## District wise power demand in Andhra Pradesh

#insight

02





### WANT SPECIFIC MARKET STORY? WRITE OR CALL TO US

at <u>connect@eninrac.com</u> +91 93190 48963/47963, +91 72900 16953



© Copyright @ eninrac consulting private limited, 2023