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Press Release

BSES Fully Geared-Up For The Winter Months

Delhi consumers to continue getting reliable power supply as power demand expected to reach ~4700 MW

- **Accurate "load forecasting" helps BSES to optimize power purchase costs**
- **BSES uses advanced statistical forecasting solutions, including AI & Machine Learning**
- **Banking helps in arranging power for summer months, while disposing off surplus winter power**

New Delhi: Ensuring reliable supply in any season is as much the function of proper power arrangements as also accurate demand forecast and robust distribution network. On all these aspects, BSES discoms are fully geared to ensure adequate power availability during the winter months.

The back-bone of BSES' power-supply arrangements during the winter-months includes long-term agreements from power-plants like Dadri (stage 1 & 2), Hydro Stations, Singrauli, Rihand, Sasan, DVC Mejia and Delhi based gas fueled generating stations. Additionally, BSES is also receiving 50 MW of wind power and 20 MW of solar power from SECI.

Apart from these, BSES discoms are using advanced techniques and avenues like "Banking", "Reserve Shutdown", "Power Exchange" and ensuring sufficient "Spinning Reserves" to dispose of surplus power as well as ensuring reliable power supply, as also making arrangements to get power during summer months. In case of any unforeseeable contingency, BSES discoms will buy short-term power from the exchange which is available at economical rates and can range between (around) Rs 1 to over Rs 4 per unit – during winter months, depending on the time-slot. Adding to these efforts are the advanced load-forecasting statistical and modelling techniques, which are helping the discom accurately forecast the power demand.

Delhi's peak power demand this winter can go upto 4700 MW. Last year, it had peaked at 4472MW. The peak winter power demand in BRPL and BYPL areas had reached 1926 MW and 1091 MW respectively during last winter. This year, it is expected to reach 2020 MW and 1165 MW for BRPL and BYPL respectively.

Peak demand (Winters)	Delhi (MW)	BRPL (MW)	BYPL (MW)
2019-20 (Expected)	4690	2020	1165
2018-19	4472	1926	1091
2017-18	4511	1888	1136
2016-17	4168	1758	1259
2015-16	4125	1835	1080

Surplus Power

BSES discoms will also bank surplus power with hilly states, which need additional power during the winter months. This banked power will be available during the summer months.

BRPL will bank between 267 MW and 278 MW with states like Himachal Pradesh and Manipur. On its part, BYPL will return around 235 MW to states like Himachal Pradesh, Meghalaya and Goa from whom it had taken the quantum during the summer-months.

Load Forecasting

Accurate demand (load) forecasting is critical for reliable power supply. It is done on various parameters like (i) Day-ahead in 96 time-slots, (ii) Intra-day basis and (iii) Medium term (from a fortnight to one year). Among other aspects, weather parameters like Temperature, Rainfall, Cloud Coverage, Wind Speed, Wind Direction and Humidity play an important role in accurate demand forecast. Even holidays and random disturbances have an impact on the power demand.

Explaining the use of technology in ensuring reliable power supply, BSES spokesperson said, "To meet today's power challenges and to get a grip on so many varied and dynamic variables, BSES uses a mix of advanced statistical forecasting models, combined with state-of-the-art weather forecasting solutions, including Artificial Intelligence (AI) and Machine Learning."

"Domain expertise provided by IMD-POSCO also helps. These help discoms build advanced models, which leads to high accuracy planning and huge saving of man-hours and cost"-**added the spokesperson.**

This accurate day ahead, intra-day and medium term demand forecasting is vital for optimal and cost effective planning in ensuring reliable power supply to consumers at an optimal cost.

BRPL & BYPL are premier power distribution companies and Joint Ventures between Reliance Infrastructure Limited and GoNCT.

BSES



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