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Press Release

BSES Fully Geared-Up For The Winter Months

- **BSES uses advanced statistical forecasting solutions, including AI & Machine Learning**
- **Accurate "load forecasting" helps BSES to optimize power purchase costs**
- **Using avenues like Power Exchange, Banking and 'Backing down' to dispose surplus power**
- **Banking helps in arranging power for summer months**

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.

Besides long-term arrangements, BSES discoms are also using advanced techniques like Banking and Backdown to dispose of surplus power, 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. 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 4800 MW. Last year, it had peaked at 4511 MW. The peak winter power demand in BRPL and BYPL areas had reached 1888 MW and 1136 MW respectively during last winter. This year, it is expected to reach 1950 MW and 1225 MW for BRPL and BYPL respectively.

Peak demand (Winters)	Delhi (MW)	BRPL (MW)	BYPL (MW)
2018-2019 (Expected)	4800	1950	1225
2017-2018	4511	1888	1136
2016-2017	4168	1758	1259
2015-2016	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 300 MW and 400 MW with states like Himachal Pradesh, Meghalaya, Manipur and J&K. On its part, BYPL will return around 200 MW to states like Himachal Pradesh, 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 and rich domain expertise provided by IMD-POSCO. These help the discom build advanced models, which leads to high accuracy planning and huge saving of man-hours and time".

"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."-added the spokesperson.

These load forecasting solutions give a near accurate demand prediction. Further, output of the statistical models, after being moderated using domain expertise, helps in achieving the objective of optimal power planning and reliable supply while ensuring grid security in real time operations. It is notable that the day ahead forecasting accuracy achieved has been close to 97%, while that of intra-day accuracy upto 98%.

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

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