

### **K-Electric facing over 550MW shortfall**

ISLAMABAD: The Cabinet Committee on Energy (CCoE) was recently informed that K-Electric is facing over 550MW shortfall which implies unscheduled load shedding in the city, according to official document.

The KE's own existing generation stood at 1,990 MW, if things are normal. In addition, 300 MW power is coming from existing IPPs, 704 MW supply from national grid including three wind power plants, 127 MW from Tapal power plant and 128 MW from Gul Ahmad which makes a total of 3,249 MW. The power utility's base load supply (after 10 per cent reserve margin and excluding supply) was 2,840 MW. KE's peak demand has been calculated at 3,392 MW after segmented load shed, which implies that it is facing a shortfall of 552 MW in 2020, which will further intensify if additional power is not supplied to it.

The Cabinet Committee on Energy (CCoE), headed by Minister for Planning, Development and Special Initiatives, Asad Umar, in one of its recent meetings decided to give additional 1400 MW electricity to KE. According to existing power supply arrangements from National Grid to KE, from NKI 500/220 kv grid station and Jamshoro-KDA 220 kv double circuit/ line, firm maximum arrangement is only for 650 MW. NKI grid station extension is not possible due to its complex design. There is also capacity limitation due to old and deteriorated 220 transmission line due to which both NTDC and KE networks cannot handle additional capacity.

From 132KV double circuit transmission line from three wind power plants at Ghara cluster (Dawood Hydrochina, Tengra & Zyphyr) to KE net work, 150 MW maximum capacity is available which varies depending on wind speed. This supply is based on interim arrangement up to March 2021, which can be further extended or reverted back in consideration of KE system requirement.

Additional generation options in KE network are as follows;(i) renewal in Power Purchase Agreement(PPAs) of Tapal and Gul Ahmad IPPs which has already done on interim basis for three years on take and pay basis. The maximum capacity of these plants is 255 MW which extends support to KE network due to their sites close to load centres. In addition, 900 MW RLNG power projects at BQP-s, which is under construction. The 700 MW power project at Datang is under review as there has been no approval from GoP so far. Its replacement for supply from national grid is under construction. Another project of 450 MW of Engro is under bidding process. The Power Sector Inquiry Committee has also submitted the following recommendations with respect to KE;(i) novation of PPAs to KE instead of KE setting up 900 MW RLNG and 700 MW coal-based power plants; (ii) KE to submit timeline for retiring/mothballing old 1299 MW Bin Qasim Plant and; (iii) integration of NTDC and KE systems. National Electric Power Regulatory Authority (Nepra) in its state of industry report 2019 clearly stated that National Electric Power Regulatory Authority (Nepra) has raised question

marks on the performance of K-Electric, saying that power utility kept its power plant intentionally underutilized and undertook unauthorized load shedding.

The regulator stated that a review of last three years shows that KE has underutilized its power plants although the issue had been taken up by the Authority with KE in the past. It is noted that KE is still continuing its policy about not supplying electricity to certain categories of consumers, in spite of the fact that some of its own generation plants were intentionally underutilized.

While analyzing the available information it noted that the utility is subjecting its consumers to undue and unauthorized load shedding by underutilizing its owned generation capacity. As per submissions of KE, the company faced gas (fuel) and outage (scheduled, forced and maintenance) constraints throughout three years for all the power plants. The fuel availability is the power producer's responsibility and KE is required to have Fuel Supply Agreements (FSA) urgently to overcome these issues. Nepra has noted that underutilization of plants even caused by non-availability of fuel ultimately impacts the electricity tariff of end consumer. Another main cause of underutilization of efficient power plants could be transmission system constraints existing in KE's transmission network, such as overloading of transmission lines, insufficient transformation capacity, outages of transmission lines due to tripping, faulty transformers etc. Under applicable documents, KE is responsible for evacuation of power from power plants, which are supplying electricity to KE system. Non-evacuation of electricity that can be generated through cheap power plants is a failure of KE.

On June 24, 2020, Nepra took notice of the news appearing in media regarding excessive/un-announced load shedding by K-Electric in Karachi. Besides, it has come to the knowledge of the Authority through media reports that "inflated" electricity bills are being charged to the consumers of K-Electric. In this regard, strict directions have been given to the K-Electric to take remedial measures and submit a detailed report to Nepra immediately.

Furthermore, consumers who are receiving excessive bills have been advised to file complaints with Nepra Regional Office Karachi or through online at its website along with documentary evidence, so that their issues could be taken up with K-Electric for redressal.