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New Delhi

Tata Power-DDL receives patent for Self-Regenerating Breather; to enhance life of Distribution Transformers



Tata Power Delhi Distribution Limited (Tata Power-DDL), a leading power utility supplying electricity to over 2 million customers in North Delhi, has been granted the patent for its unique Self-regenerating Transformer Breather for a term of 20 years. The 'Self-Regenerating Breather' is a device that protects a transformer from moisture ingress and thus, increases the longevity of electric transformers.

The patented technology, which is another feather in the cap of Tata Power DDL's glorious journey of innovations, is also expected to reduce the maintenance man-days for replacement of Silica gel in a transformer's breather to protect it from moisture damage.

With the new technology, Silica gel will be required to be checked or replaced only during the transformer maintenance schedule, which is generally once in two years. In contrast, in the conventional design, Silica gel needs to be replaced 4-6 times before a maintenance schedule of 2 years.

Tata Power DDL's Engineering team developed and successfully tested the '**Self-Regenerating Breather**' in December 2015. The pilot installation of 20 breathers was done in 2016-17, which showed remarkable results. The company filed for a patent of 'Self-Regenerating Breather' technology in 2016.

The moisture in the air can cause outages and shorten the life of a transformer. The new technology utilizes waste heat from the top plate of the transformer to minimize moisture content in the air inlet to the Distribution Transformer (DT) Breather. The moisture absorbent Silica gel also gets recharged, thereby increasing the life of Silica gel by up to 3 years in outdoor applications.

Commenting upon this invention, Mr. Gajanan S Kale, Chief Executive Officer of Tata Power-DDL said, "At Tata Power-DDL, we keep striving for innovation to address existing challenges and leverage our strong R&D to develop new technologies to ensure uninterrupted power supply to our customers. This patent is yet another example of our tech edge, which will make our power supply infra ready for difficult weather conditions."

About Tata Power Delhi Distribution Limited:

Tata Power Delhi Distribution Limited is a joint venture between Tata Power and the Government of NCT of Delhi. Tata Power-DDL distributes electricity in North Delhi and serves a populace of 7 million. Tata Power-DDL has been a frontrunner in implementing power distribution reforms and is acknowledged for its consumer-friendly practices. Since privatization, the Aggregate Technical & Commercial (AT&C) losses in Tata Power-DDL areas have shown a record decline. Today, AT&C losses stand at 5.9%, which is an unprecedented reduction from an opening loss level of 53% in July 2002.

To learn more about Tata Power-DDL, please visit www.tatapower-ddl.com

