The image shows three large industrial transformers. Each transformer has a cylindrical core with multiple layers of white and red windings. They are connected to a top busbar system with copper busbars and insulators. The transformers are mounted on a metal base. In the background, a person is visible, and there are some signs, including one that says "ABB".

# Nomex<sup>®</sup> Engineered Dry Type Transformers for Urban India

# Nomex® Engineered Dry Type Transformers for Urban India

DuPont™ Nomex® Engineered Dry Type Transformers are virtually fire-safe and are ideally suited for distribution networks passing through highly congested and populated areas.

## Issue

Reliance Energy, serves one of the most densely populated cities in India – Mumbai, the financial capital of the country. The city is also home to some of the most demanding customers in India. Reliance Energy, was seeking transformer solutions to provide a safer and more reliable distribution network that is equipped to provide uninterrupted power supply to a city like Mumbai that is prone to heavy rains for a large part of the year.

## Challenge

The power distribution network in Mumbai has to go through very congested areas and therefore needs to be inherently fire-safe. Heavy showers also destabilize the regular maintenance and repair operations, that could lead to break downs and black outs that a city like Mumbai cannot afford.



## Solution

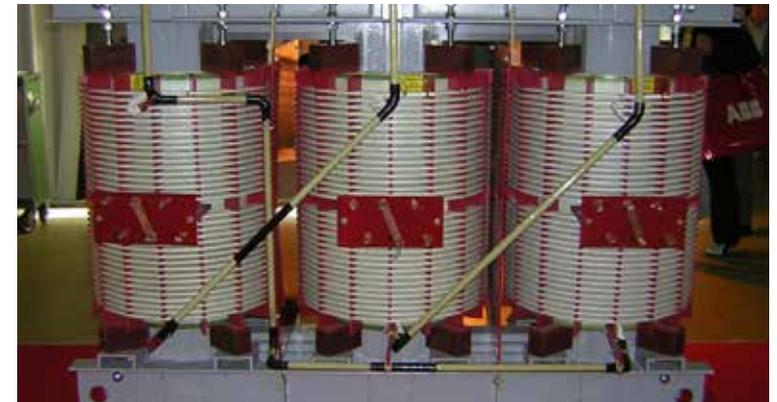
Reliance Energy collaborated with DuPont India, to reinforce their energy distribution network with reliable energy solutions in Mumbai. Keeping their specific demands in mind, DuPont India put together a design, and built a prototype of DuPont™ Nomex® - ReliatraN® transformers that met the needs of Reliance Energy.

These transformers are virtually “fire-safe”, with less than 5% of the material in the transformer being combustible. In addition, Nomex® unlike oil is an environment-friendly material and does not release any toxic gases upon combustion. These transformers also require significantly lower maintenance, thereby saving huge resources for Reliance Energy.

## Benefit

The biggest testimony for ReliatraN® transformers surfaced at the time of the Mumbai floods in 2006, when in spite of being under water for more than 24 hours, the ReliatraN® transformers did not fail. In fact, these were the first transformers that were up and running immediately after the water receded. This is a proof of the robustness and reliability of these transformers. In addition, the ReliatraN transformers have allowed Reliance Energy to save huge costs as these transformers have significantly lower requirements for maintenance.

Our science driven insulation solutions have empowered Reliance Energy to enhance its energy distribution network and helped Mumbai in its quest for zero power cuts.



“A minute of power failure would put the key installations of Mumbai on hold. There is no place for compromise. Which is why, we trust DuPont ReliatraN® transformers to keep our commitments of uninterrupted power supply.”

- Anup Mondal, Senior Executive Vice President (O&M), Reliance Energy