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September 21, 2018

BSE Limited
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Mumbai 400 001
(Attn : DCS CRD)

National Stock Exchange of India Ltd
Exchange Plaza, 5th Floor
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Attn: Listing Dept.

Dear Sirs

We are sending herewith a copy of web story, which is being published and sent to media by us, for the information of the Stock Exchanges.

Thanking you

Yours faithfully
For ABB India Limited

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Deputy General Counsel &
Company Secretary
FCS 2631

Encl: as above

BENGALURU, SEPTEMBER 21, 2018

ABB to enhance power quality for India's longest freight train network

Increasing reliability of electrical network and higher energy efficiency

India's economy is growing at a rapid pace, among the fastest in the world. The country's rail transportation network, which extends across 3.3 million square kilometers and is one of the largest in the world, is a key driver. Core growth sectors like power, coal, steel and cement depend on the rail network, and the increasing importance of this sector has led to the undertaking of an ambitious project to create a high density Dedicated Freight Corridor (DFC). The DFC will run between the four cities known as the Golden Quadrilateral - Delhi, Mumbai, Chennai and Kolkata - and will be developed by the Dedicated Freight Corridor Corporation of India, Ltd (DFCCIL).

The DFC is an ambitious infrastructure development designed to enable the efficient movement of freight containers across the vast geography of the country. It is expected to relieve congestion on commuter routes and drive industrial growth and investments in these regions. ABB will play a key role by enhancing the system's reliability with an innovative power quality solution.

The Power Quality challenge

DFCCIL expects to transport up to 15,000 tons of load for long distances and will have a container capacity of 400 units per train, among the highest in the world. To cope with the volume, DFCCIL is pioneering the operation of double stack containers on electrified routes in India. The trains will be high-speed, with maximum speed varying between 75 kilometers per hour (kmph) to 100 kmph.

Such high speeds and variation of loads can affect power consumption patterns, creating significant voltage fluctuations and low power factor that cause power quality issues in the electrical railway traction systems. This could result in equipment malfunction and even downtime. Power quality issues can also spread through the supply grid, creating a domino effect of disturbances to other users. The potential risk of non-compliance to grid codes can also lead to financial penalties.

An efficient and effective power quality solution

To address this challenge, ABB will supply a step-less Power Quality Compensator – Reactive ((PQCR), which helps to regulate and stabilize the power supply when there are dynamic and highly fluctuating loads. The PQCR will help improve power quality and voltage stability and help comply with grid codes. In addition, ABB will also supply fixed and dynamic reactive power compensation panels at 23 traction substations.

By improving the reliability of the grid and reducing downtime, ABB's innovative PQCR technology will help DFCCIL optimize the operating costs of its freight network. The solution will be implemented in the western segment of the DFC between Mumbai and Dadri that covers a distance of more than 1,500 km.

"We are pleased to support the Indian Railways with our state-of-the-art power quality technology and to contribute to a world class freight rail corridor in the country," said Giandomenico Rivetti, head of

ABB's High Voltage Products business, a part of the company's Power Grids division. "This initiative further supports ABB's commitment to contribute to India's economic growth with state-of-the-art technology solutions."

As a pioneering technology leader, ABB offers power quality products and solutions in low, medium and high-voltage applications for utility, industrial, infrastructure and transportation sectors.