Press Release

New Energy and Industrial Technology Development Organization

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June 9, 2011

Diesel Engine Power Generators that Utilize Natural Gas -Joint Demonstration Project with the Government of India for Fuel Conversion Efficiency Technology-

A completion ceremony was held in Pune, Maharashtra, India in conjunction with the completion for the installation and modification of equipment for the Model Project "Converting a Diesel Generator to Dual-fuel Operation", a joint project between the New Energy and Industrial Technology Development Organization (NEDO) and the government of India . The Project is designed to demonstrate technology that reduces oil consumption and reduces environmentally harmful gas emissions (including nitrogen oxide, sulfur oxide and carbon dioxide) through the conversion of diesel-fueled engines at Tata Motors Limited (Pune) to dual-fuel operating engines that can use natural gas.

Project Facility

1. Background and Purpose

In India, demand for power has rapidly increased due to economic development, and power source development has not been able to meet the growing demand, which has resulted in a serious power shortage situation. At the same time, oil-fueled power facilities have been forced to shut down operations due to rising costs caused by fuel price increases.

Under the Project, technology was introduced to reduce oil consumption by converting an existing diesel engine's fuel source from solely oil to dual-fuel. Through the introduction of Japanese alternative energy technology, the project demonstrated technology that reduces oil consumption and effectively reduces environmentally harmful gas emissions such as nitrogen oxide, sulfur oxide and carbon dioxide. The aim of the Project was to promote the dissemination of this technology throughout India as well as other countries overseas.

2. Completion Ceremony Overview

(1) Date and Time: June 8th, 2011 (Wednesday) 11:00a.m. - 12:00p.m. (Indian Standard Time)
(2) Venue: Tata Motors Limited, Pune, Maharashtra, India
(3) Attendees:

India Side:

Mr. P M Telang, Managing Director of Tata Motors Limited

Japan Side:

Mr. Sadao Wasaka, Executive Director, NEDO
Mr. Tetsuo Tsuyuguchi, Managing Director of JFE Enngineering Corporation

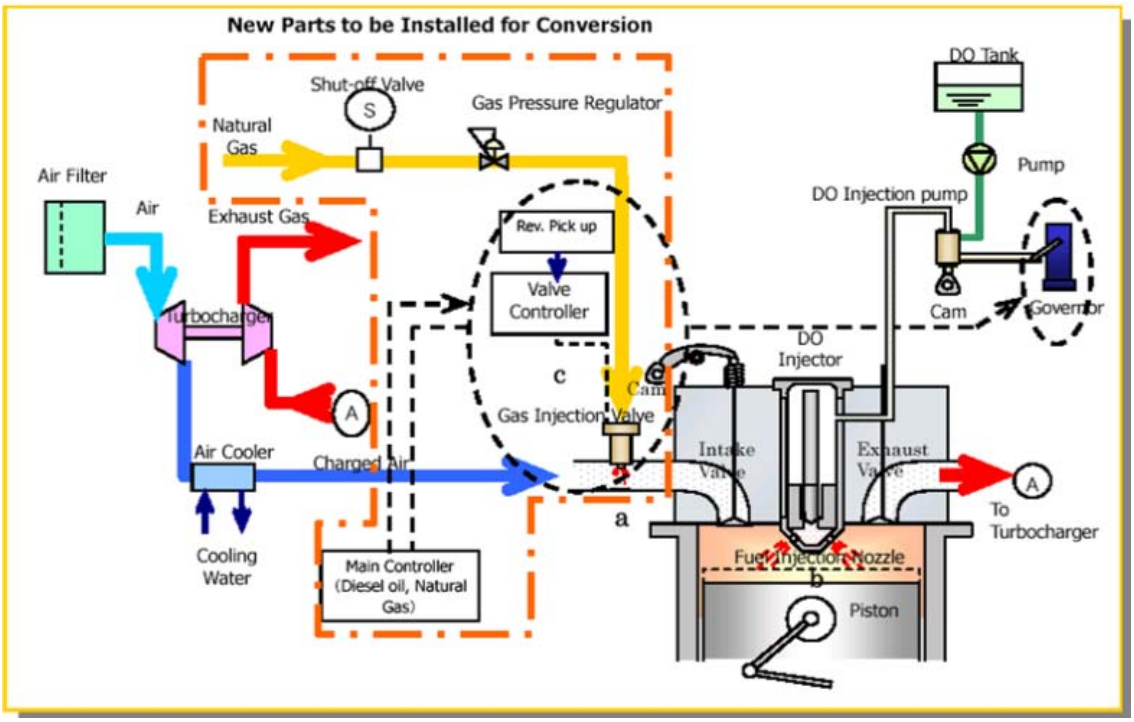
3. Project Overview

Under the Project, auxiliary equipment such as fuel system equipment, control equipment, etc. were installed (please refer to the diagram below) in diesel engines at Tata Motors Limited located in Pune, Maharashtra, India in order to convert the existing engine' s fuel source from oil to dual-fuel. The conversion aims to achieve reductions in oil consumption as well as reductions in environmentally harmful gas emissions such as nitrogen oxide, sulfur oxide and carbon dioxide.

Furthermore, relatively low investment costs can be realized through this fuel conversion technology when converting existing diesel engines to dual-fuel operable engines.

The main components and equipment of the existing diesel engine that have been added or replaced are as follows:

① Diesel engine converted to a dual-fuel engine
② Fuel system equipment (including pipes, gas pressure regulator units, safety devices)
③ Dual-fuel control and monitoring devices
④ Instrumentation equipment



Overall process

Equipment: Fuji Diesel 12V32X engines
Power generation capacity: 1.8 MW x 2 engines (gas mode, diesel mode operable engines)
Annual operating hours: 2,800 hours (estimated)
Annual alternative energy effect: 94.2 TJ/year
Annual greenhouse gas emission reduction: 1,361 ton/year
Entrusted company: JFE Engineering Corporation

4. Outlook

We are aiming to disseminate this technology throughout India and other countries overseas by carrying out technology demonstrations and analysis using data acquired under actual operating conditions to identify the benefits and effects of converting to dual-fuel engines that use natural gas as well as arranging for factory tours and dissemination seminars.

5. Contact Persons;

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