



20/05/2008

Chennai Water Desalination Limited
Chennai, India

ASEA BROWN BOVERI SA

Jesús Pinillos

Seville, 28.05.08

Subject: FREQUENCY CONVERTER IN HIGH-PRESSURE PUMP

Dear Sirs.:

With regard to the subject mentioned on the regulation of high-pressure pump speed of desalination plants, we do hereby confirm that the use of innovating technology of DTC control (Direct Torque Control) in ACS1000 frequency converters for high power and Medium Voltage grids (3.3 KW or 4 KW) is attaining highly competitive advantages, such as keeping the pressure constant independently from water pressure or temperature, membranes in any season of the year. It is also attaining significant energy saving as it only supplies the useful power or power needed in every moment.

Therefore, when energy power decreases dramatically, CO₂ emissions to the atmosphere decrease in the same proportion.

Main references of this kind of high power medium voltage converters are:

Chennai Water Desalination Limited	2,200 KW, 3.3 KV
Ionics (Trinidad and Tobago)	2,000 KW, 4KV
Gold Coast (Australia)	1,120 KW, 3.3 KV
IDE Madera (Israel)	1,400 KW, 3.3 KV

(NOTE: This information may be confidential, so it should be treated in such manner.).

Should you need further information or any clarification, please contact us.

Yours sincerely,

Asea Brown Boveri S.A.

Actuation Department

Jesús Pinillos

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Ms. Amaya Arroyo Sainz de Medrano, appointed official English translator and interpreter, by the Spanish Ministry of Foreign Affairs, certifies that the following translation is a true and legitimate translation into English of a document written in Spanish. In Seville, 8th June 2008.

D^a Amaya Arroyo Sainz de Medrano da fe de que la que sucede es traducción fiel y completa al inglés de un texto redactado en español. Sevilla, a 8 de junio de 2008.

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