



Bogotá, 26 de septiembre de 2011

Ingeniero

**Andrés Felipe Ramírez Gómez**

E.S.D.

Kind regards:

Regarding your request related to JT valve operation at Gas Gibraltar plant, as well as for its energy consumption please find below the answers:

Within the gas plant process there is a JT valve that increases the operation flexibility, as it provides support during the start – up, when the load volumes are low and complements the volume to feed the twister technology, as this system works between 20 MSCFD and 34 MSCFD range.

During start – up, well flows are below 20 MSCFD so the JT valve has to be feed with the initial load of gas, while the volumes are increased gradually. The mentioned valve could be bypassed or keep working along with twister system.

On the other hand gas sale's agreement demands 35,5 SCFD which may only be reached with both systems working at the same time.

It is worth to mention the JT valve low energetic consumption, which it is not expected to go beyond 2837 BTU / hr, associated with the energy required for glycol regeneration.

Looking forward to your comments

Yours Sincerely

**VICTOR MADIEDO CEPEDA**

Director del Proyecto Planta de Gas Gibraltar