

June 11, 2013

**Responses to Technical Comments by Independent Reviewer on Approval by
Mail: Colombia: Energy Efficiency Financing Program for the Services Sector
(IDB)**

Dear Zhihong and Admin Unit colleagues

I am sending you the independent review and corresponding responses, related to our program "*CTF Colombia: Energy Efficiency Financing Program for the Services Sector*", which has just been approved by the TFC.

I would appreciate if you could post these files on the website, so that the package is complete.

Regards

Claudio Alatorre Frenk

Responses to Technical Comments by Independent Reviewer (Ms. Ana Cecilia Escudero Atehortúa)

Prepared by the Inter-American Development Bank (IDB)

June 6, 2013

We would like to thank Ms. Ana Cecilia Escudero Atehortúa for her written comments. Please find below our responses.

Q: A minor comment is for pg 4 sub-index 8 “Hotels and clinics/hospitals are considered to be regulated clients”. This is not specified by regulation, if the power demand is over 100 KW or energy demand over 55 MWh-month, they could be self-declared as non-regulated and are able to negotiate process with the energy utilities, actually several hotels and hospital are non-regulated.

A: We agree with the peer reviewer that Colombia’s market also includes non-regulated hotels and hospitals and will correct this reference in footnote 12 of the POD. We note, however, that there are only a small number of non-regulated hotels and hospitals, and in general they are large firms (not small/medium enterprises).

Also, as shown below, despite being non-regulated and thus able to negotiate prices, their situation is similar to regulated hotels and hospitals: electricity prices for both regulated (smaller) and non-regulated (larger) hotels and hospitals are equal to or higher than the electricity costs of industry:

1. Regulated hotels and hospitals pay US\$0.22/kWh (420.06 pesos/kWh), which is the tariff for “non-residential Industrial and Commercial” users (from the May 2013 bulletin of electricity prices from the Ministry of Mines and Energy).
2. Non-regulated hotels and hospitals pay on average US\$0.15/kWh (283.70 pesos/kWh), as was found in a survey conducted across 20 hotels in January-June 2013 by an IDB market study.
3. Regulated industrial users in the middle level of voltage connection (30-57.5 kilovolts/kV), pay US\$0.13/kWh (248.00 pesos/kWh) while unregulated users pay US\$0.148/kWh (281.20 pesos/kWh). However, unregulated industrial user connected to the grid at high-voltage (220kV and above) pay on average US\$0.08/kWh (157.8 pesos/kWh). This data is from the March 2011 study “Price Determinants in the Non-Regulated Energy Power Market in Colombia”, Graph 2, p.25 (Journal: Strategic Science Magazine, *Revista Ciencias Estratégicas*).

As a result of this clarification, we suggest that footnote 12 in the project Proposal for Operation Development (POD) be changed to the following:

Most hotels and clinics/hospitals are considered to be regulated clients in Colombia’s electricity and natural gas markets (See: www.creg.gov.co), although there are a few large ones which are unregulated. Both regulated and unregulated hotels and clinics/hospitals pay equal or higher prices per unit of energy (electricity or gas) than firms in the industrial sector. This is particularly true in the northern coast of the country, where most tourism hotels are concentrated. In this area,

a 200-room hotel pays between US\$500,000 and US\$1 million per year for its electricity and natural gas consumption. (See: [Estudio de Mercado sobre el Potencial de Eficiencia Energética y Energías Renovables para Hoteles](#), E. Botero y D. Magallon, 2012).

Q: In pg 12 (2.6) about environmental risks: power from co-generation may result in higher local emissions compared with global emissions from the National Grid Power. Detailed emission balance should be explicit for this specific technology.

A: We agree with the peer reviewer that in certain cases cogeneration can lead to increased emissions, if there is not sufficient waste heat from electric generators. However, under the current program, the eligible measures and technologies relating to cogeneration will only include those that have potential to reduce GHG emissions, i.e. steam production, water heating or cooling absorption refrigeration (or a combination thereof). Despite the low emissions factor for electricity generation in Colombia, these technologies are expected to reduce emissions compared to the baseline traditional model, where hotels or hospitals buy electricity from the grid on the one hand, and burn gases for heating processes on the other. The project team will make sure that the specifications for project eligibility as well as specific templates for project proponents to present projects and monitor them will be described in detail to ensure that only technologies and measures that reduce GHG emissions are eligible.

Q: In Annex II pg 1 “The IP for Colombia includes US\$50 million of concessional CTF resources for energy efficiency” should add comments on the revised proposal.

A: This project proposal was submitted to review by the CTF committee and independent review before the presentation and endorsement of the Revised CTF Investment plan for Colombia. The Project Team will ensure that references to the Revised CTF Investment Plan of Colombia are also made when relevant.