THE ENERGY SECTOR IN ECUADOR

December 2008
In Ecuador agent suppliers of energy information, in accordance with the structure of the government, are two ministries that coordinate the activity of energy:

- Ministry of Mines and Petroleum (www.minasypetroleos.gov.ec), and

The Ministry of Mines and Petroleum is the one who sets the oil policy which is approved by the President of the Republic and they are executed through their Entities which are the State Oil Company of Ecuador who has the following structure:
Petroproducción,
Petroindustrial,
Petrocomercial,
Pipeline Management,
International Trade Management,
Environmental Management
The National Directorate of Hydrocarbons which is a unit of the Ministry of Mines and Petroleum and is responsible for exercising control activities prior, concurrent and back to the state as private companies that signed contracts with the State in terms of crude oil, Natural gas, marketing products and LPG.
The Ministry of Electricity and Renewable Energy, has the same purpose of implementing the electrical policy adopted by the President of the Republic.

The Minister chairs the Board of the National Council on Electricity, CONELEC, which is the controller and regulator of the electricity sector.
✓ The sector also includes the Solidarity Fund, FISE, which is responsible for the management of electricity distribution companies that are state-owned.

✓ Another institution of the electricity sector is the National Company of Electricity Transmission, TRANSELECTRIC SA, which is responsible for the phase power transmission through the National Interconnected System.
✓ The Corporation CENACE institution that is in private law to regulate purchase - sale of electricity in wholesale markets and retailers to meet the demands of energy, especially at peak hours in Ecuadorian territory.

✓ Besides they are receiving economic and social information from the Central Bank of Ecuador, Institute of Statistics and Census Bureau and the Ministry of Environment.
HYDROCARBONS
SECTOR
The collection of information is done in places where the activity is generated, i.e.: fields of oil production, production facilities, transportation systems, storage systems, terminals for crude oil and clean products, as well as the importation, storage, transportation and marketing of liquefied petroleum gas.
This information is sent through a written document to the National Directorate of Hydrocarbons, where their respective units analyze that information, comparing it with the information sent by the private operating and the state companies, verifying that they comply with laws, regulations and rules established and they record in the respective files for processing as it corresponds.
The information is generated daily on-site, at the end of the month is consolidated in a monthly report which will be forwarded to the National Directorate of Hydrocarbons for monthly analysis, validation, verification and consolidation to the national level.
LEGISLATION

- The Hydrocarbons Law
- The Rules of hydrocarbon Operations
- Regulation of Crude Oil Transport by the SOTE and OCP.
- Regulation of Oil Shipments
- NTE, INNEN, API, ASTM standards
ACCESS POLICIES

A summary of the country's hydrocarbon activity is presented on the website of the Ministry of Mines and Petroleum.

Detailed information is available prior to the application and approval of the National Directorate of Hydrocarbons.
MECHANISMS FOR GATHERING AND VALIDATING

The information is gathered on site in daily papers, at the end of the month is reviewed and is consolidated in a monthly record. The private operating companies and the state must enter the information into the database of Hydrocarbon Control System - SICOHI, by Internet for entering the website of the Ministry of Mines and Petroleum.
Monthly at the National Directorate of Hydrocarbons compares the information sent by the regional versus the information entered into the database SICOHI.
ELECTRICITY SECTOR
The regime law of the Electricity Sector, LRSE, from October 10, 1996, introduced a new legal framework within which the National Electricity Council CONELEC, will have to provide the tools to exercise their functions of planning for the development of the sector.
The CONELEC has a system that allows information to other entities in the sector, carry out monitoring on production, fuel consumption, availability, billing for consumption, losses, energy balance, stopping and Reconnection of supplies, failures and quality of services provided, among others.
✔ The companies and persons under their control, they are obligated to provide the CONELEC, technical and financial information that it requires.

✔ CONELEC, it can issue and publish regulations to be imposed on the CENACE, generators, self-producing, transmitting, distributors, large consumers and consumers of the regulated electricity sector, which was issued in accordance with the law and its regulations.
For this purpose it has been developed the document "Instructions for the Collection of Information of the National Electricity Industry", which is in tune with the new realities of the sector and that unifies the statistical information to the agents reported.
SENDING INFORMATION

The forms are in MS Excel sheets and books are grouped depending on the type of agent. The information must be submitted within the deadlines set, to the e-mail of the Ecuadorean Electricity Sector Statistics (sisdat@conelec.gov.ec), as an attachment to an e-mail indicating in the matter and a short explanation of the file annex, plus the name and title of the person who sent
In addition to supplement the information in the first half and the annual should send a craft to the Director of Planning of CONELEC, which provides a record of the date and time of monthly shipments via e-mail and any comments or concerns about the information if it exists.
COMPILATION OF MONTHLY INFORMATION

✓ Production
✓ Balance of Production
✓ Energy Sold.
✓ Processors
✓ Lines
✓ Received energy
✓ Delivered Energy
✓ Energy Balance
✓ Energy transported.
✓ Substations
✓ Customers Regulated Bill
✓ Not Regulated customers
✓ Frequency Distribution
✓ Purchased energy
✓ Losses
COMPILATION OF ANNUAL INFORMATION

- Central by companies
- Units for central
- Substations,
- Transformers and auto-transformers,
- Lines of T and ST.,
- Primary distribution feeders
- Secondary networks
- Attacks,
- Meters and fixtures
- Staff
SEND INFORMATION GRAPHICS

Network associates to understand the company distributor:

- TRANSMISSION SYSTEM,
- SUBTRANSMISSION, Y
- DISTRIBUTION.
LEGISLATION

✓ Organic Law of Consumer Protection

✓ Organic Law of Regime for the Electricity Sector

✓ Law to the Constitution of fees and charges to Electrification Works

✓ General Rules of the System Law of the Electricity Sector

✓ Supply of Electricity Regulation
CONTINUED……

✔ Regulations for the Administration of Wholesale Electricity Market

✔ Trans International Regulations for Electricity

✔ Regulation of Guarantees for payment of contracts for the sale of power and energy

✔ Consolidation of the Rules of Rates

✔ Regulations for Environmental Activities in Electric Sector
CONTINUED......

✓ Rules for Free Access to the Transmission and Distribution Systems

✓ Rules of Operation Dispatch and the National Interconnected System

✓ Regulations for the Administration of the Fund for Urban-Rural Electrification Marginal, FERUM

✓ Regulation of Concessions, Permits and Licenses for the Provision of Electricity Service
The Central Bank of Ecuador and the National Institute of Statistics and Censuses provide specialized social and economic information that allows energy to supplement the technical information that are critical for measuring the socio-economic development of Ecuador.
DIFFICULTIES AND NEEDS OF THE COUNTRY TO IMPROVE ITS MANAGEMENT OF ENERGY STATISTICS.

- There is not enough staff in the energy sector to verify, reinforce and develop the information daily and monthly.

- The information generated in the workplace suffers from miscalculations and/or consolidation of daily and monthly.
The information entered via Internet also suffers from the errors described above. It is also incomplete in some cases.

Failures in computer communication systems.

Lack of staff in the energy sector for a thorough analysis, verification, validation and consolidation monthly.
Failures in the programming of the database, which creates difficulties in entering information, review data collection and reporting, which leads to the information stored is not a hundred percent reliable.