OGRA

Oil & Gas Regulatory Authority

Annual Report
2006-07

Mission Statement

Safeguard public interest through efficient and effective regulation in the midstream and downstream petroleum sector

The Authority

Syed Hadi Hasnain	Rashid Farooq	Munir Ahmad	M.H. Asif
Member Gas	*Member Oil/Vice Chairman*	*Chairman*	*Member Finance*

Senior Officers

Left to Right (Sitting): **Muazzam Hussain Ch.** (Joint Executive Director), **Muhammad Yasin** (Executive Director), **Sarfraz Ali Sheikh** (Sr. Executive Director), **Brig. (R) Tariq Mahmud** (Secretary/Sr. Executive Director), **Javed Nazir** (Sr. Executive Director), **Syed Jawad Naseem** (Sr. Executive Director), **Shahzad Iqbal** (Executive Director)

Left to Right (Standing): **Amjad Khan** (Joint Executive Director), **Anwar Ali Sheikh** (Joint Executive Director), **Malik Mazhar Makhdoom** (Joint Executive Director), **Sohail Ahmed Tariq** (Joint Executive Director), **Lt. Col. (R) Farrukh Nadeem** (Joint Executive Director), **Lt. Col. (R) Iqbal Ahmed Qureshi** (Principal Law Officer), **Sarmad Aslam** (Joint Executive Director)

Employees

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ABBREVIATIONS AND ACRONYMS

AJK	Azad Jammu & Kashmir
ANSI	American National Standards Institute
API	American Petroleum Institute
ARAMCO	Arabian-American Oil Company (now known as Saudi Aramco)
ARL	Attock Refinery Limited
ASME	American Society of Mechanical Engineers
BBL	Barrels
BBTU	Billion British Thermal Unit
C&F	Cost and Freight
CBR	Central Board of Revenue
CEO	Chief Executive Officer
CNG	Compressed Natural Gas
CP	Contract Price
CPGCL	Central Power Generation Company Limited
CPI	Consumer Price Index
CRPR	Complaint Resolution Procedure Regulations
DCO	District Coordination Officer
DHA	Defense Housing Authority
DSL	Digital Subscriber Loop
ECC	Economic Coordination Committee
ECPL	Engro Chemical Pakistan Limited
ERP	Enterprise Resource Planning
ERR	Estimated Revenue Requirement
FATA	Federal Administered Tribal Areas
FFCL	Fauji Fertilizer Company Limited
Fig	Figure
FIR	First Information Report
FJFC	FFC-Jordan Fertilizer Company Limited
FOB	Free On Board
FPCDL	Foundation Power Company (Daharki) Limited
FRR	Final Revenue Requirement
FY	Fiscal Year/Financial Year
GDS	Gas Development Surcharge
GENCO	Generation Company
GIREP	Gas Infrastructure Rehabilitation and Expansion Project

GoP	Government of Pakistan
GSA	Gas Sale Agreement
HDIP	Hydrocarbon Development Institute of Pakistan
HOBC	High Octane Blending Component
HQ	Head Quarter
HR	Human Resource
HSD	High Speed Diesel
ICB	International Competitive Bidding
ICMAP	Institute of Cost and Management Accountants of Pakistan
IFEM	Inland Freight Equalization Margin
IPP	Independent Power Producer
IRBP	Indus Right Bank Pipeline
IRL	Indus Refinery Limited
ISA	International Standards for Automation
IT	Information Technology
JP	Jet Propellant (Aviation fuel)
KERO	Kerosene Oil
Km	Kilometer
LAN	Local Area Network
LDO	Light Diesel Oil
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
LPS	Late Payment Surcharge
LUMS	Lahore University of Management Sciences
Mbps	Megabits per second
MD	Managing Director
MGCL	Mari Gas Company Ltd.
MMBTU	Million British Thermal Unit
MMcfd	Million Cubic Feet per Day
MP&NR	Ministry of Petroleum & Natural Resources
MS	Motor Spirit
MT	Metric Tonne
NFPA	National Fire Protection Association
NGRA	Natural Gas Regulatory Authority
NOC	No Objection Certificate
NWFP	North West Frontier Province

OCAC	Oil Companies Advisory Committee
OEM	Original Equipment Manufacturer
OGDCL	Oil and Gas Development Company Limited
OGRA	Oil and Gas Regulatory Authority
OMC	Oil Marketing Company
PARCO	Pak-Arab Refinery Company
PDL	Petroleum Development Levy
PER	Performance Evaluation Report
PKP	Premier-KUFPEC Pakistan BV
PKR	Pakistan Rupee
POL	Pakistan Oilfields Limited
PPL	Pakistan Petroleum Ltd
PPRA	Public Procurement Regulatory Authority
QPCEP	Quetta Pipeline Capacity Expansion Project
RON	Research Octane Number
ROW	Right of Way
RR	Revenue Requirement
Rs.	Rupees
SMS	Sales Meter Station
SNGPL	Sui Northern Gas Pipelines Ltd
SSGCL	Sui Southern Gas Company Ltd
T&D	Transmission and Distribution
TARL	Trans Asia Refinery Limited
TMO	Town Municipal Officer
TRR	Total Revenue Requirement
UFG	Unaccounted for Gas
UK	United Kingdom
US$	US Dollar
USA	United States of America
USOA	Uniform System of Accounts
WACOG	Weighted Average Cost of Gas
WAPDA	Water and Power Development Authority
w.e.f	With Effect From

Report on Conduct of OGRA Affairs

1. CHAIRMAN'S REVIEW

It is a great honour for me as OGRA's pioneer chairman to present its 5th consecutive Annual Report in pursuance of Section 20(1)(a) of the OGRA Ordinance, promulgated in March 2002, to regulate midstream and downstream oil and gas sectors. OGRA has been quite successful in taking forward the Government's economic reform agenda by achieving its objectives of fostering competition with increased private investment and ownership in the midstream and downstream petroleum industry, and protecting the public interest by providing effective and efficient regulations.

OGRA has made significant progress during FY 2006-07, an eventful and successful year. The main feature of OGRA activities was formulation of the Liquefied Natural Gas (LNG) Licensing Rules and their subsequent approval and notification by the Federal Government. This is another milestone for OGRA, as LNG is a segment of petroleum business which is new for the country, and the said Rules provide the framework for regulating it in public interest while protecting the investors' interest.

Another new aspect of the OGRA activities is determination and announcement of the maximum base-stock price of Liquefied Petroleum Gas (LPG) every month. The Government of Pakistan had deregulated the LPG prices in August 2000, allowing the prices to be determined by market dynamics. However, the Federal Government reviewed the situation and, under the LPG policy, 2006 has obligated OGRA to fix the maximum base-stock price of LPG in accordance with Saudi Aramco FOB Contract Price for each month. The Federal Government had earlier transferred to OGRA the regulatory functions of the midstream and downstream oil sector along with petroleum products' pricing on March 15, 2006. Thus, OGRA now has the mandate to determine and announce a whole range of oil and gas prices i.e. Natural Gas Well-head Prices and Retail Prices for consumers on half-yearly basis, Natural Gas Prescribed Prices for gas companies-3 times a year, petroleum product prices on fortnightly basis and LPG base-stock prices every month. OGRA is fulfilling this responsibility meticulously within the prescribed time-limitation.

Besides the above pricing-related functions, OGRA has remained fully engaged in the grant of licences for transmission and sale of natural gas, construction of CNG facilities and production & marketing of LPG. It has also remained engaged in the determinations of revenue requirement/prescribed prices of gas utilities, expeditious resolution of consumer complaints, effective enforcement of service standards, and developing new rules and regulations etc.

One of the more important functions of the Authority is determination of revenue requirement of natural gas utilities. Sui Southern Gas Company Limited (SSGCL) is entitled to a return @17% and Sui Northern Gas Pipeline Limited (SNGPL) @ 17.5% on their operating assets before tax and financial charges. During the year under review, the Authority decided ten such cases including review petitions from the utilities. These decisions were made after in-depth scrutiny of the capital and operating expenditure based on prudence, optimization, improved service to customers and safeguarding public interest. The Authority also held public hearings and provided full opportunity to all stakeholders to express their viewpoint, which were given due consideration before taking the decisions.

The Authority also issued seventy-one well-head gas price notifications for forty-seven gas fields. The Authority issued notifications of prescribed prices for each category of consumers for FY 2006-07 and FY 2007-08 on the basis of estimated revenue requirement of the two utilities. The Authority also notified the sale prices of natural gas for each category of consumers in accordance with the provisions of the OGRA Ordinance. The differential between the prescribed prices and sale prices is Gas Development Surcharge (GDS), paid by the gas companies to the Government.

Unaccounted for Gas (UFG), commonly known as line losses, is an allowance for the gas companies to cater for their operational losses, leakages, measurement losses, gas theft etc. According to international standards a reasonable UFG remains in the range of 2-3%. Keeping in view the local environment, OGRA has fixed long-term UFG targets to motivate the gas companies to improve their operational efficiency. The target fixed by OGRA progressively brings down the UFG to 4-5% by 2011-12 as against the actual UFG of about 7.5% during 2006-07. It would be of interest to note that 1% of UFG of both the gas companies means a loss of gas of over one billion rupees per year. As a consequence of enforcement of these targets during 2006-07, OGRA was able to avoid additional burden on gas consumers of Rs.3.21 billion (Rs.3.65/MMBTU). The companies had to absorb it from their own profits. This is also motivating the gas utilities to initiate effective measures for improving operational efficiency and increase their profitability.

OGRA has also enforced a benchmark for human resource cost to obviate the need to scrutinize details of this major cost element and avoid the impression of trying to indulge in micro managing the companies. This measure has had a salutary effect in containing this cost and encouraging the companies to rationalize their human resource policies and practices

Another very important aspect of OGRA's functions is the redressal of consumers' complaints. Expeditious resolution of public complaints against the Oil, Gas, CNG and LPG companies, improving their quality of service and compliance of performance and service standards by them are Authority's priorities. There is growing satisfaction in the public about OGRA's endeavours in these areas. The complaints are dealt in accordance with the Complaint Resolution Procedure Regulations (CRPR), 2003. A separate Department for complaint redressal has been established. It receives public complaints and processes them with a view to provide due relief to the consumers expeditiously. During FY 2006-07, OGRA received 1,743 complaints out of which 1,343 complaints which included 1,195 pertaining to Natural Gas, 89 to LPG, 46 to CNG and 13 to Oil sectors were resolved. Bulk of these complaints were resolved within sixty days of their receipt in OGRA.

OGRA intervention on consumer complaints resulted in direct benefit/relief to 414 complainants mostly the domestic consumers, during FY 2006-07. However, more important is the positive effect that it is having on companies' overall performance. They are continuously upgrading their own complaint resolution processes, improving the response to complaining consumers qualitatively as well as quantitatively. They have also improved greatly in compliance of prescribed rules and procedures. This is what the ultimate purpose of OGRA complaint redressal system is, and it is gratifying to state that much progress has been made in this direction.

The Authority is currently developing Natural Gas "Unauthorized Use" Rules in consultation with its legal consultant and the same will be finalized shortly after consultation with the stakeholders. These rules will regulate the complex phenomenon of gas theft and help to control this menace maintaining due balance, which means that the innocent are not allowed to be harassed and culprits are not let off. This is the challenge that the said rules will tackle.

OGRA has so far issued twelve licences in natural gas sector and approved a number of agreements between producers and licensees and between licensees and retail consumers. OGRA also granted approval of SSGCL and SNGPL's projects related to expansion in the transmission and distribution networks, with some deletions where prudence of investments was not established in the light of design parameters or the project assumptions.

OGRA was empowered under the OGRA Ordinance, 2002 to regulate the CNG sector with effect from 15th March, 2003 under the CNG (Production & Marketing) Rules 1992. During FY 2006-07, OGRA issued 2,218 licences for construction of new CNG stations and 485 for marketing licences after receiving satisfactory inspection report from third party inspectors. Pakistan now ranks third in the world with 1,450 functional CNG stations spread all over the country, and more than 1.2 million vehicles have been converted to CNG. This sector has provided direct and indirect employment to about 50,000 persons. An investment of about Rs.45 billion has already been made in this sector and investment of Rs.28 billion is in the pipeline expected to be made during the next two years.

The regulatory functions of LPG were transferred from Ministry of Petroleum & Natural Resources to OGRA on March 15, 2003 and since then OGRA has been regulating the sector in accordance with LPG (Production & Distribution) Rules, 2001 and the deregulation policy of the Federal Government. During the year, 2006-07, OGRA issued thirteen licences for marketing of LPG while twenty nine licences have been issued for construction of LPG storage and filling facilities. As of June 30, 2007, there were 10 LPG producing companies with a production capacity of approximately 1,525 Metric Tonnes (MT) per day and 60 LPG marketing companies were operating in the country. 61 licences for the construction of storage and filling facilities had also been issued. An investment of approximately Rs.11.0 billion has so far been made in this sector.

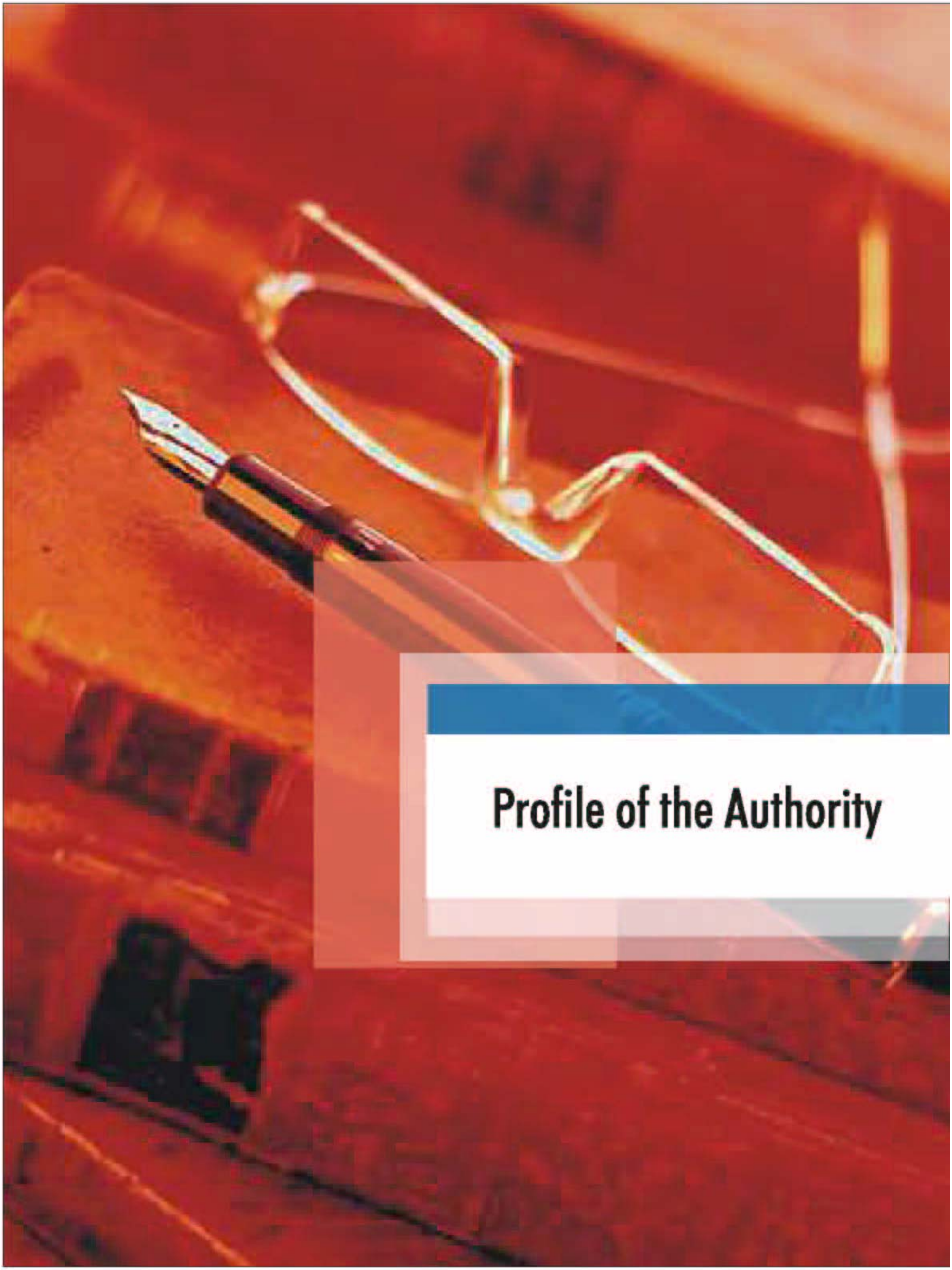
Before concluding, I must acknowledge the contribution made by my colleagues, Mr. Jawaid Inam, Member (Gas) and Vice Chairman, Mr. Rashid Farooq, Member (Oil) and Mr. M.H. Asif, Member (Finance). Their long and multi faceted exposure has been an invaluable resource - not only of knowledge but wisdom, which helped make OGRA's decision making forward looking, balanced and prudent. I am thankful to them for their total support and understanding.

Mr. Jawaid Inam, Member (Gas) retired on December 19, 2006 on attaining the age of 65 years. The Federal Government named Syed Hadi Hasnain to replace him, who joined the Authority on August 3, 2007. Federal Government has also named Mr. Rashid Farooq, Member (Oil), Vice Chairman under Section 3(13) of the OGRA Ordinance, in place of Mr. Jawaid Inam.

I would also like to pay tribute to our employees who are the most precious resource of the organization. It was their commitment and hard work that enabled OGRA to pursue its objectives. Dedication, team work and goal orientation are hallmarks of OGRA's work culture. Our people take their job assignments seriously and exhibit passion to excel on all fronts, not just for their own career development but for the fulfillment of the organization's objectives. Employees of OGRA deserve wholehearted appreciation for their exceptional spirit of cooperation and professionalism that has helped the organization meet all challenges with success.

Due to its relentless pursuit of quality and efficiency in the regulatory sphere, OGRA has earned reputation of being an impartial and effective regulator. I am confident that solid foundations have already been built and OGRA will continue to strive for financial and operational efficiencies in the midstream and downstream petroleum sector through effective and meaningful regulation, in the larger public interest in keeping with the spirit of Government reform Agenda and the OGRA Ordinance.

(Munir Ahmad)
October 30, 2007



Profile of the Authority

2. PROFILE OF THE AUTHORITY

2.1 Composition

The Authority, established under the Oil and Gas Regulatory Authority Ordinance, 2002, comprises a Chairman, Member (Oil), Member (Finance) and Member (Gas). They have been selected by the Federal Government through open competition and appointed on tenure basis. The qualifications and other terms & conditions of their appointments, as provided in the Ordinance are:

a) The Chairman shall be an eminent professional of known integrity and competence with a minimum of twenty years of related experience in law, business, engineering, finance, accounting, economics or petroleum technology.

b) The Member Oil shall be a person who holds an appropriate degree in the relevant field and is an experienced, eminent professional of known integrity and competence with a minimum of twenty years of related experience in the field of oil, including the transportation thereof.

c) The Member Gas shall be a person who holds an appropriate degree in the relevant field and is an experienced, eminent professional of known integrity and competence with a minimum of twenty years of related experience in the field of natural gas, including the transmission and distribution thereof.

d) The Member Finance shall be a person who holds an appropriate degree in the relevant field and is an experienced, eminent professional of known integrity and competence with a minimum of twenty years of related experience in the field of corporate finance or accounting.

e) The Chairman shall be appointed by the Federal Government for an initial term of four years and shall be eligible for reappointment for a similar term.

f) The Member Oil and Member Gas shall be appointed by the Federal Government for an initial term of three years and shall be eligible for reappointment for another term of four years.

g) The Member Finance shall be appointed by the Federal Government for an initial term of two years and shall be eligible for reappointment for another term of four years.

h) The Chairman and the other Members shall retire on attaining the age of sixty five years.

2.1.1 Chairman

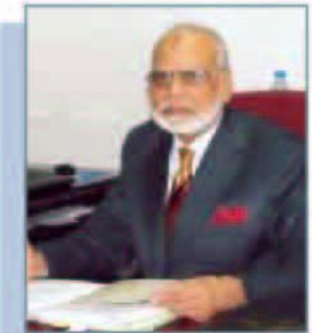
Mr. Munir Ahmad

Mr. Munir Ahmad is the pioneer Chairman of OGRA. He has forty years extensive experience of dealing with the economic, operational and regulatory matters of the petroleum sector. He holds a Master's Degree in Petroleum Geology and has attended a number of professional courses on gas tariffs, regulation, privatization etc. at home and abroad. Before joining OGRA he held the position of Director General (Gas), Ministry of Petroleum and Natural Resources, GoP for seventeen years. He had been a Director on the Board of several petroleum sector companies for over twenty years. He also held the position of Managing Director, Sui Southern Gas Company Limited in 1989 and Sui Northern Gas Pipelines Limited in 1999. After completion of his first term of four years as Chairman OGRA, he has been reappointed by the Federal Government for the second tenure of four years effective September 7, 2004.

2.1.2 Vice Chairman/Member (Oil)

Mr. Rashid Farooq

Mr. Rashid Farooq was appointed as Member (Oil) on October 09, 2002. He holds Bachelor's Degree in Chemical Engineering from University of the Punjab and Master's Degree in Energy Engineering from University of Surrey, the UK. He has thirty three years' experience in regulatory and policy matters in the petroleum sectors. He has been with the Ministry of Petroleum for twenty eight years and remained on the Board of Directors of Attock Refinery, Pakistan Refinery, Pak Arab Refinery, Pak Arab Pipeline Company, National Tanker Company, Pirkoh Gas Company and National Petrocarbon. He attended various international seminars, conferences and training programmes in the downstream oil sector, Petroleum Management and Environment and obtained post graduate certificates in Petroleum Management from University of Pittsburgh, the USA, Canadian Petroleum Institute, Canada, Business Management from the University of Surrey, the UK and Environment Impact Assessment from Asian Institute of Technology, Bangkok. He represented MP&NR in various countries at meetings on bilateral economic cooperation in the petroleum sector. He was Director General (Oil) in the Ministry of Petroleum before joining OGRA. After completing first tenure of three years, he was reappointed in October 2005 for a second term of 4 years.



2.1.3 Member (Finance)

Mr. M.H. Asif

Mr. M H. Asif was appointed as Member (Finance) on March 29, 2004 for an initial term of two years. On its expiry, he was reappointed for the second term extending up to 11 February, 2009. He is Fellow Member of the Institute of Cost and Management Accountants of Pakistan (ICMAP) and also holds Masters Degree in Economics and Bachelors Degree in Commerce. He has to his credit over forty four years exposure in leadership positions in the fields of finance, management, marketing, planning, human resource development and professional education. He has been associated with gas sector, GoP and public sector autonomous bodies. He has also been a member of the management team of the ICMAP for a long time, in various honorary positions including President. Currently, he is Chairman of its Research, Ethics and Quality Assurance. He served for two years as Technical Advisor to the Public Sector Committee of the International Federation of Accountants, developing International Accounting Standards for public sector entities. He has received training abroad on various aspects of regulation of utilities, market-based free economy operations in gas and oil industry and accounting profession. He has presented a number of technical papers in Pakistan and abroad. He is well known in professional circles as honorary guest speaker on technical as well as personal development topics.

2.1.4 Member (Gas)

Mr. Jawaid Inam

Mr. Jawaid Inam retired on December 19, 2006 on attaining the age of 65 years in accordance with Section 3(9) of OGRA Ordinance. He served OGRA as Member (Gas) from its inception, for six years and 3½ months. Mr. Inam had also been designated by the Federal Government as Vice Chairman to perform the duties of the Chairman during his absence. He had a Bachelor's Degree in Fuel Science and Technology from the University of Leeds, UK and had long professional experience of about forty years with British Gas, UK, SNGPL and finally with OGRA. He rose to become the Managing Director in SNGPL. He received training at reputable universities such as Oxford, Chicago, Florida, Oklahoma and Texas in the fields of Engineering, Management and Utility Regulation. He made significant contribution to the development of OGRA as an efficient and professional regulatory organization, which is thankfully acknowledged.

2.2 Powers and Functions

The salient features of the Powers and Functions of the Authority as embodied in the Ordinance are as under:-

- **Exclusive** power to grant, amend or revoke licences for regulated activities and enforce compliance of licence conditions to promote efficiency, cost effectiveness, best practices, high safety and service standards etc. The regulated activities are:
  - **Natural Gas**
    - Construction or operation of pipelines or storage facilities or other installations
    - Transmission
    - Distribution
    - Sale
  - **OIL**
    - Construction or operation of refinery, pipelines, storage facilities, blending facilities and installations
    - Marketing and storage of refined oil products
  - **Liquefied Petroleum Gas (LPG)**
    - Construction or operation of pipelines, production or processing facilities, storage facilities and installations
    - Transporting , filling, marketing and distribution
  - **Compressed Natural Gas (CNG)**
    - Construction or operation of installations including testing or storage facilities
    - Transporting, filling, marketing and distribution
  - **Liquefied Natural Gas (LNG)**
    - Construction or operation of installation including testing or storage facilities
    - Transporting, filling, marketing and distribution

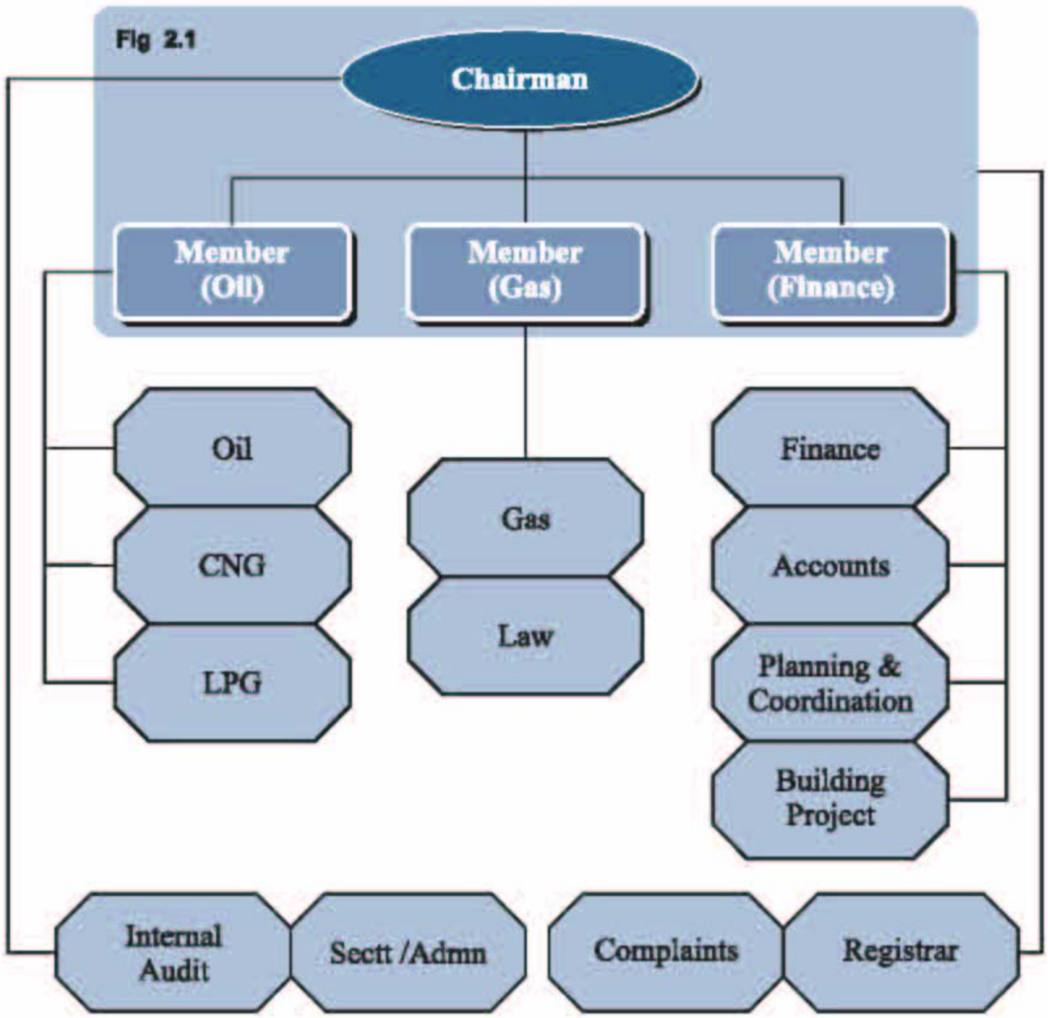
- **Exclusive** power to employ officers, staff, experts, consultants, advisors and other employees on such terms and conditions as it may deem fit
- **Exclusive** powers to decide upon all matters in its jurisdiction
- Develop and enforce performance and service standards
- Determine in consultation with the Federal Government and the licensees, a reasonable rate of return to the natural gas licensees.
- Prescribe procedures and standards for investment programmes of the gas utilities and oversee their capital expenditure to ensure prudence.
- Determine annually the revenue requirement of gas utilities covering the cost of gas, transmission and distribution cost and the prescribed return.
- Resolution of complaints and disputes between a person and a licensee or between licensees.
- Enforce standards and specifications for refined oil products as notified by the Federal Government.
- Implement policy guidelines of the Federal Government as are issued under Section 21 of the OGRA Ordinance.

2.3 Organization Structure

2.3.1 Organogram

The Authority is organized as reflected by **Fig 2.1**

Fig 2.1



2.3.2 Human Capital

OGRA is a lean organization with a fine blend of professionals both from public and private sector. It has a flat structure where emphasis is on quality, efficiency, goal orientation and professionalism. The departments are essentially small teams of highly motivated professionals with bare minimum support staff.

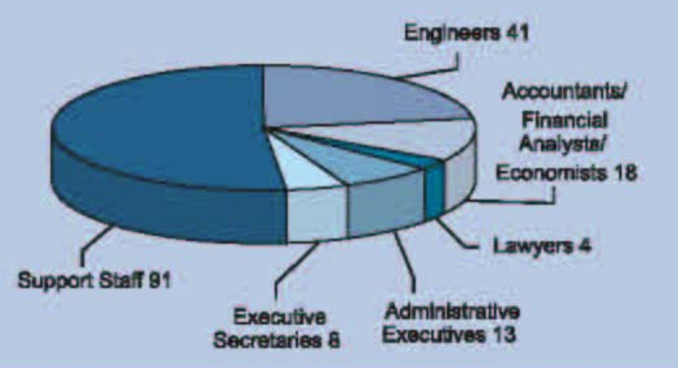
The organization has full support of modern management tools and the enlightened Human Resource strategy of

OGRA is making it a great work place. It focuses at developing an organizational culture that puts its Employees first. It is based on core values, encourages creativity and enhances professionalism which is fostering a spirit of teamwork in an atmosphere of mutual respect, trust & entrepreneurship. The proactive approach of the employees is making handsome contribution in the decision making process.

The Human Resources (HR) initiatives of OGRA are not only playing an important role in recruiting and subsequently retaining high quality workforce, but also developing them through continuous motivation, broad-based training and attractive rewards.

The officers, staff, experts, consultants, advisors and other employees are employed strictly on "as required" basis, on the terms and conditions stipulated in the OGRA Service Regulations, notified under the OGRA Ordinance. Appointments are made on merit through a transparent and competitive process while observing provincial quotas. Category-wise status of employees as on June 30, 2007 is given in **Fig 2.2.**

Fig 2.2: Category-wise Employees Status (Total: 175)



The strengths, weaknesses and work performance of each employee is evaluated through a carefully devised Performance Evaluation Report (PER), on yearly basis. This assessment of performance subsequently forms the basis for planning his/her professional training both within and outside Pakistan, whereas the rewards provide the required impetus to his/her growth. The system establishes a strong link between the employees and the organization. The synergy, so achieved promotes the culture of OGRA as a highly motivated and professional body.

OGRA's compensation policy is designed to be competitive with the high performing organizations, particularly in the Petroleum sector. Its market based salaries and attractive terminal benefits provide great incentive to the employees not only to contribute but also to develop a long-term association.

Regulation by an independent regulator is a relatively new concept in Pakistan, as a result of which there is an acute shortage of experts in this field. Therefore, the employees are also provided ample opportunities to benefit from the experience of other regulators from different countries of the world. Continuous education, training and career development plays an important role in enhancing the professional competence of employees, enabling them to effectively meet the new challenges.

OGRA believes in organizational excellence by developing and realizing the true potential of its human capital and providing opportunities for their growth, well being and enrichment.

2.3.3 Capacity Building Project

Capacity building is defined as the "process of developing and strengthening the skills, instincts, abilities, processes and resources that organizations need to survive, adapt, and thrive in the fast-changing world". Capacity building refers to activities that improve an organization's ability to achieve its mission or a person's ability to define and realize his/her goals or to do his/her job more effectively.

OGRA's World Bank-funded Capacity Building Project involves both institutional capacity-building as well as human capacity-building. Out of this World Bank's US$ 2 million funded Project, US$ 1.5 million have been allocated for institutional development studies and US$ 0.5 million have been reserved for OGRA employee's professional trainings. OGRA also spends its own funds for development of certain skills, competencies, or for general upgrading of performance of its officials through training. During the year under review, OGRA officers attended 14 international training programmes and 4 senior officers travelled for study visits to advanced regulatory bodies in Canada & Italy, which provided them an opportunity to interact with and gain from their experience. OGRA's 17 officers also participated in local training programmes.

During FY 2006-07, OGRA awarded the contract for conducting the study on "Development and Enforcement of Technical and Performance Standards relating to LPG" to an international consulting firm. Further, an institutional building study on "Development of additional Rules/Regulations pertaining to various Powers and Functions of OGRA" is under way. OGRA drafted the LNG Licensing Rules and submitted the same to the Federal Government, which were duly approved and notified in accordance with the provisions of the OGRA Ordinance.

2.3.4 I.T. Orientation

Information Technology (IT) is no longer a business resource; it is the business environment. OGRA's IT policy is inspired by this thought. All officers in OGRA have dedicated computers and three Local Area Networks (LANs) have been established at its three office buildings enabling each computer to access the World Wide Web and send and receive messages in electronic form. The Authority is continuously working to minimize the paper usage and achieving efficiency through intensive use of Information Technology.

The Computer resource sharing concept has improved efficiency and reduced cost of equipment. Internal communication, normally, is done electronically reducing paper load and enhancing speed. OGRA maintains web portal 'www.ogra.org.pk' which has been designed using latest and secure web development tools. It is user friendly and is being updated regularly. Anyone can access it and reach OGRA Ordinance, Rules and Regulations, decisions, press releases, oil price notifications, gas & well-head price notifications, LPG price notifications, list of operational CNG stations, list of licensees, tender notices, job announcements, etc., etc. OGRA's website is ranking amongst the most frequented in the country as during the past one year over 600,000 visits were recorded, which proves its popularity and usefulness.

At present, OGRA has two DSL (Digital Subscriber Loop) connections of 512 Mbps each. One DSL connection is operational at office location Tariq Chamber Building and the second connection is being shared at locations Al-Fabric and Block-7 Buildings. In addition, OGRA has its own dedicated email server which is being used for internal and external communication. A comprehensive database and ERP design, development and implementation project is also under consideration.

The Process

3. THE PROCESS

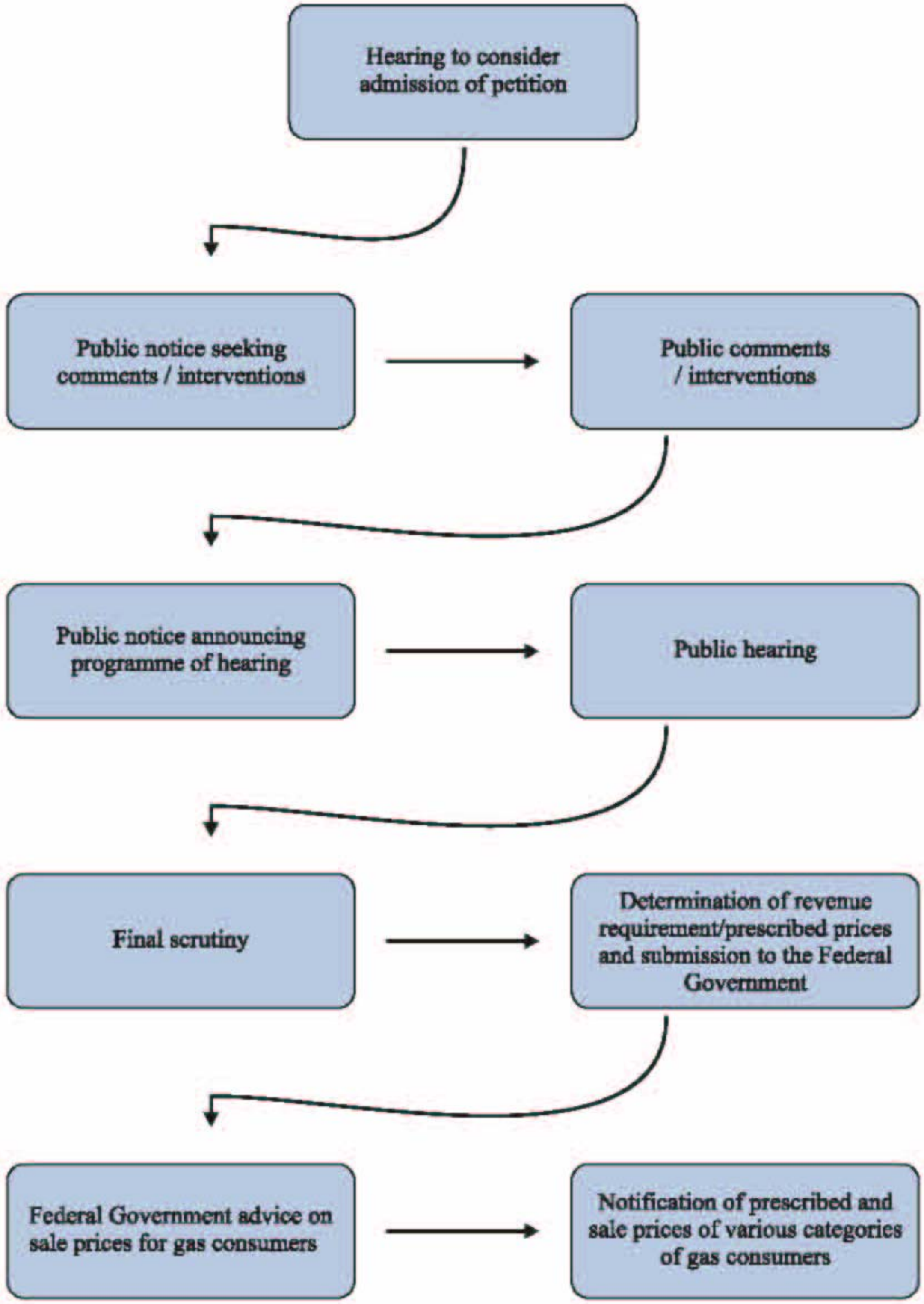
3.1 The Authority's Decision Making Process

The regulatory framework consists of quasi-judicial authority for issuance of licences, tariff setting and maintenance of proper standards and quality of services by the licensees. Therefore, the Authority is vested under the Ordinance and Rules with the power of delivering decisions. The Authority exercises the power of original jurisdiction in the petitions filed for grant of licences for various types of regulated activities, and setting of tariff which include determination of estimated and final revenue requirement of natural gas transmission and distribution licensing companies at the beginning and end respectively of each financial year, and also of review during the year. In addition to natural gas, the Authority is empowered to grant licences for Oil, CNG, LPG and LNG related activities. The Authority is also vested with the appellate power and power to review its decisions under the Ordinance and Rules.

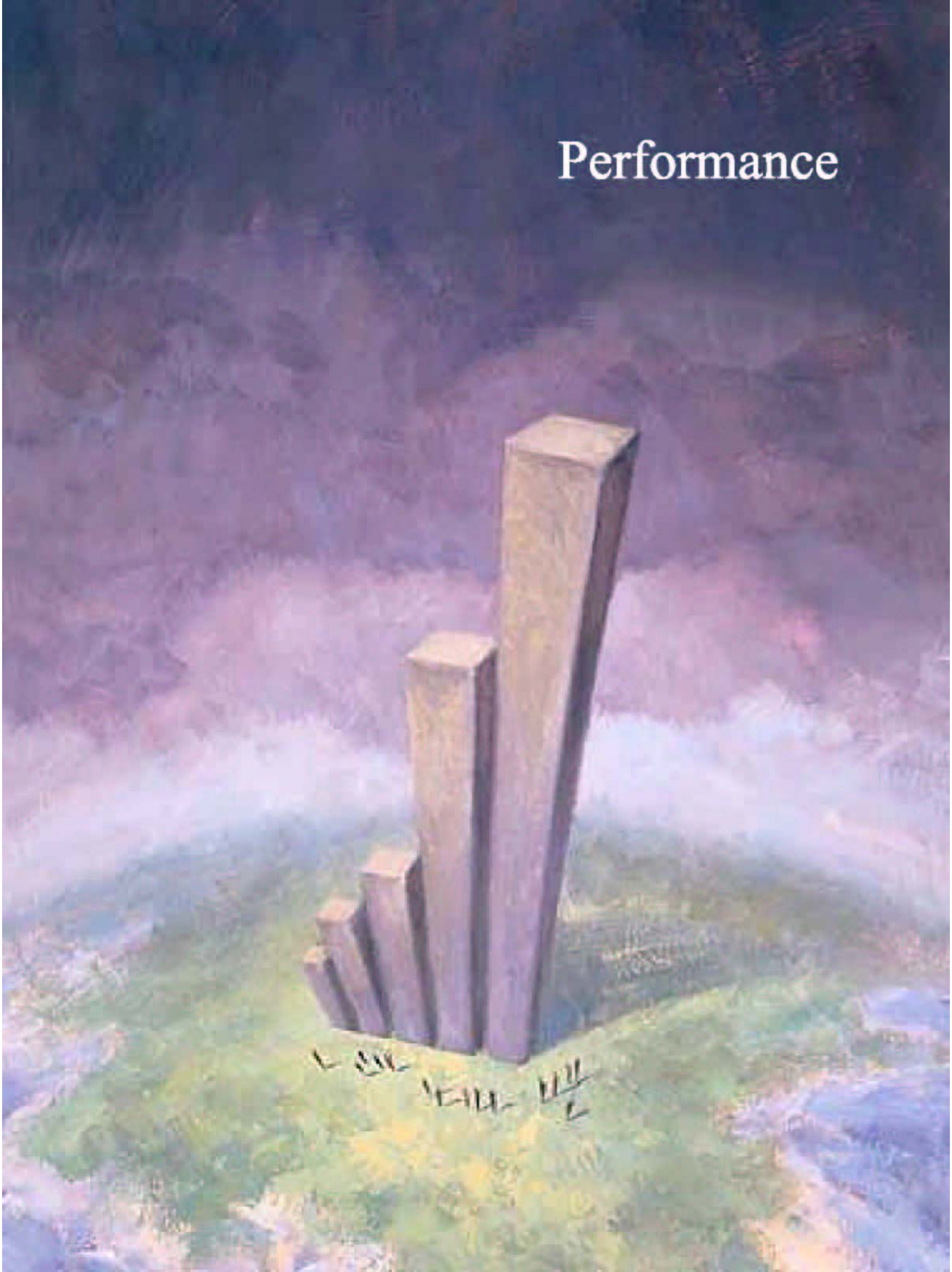
All petitions are examined in the light of relevant rules, which, *inter-alia*, involve interactive process of consultation with all stakeholders including consumers through public hearings. This provides the general public an opportunity to air their views on the cost and quality of service provided to them and the utility company to put across its point of view. This enables the Authority to have the benefit of a wider range of information and all shades of opinion which it evaluates and formulates its decision. To explain a typical process, **Fig 3.1** shows the steps involved in determination of revenue requirement of a gas company from receipt of petition to notification of prescribed and sale prices.

Authority at a public hearing

Fig 3.1: The Process of Determination of Revenue Requirement, Notification of Consumer Gas Prices



Performance



4. PERFORMANCE

4.1 Development of Rules & Regulations

4.1.1 Formulation of Rules and Regulations

Sections 41 and 42 of OGRA Ordinance, 2002 require the Authority to formulate rules and regulations to carry out its various functions as provided in the Ordinance. The rules are to be approved and notified by the Federal Government, whereas the regulations are to be approved and notified by the Authority itself. One of the fundamental instruments i.e. the Natural Gas Licensing Rules had been framed under the erstwhile NGRA Ordinance and notified in February, 2002. These rules were protected under a provision of OGRA Ordinance. Since its inception in March, 2002, the Authority has put in place a comprehensive regulatory framework as listed in **Appendix-I**. During FY 2006-07 OGRA developed the following rules, some of which were then notified by the Federal Government.

4.1.1.1 Liquefied Natural Gas Rules, 2007

In light of Government's LNG Policy, 2006, OGRA has developed LNG Rules comprehensively covering various parameters for all aspects of LNG operations. These were finalized after incorporating the feedback from all the stakeholders, and were notified by the Federal Government on June 5, 2007.

4.1.1.2 Amendments in LPG (Production & Distribution) Rules, 2001

To give effect to the LPG Production and Distribution Policy, 2006 and the regulatory framework for the use of LPG in automotive sector, amendments were made to the LPG (Production & Distribution) Rules, 2001. These amendments were approved and notified by the Federal Government on March 10, 2007.

4.1.1.3 Pakistan Oil (Refining, Blending, Transportation, Storage and Marketing) Rules

During the year under review, the Authority has developed rules for the regulated oil sector viz. Pakistan Oil (Refining, Blending, Transportation, Storage and Marketing) Rules. These were finalized after taking into account the comments from the oil industry and MP&NR and then were sent to the Federal Government for approval and notification.

4.2 Natural Gas Sector

4.2.1 Licences

OGRA, under the Natural Gas (Licensing) Rules, 2002, has so far issued twelve licences for transmission, distribution and sale of natural gas to the companies **(Appendix-II)**. During FY 2006-07, OGRA has issued a licence to Fatima Fertilizer Company Limited for transmission of natural gas as described below.

4.2.1.1 Licence Granted to Fatima Fertilizer Company Limited

The Federal Government had allocated 75 MMcfd gas to Fatima Fertilizer Company Limited (FATIMA) from Mari Gas field as per terms and conditions of Fertilizer Policy, 2001.

FATIMA filed a petition on October 14, 2006 under provisions of the OGRA Ordinance, and NGRA (Licensing) Rules, for grant of transmission licence specifically for:

> "Construction and operation of 47 Km pipeline, 20" dia alongwith ancillary/connected facilities for transmission of natural gas from Mari gas field to FATIMA Fertilizer Company Limited's plant at Mukhtar Garh, Sadiqabad, District Rahim Yar Khan exclusively for self use".

The Authority, after completing due process, granted the requested licence on 16th April, 2007, for a period of 30 years effective from 17th Oct, 2006 or till the expiry of the Gas Purchase and Sale Agreement between Mari Gas Company Limited and FATIMA Fertilizer Company Limited, which ever comes first.

Mr. Munir Ahmad, Chairman, OGRA handing over the licence to Mr. Fawad Ahmad Mukhtar, CEO, Fatima Fertilizer Company Limited (FFCL) for Transmission of Natural Gas.

4.2.1.2 Licence Granted to Foundation Power Company Limited

The Authority has also received request for a licence to Foundation Power Company (Daharki) Limited (FPCDL) for transmission of natural gas on April 24, 2007, details of which are given below.

FPCDL filed the petition under provisions of the OGRA Ordinance, and NGRA (Licensing) Rules, for grant of transmission licence specifically for:

"Construction and operation of 15 Km, 20" dia pipeline alongwith ancillary/connected facilities for transmission of natural gas (Mari Deep) from Mari gas field gate to FPCDL's plant at Daharki, Sindh exclusively for self use".


Mr. Munir Ahmad, Chairman, OGRA handing over the transmission licence to Lt. Gen (Retd), Arif Hassan, MD/CEO, Foundation Power Company (Daharki) Limited.

The Authority, after completing due process, granted the requested licence on 27th August, 2007 effective from June 01, 2007 for a period of twenty seven (27) years or till the expiry of Gas Supply Agreement between Mari Gas Company Limited and FPCDL, whichever comes first.

4.2.2 Formulation and Notification of Liquefied Natural Gas Rules

Based on the current gas supply / demand projections, a gap would emerge in the year 2010 which, it is feared, would continue to grow if no major discovery is made or alternate supply sources are found.

In order to meet the anticipated shortfall, the Government is considering various options including importing gas through pipelines and in the form of Liquefied Natural Gas (LNG). For LNG option, the Government formulated and announced LNG Policy, 2006. In order to develop comprehensive rules and regulations for LNG related activities covering various parameters for construction, operation, safety, etc. OGRA, in collaboration with a legal consultant, drafted LNG Rules, under Section 41 of the OGRA Ordinance. These draft LNG Rules were uploaded on the website of OGRA and were sent to the stakeholders for comments. After incorporating the comments as far as possible, OGRA finalized the LNG Rules, which were notified by the Federal Government on June 5, 2007. Salient features of various parts of LNG Rules are as follows:

4.2.2.1 Salient Features of LNG Rules, 2007

1. **Licensing of Regulated Activities:** This part lays down the pre-requisites of the application to obtain or renew a licence to undertake LNG regulated activity. This part also elaborates procedures for admitting applications, intervention by interested persons, replies, rejoinders, public hearing and comments and interrogatories by the Authority. To facilitate the investors, a format of Licence Application is also given.

2. **Evaluation of Application:** This part gives the procedure for evaluation of application for licence by the Authority.

3. **Licence Conditions:** This part covers issues pertaining to transfer or assignment of licences, accounting requirements, obligations of the licensees, revocation of licences etc.

4. **Modification or Renewal of Licences:** The Authority has made provisions for processing applications for any modification of any term or condition of a licence. On the other hand, the Authority may itself initiate the process of modification of the terms and conditions of the licence in public interest. Details are given in this part.

5. **Miscellaneous:** In this section, various issues such as penalty for contravention, appointment of independent consultant firm to assist the Authority, inspection and audit and provisional licence for the purpose of facilitating the import of LNG etc. have been taken care of.

4.2.3 Notification of Well-head Gas Prices

Section 6(2)(w) of OGRA Ordinance, 2002 empowers the Authority to determine the well-head gas prices for the producers of natural gas in accordance with relevant agreements or contracts, and notify the same in the official gazette. The Authority accordingly issued 71 well-head gas price notifications during FY 2006-07 for 47 gas fields. **(Appendix-III)**

4.2.4 Weighted Average Cost of Gas (WACOG)

The gas prices differ for different gas fields, and, therefore, the cost of input gas into SSGCL and SNGPL systems also differs substantially causing a significant impact on their prescribed prices. Since the Federal Government, as a policy, has kept the consumer gas prices uniform all over the country, it issued a policy guideline under Section 21 of OGRA Ordinance on June 18, 2003 that the cost of gas of SSGCL and SNGPL should be worked out on an overall average basis to keep this major input cost uniform for both the utilities. To implement this policy guideline, the two gas companies have signed an agreement, with the approval of OGRA, for making adjustments of the cost of gas paid to the producers on the basis of WACOG. For the FY 2006-07, the WACOG worked out to Rs. 170.38 / MMBTU, which was allowed by the Authority in the Revenue Requirement of both the companies.

4.2.5 Fixed and Variable Charges

Under the Licence Condition 45, SSGCL and SNGPL filed petitions with OGRA in the first quarter of 2006, for approval of fixed and variable charges, in respect of various kinds of services e.g. meter rent, late payment surcharge, service line charges, initial connection charges, reconnection charges etc, which are recovered from retail consumers.

The fixed and variable charges submitted by both the utilities revealed following major discrepancies:

- Rates charged by both the utilities in case of similar activity were not uniform.
- Some charges were not recovered uniformly.
- Similar charges are being booked under different nomenclatures (heads).

OGRA examined the descriptions/charges keeping in view the principles of non-discrimination, fairness, equity and quality of service. The proposal submitted jointly by SSGCL and SNGPL was thoroughly discussed during various consultation sessions/meetings with them. The Authority decided to achieve uniformity throughout the country and reduction in number of such charges. The Authority approved the revised fixed and variable charges w.e.f. July 01, 2006, and notified the same in the official gazette.

4.2.6 Benchmarks

National Security Council decided in the year 2000 that the regulatory authorities shall look into the inefficiencies and losses of public utilities in the energy sector before allowing increase in the tariff. In compliance with this decision, OGRA, for the first time in Pakistan, has undertaken various steps to implement yardstick regulations through the introduction of effective benchmarks. The enforcement of efficiency based incentive oriented operating targets for Unaccounted For Gas (UFG)/line losses and Human Resource (HR) cost has induced indirect competition and avoided passing on inefficiencies of the utilities to the consumers.

The operation of benchmarks makes regulatory intervention more predictable and obviates the need to scrutinize micro details. It also facilitates the licensees to introduce prudent management policies making the utilities more efficient.

4.2.6.1 Reduction in Unaccounted for Gas (UFG) and UFG Benchmark

Fig 4.1: UFG Targets (Projected)

UFG levels of SSGCL and SNGPL have been a major concern for the Authority as 1% of UFG of both the companies means a loss or gain of over 1.00 billion rupees per year. Prior to establishment of OGRA in 2002, the level of UFG in SSGCL and SNGPL hovered over 8% of the gas available for sale. OGRA, in consultation with the utilities, originally devised a three year incentive-based schedule from FY 2002-03 to reduce the UFG to 6.00 %. Keeping in view the local conditions, constraints and other relevant limiting factors, OGRA has since set appropriate UFG benchmarks for gas utility companies operating in Pakistan with a view to further improve their efficiency. UFG level incentives have been given to these companies to encourage them for striving to not only meet but do better than the set target, in the shape of retaining the savings to the prescribed extent. SSGCL and SNGPL have been advised to gradually reduce UFG levels to 4.00 % by FY 2011-12 as shown in **Fig 4.1**. The incentive works as follows.

If the actual UFG is between the two limits, then 50% of the revenue loss has to be borne by the company. In case, it is above the upper level then company will have to bear the entire revenue loss. Finally, if UFG target is below the lower limit then the company can reap the benefit by retaining 100% of the profit over and above its guaranteed return on assets.

The performance of the two companies before and after the application of UFG targets is clear from **Table 4.1** and **Fig 4.2** and **4.3**.

Table 4.1: Historical Perspective: UFG Percentage

(Percentage)

Financial Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
SNGPL-Actual	8.87	7.98	8.19	6.75	6.86	6.59	7.77	5.11**
Allowed	8.87	7.98	8.19	6.50*	6.00*	5.70-6.00*	5.40-6.00*	5.10-6.00*
SSGCL-Actual	8.36	7.60	7.56	7.09	7.48	6.61	7.06	5.80**
Allowed	8.36	7.60	7.56	6.50*	6.00*	5.70-6.00*	5.40-6.00*	5.10-6.00*

** Benchmark set by OGRA*
*** Estimates of the Licensees*

Fig 4.2: Historical Perspective: UFG Percentage-SNGPL

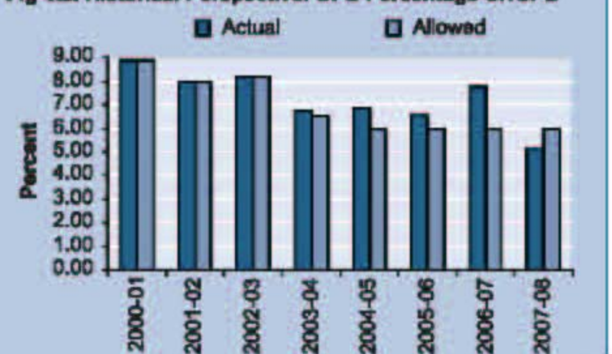
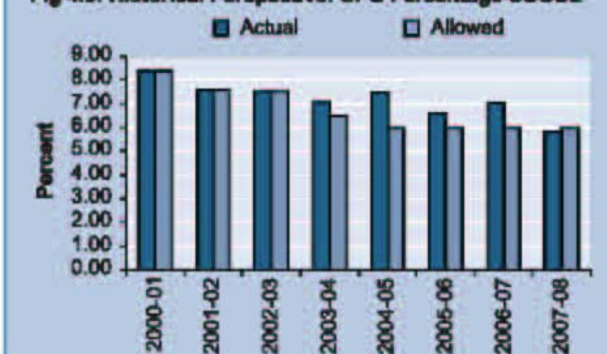
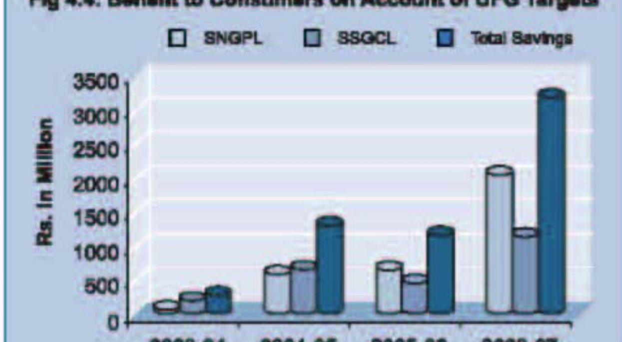


Fig 4.3: Historical Perspective: UFG Percentage-SSGCL



The utilities have tried to explain higher UFG during FY 2006-07 advancing reasons of prevailing theft culture, delay in rehabilitation of old network due to exorbitant road restoration charges by certain local governments, encroachments on networks, large scale extension to domestic gas consumers in new areas etc. The Authority, however, did not accept these arguments as it of the opinion that, give due priority, controlling these factors was well within the management's capability. As a consequence of enforcement of the above mentioned targets, during the 2006-07, an additional burden of Rs.3.21 billion on gas consumers was avoided as the companies absorbed it from their own profits. The disallowances on account of UFG benchmark have benefited consumers and this is motivating the gas utilities to initiate effective measures for improving operational efficiency, as shown in **Fig 4.4**.

Fig 4.4: Benefit to Consumers on Account of UFG Targets



4.2.7 Human Resource Cost Benchmark

The Authority observed that the HR cost had increased sharply over the years. In order to incentivize the petitioner to strive for optimization of its human resource and with a view to minimize micromanagement of HR cost of both the utility companies, the Authority has introduced, on an experimental basis, for a period of 3 years, i.e. 2005-06, to 2007-08, the benchmark HR cost. The benchmark has been set by indexing the base year (FY 2004-05) HR cost to the following:

- 50% of notified consumer price index (CPI)
- 60% of incremental number of gas consumers
- 20% of incremental transmission & distribution network
- 20% of the incremental sales volume

Savings or excess in HR cost will be shared equally between the companies and consumers. During the first two years of its introduction, the performance of both the companies has remained pretty close to the benchmark, as shown in **Table 4.2**.

Table 4.2: HR Cost

(Rs in Million)

Company	Base Year 2004-05	Benchmark Cost 2005-06	Actual Cost 2005-06	Excess/ (Saving) over Benchmark	Benchmark Cost 2006-07	Actual Cost 2006-07	Excess/ (Saving) over Benchmark
SNGPL	3,348	3,553	3,563	10	3,919	3,892	(27)
SSGCL	2,861	3,096	2,945	(151)	3,238	2,992	(246)

4.2.8 Determination of Revenue Requirement (RR) of Gas Utilities and Gas Tariff

The Revenue Requirement (RR) and the prescribed price for each category of retail consumers in respect of each licensee carrying out the activities of transmission, distribution or sale of natural gas is determined by the Authority under Section 8 of the OGRA Ordinance. The RR is the sum of money which would enable a licensee to conduct its business efficiently and earn a reasonable return on its investment.

Managing Director of SSGCL is presenting the case before OGRA against OGRA's Tariff determination of FY 2007-08 at the public hearing, at Karachi.

The revenue requirement according to the existing tariff regime is comprised of the following major components:

(i) Cost of gas paid to the gas producers (WACOG-based Well-head Cost).

(ii) Transmission and distribution cost including depreciation.

(iii) Prescribed return per Government's policy decision, which currently is, 17% in case of SSGCL and 17.5% in case of SNGPL, of the value of their net operating fixed assets.

The cost of gas which constitutes major part of the RR of the gas utilities is determined in accordance with the parameters contained in the Gas Pricing Agreements between the Federal Government and the gas producers. Any change in cost of gas is, therefore, practically a pass through amount. The scrutiny by the Authority consequently is more focused on examining the operating revenues, operating cost and asset-base.

The gas utility companies are required to submit to the Authority their Estimated Revenue Requirement (ERR) for each financial year by December 1 of the preceding year, under the OGRA Ordinance and the NGRA Tariff Rules, 2002. These petitions are scrutinized, processed and decided in accordance with the Rules after due notice in the national press giving full opportunity to all the stakeholders including the petitioner and general public to comment and being heard. Later, during the financial year, the gas utility companies file review petitions for adjustment in revenue requirement to cater for changes in cost of gas, and other relevant factors e.g. sales volume and sale mix. Determination of Final Revenue Requirement (FRR) is carried out at the end of the financial year on the basis of auditor's initialed accounts.

The companies may also file motion for review against any decision of the Authority, within thirty days, under the relevant provisions of law, and they, more often than not, do avail this opportunity.

The Authority has also directed SSGCL & SNGPL to submit review petitions to the Authority for revision in cost of gas on the basis of actual and anticipated changes in international prices of crude and fuel oil in October every year, with a view to ensure the half yearly review, in any case.

The Authority has decided the following ten petitions of SSGCL and SNGPL during the financial year 2006-07.

SSGCL

- FRR for FY 2005-06*.
- Review of ERR for FY 2006-07*.
- Second Review of ERR for FY 2006-07*.
- Review of FRR for FY 2005-06.
- ERR for FY 2007-08.

SNGPL

- FRR for FY 2005-06*.
- Review of ERR for FY 2006-07*.
- Second Review of ERR for FY 2006-07*.
- Review of FRR for FY 2005-06.
- ERR for FY 2007-08.

** Details of these decisions have already been provided in the OGRA's Annual Report for FY 2005-06 due to time lag.*

The process of determination of revenue requirements is transparent and ensures effective participation of consumers and general public in order to balance the divergent interests of all the stakeholders including the Government.

OGRA has taken a conscious decision to attach primary importance to protecting consumers' interest while remaining within the Government's policy framework and providing incentives to entities to perform optimally.

4.2.8.1 Review of Final Revenue Requirement of SSGCL for FY 2005-06

The Authority determined the Final Revenue Requirement of SSGCL for FY 2005-06 at Rs. 69,021 million as against the request for Rs. 69,745 million. SSGCL, being aggrieved on certain disallowances by the Authority had submitted a motion for review. The Authority agreed to take cognizance of certain new evidences / arguments provided by SSGCL in support of their review and decided to allow corresponding adjustments amounting to Rs. 49,415 million at the time of FRR for FY 2006-07.

4.2.8.2 Review of Final Revenue Requirement of SNGPL for FY 2005-06

The Authority determined the Final Revenue Requirement of SNGPL for FY 2005-06 at Rs.107,765 million as against the request for Rs.108,168 million. SNGPL, being aggrieved on certain disallowances made by the Authority submitted a motion for review. The Authority refused leave to this motion under its decision dated November 21, 2006 because no new argument or evidence in support of review of Authority's earlier decision in respect of FRR for FY 2005-06 was brought forward by SNGPL.

4.2.8.3 Estimated Revenue Requirement of SSGCL for FY 2007-08

Table 4.3 shows comparison of OGRA's determination (of May 21, 2007) with SSGCL's request in respect of various components of estimated revenue requirement of SSGCL for FY 2007-08.

Managing Director, SSGCL, Mr. Munawar Baseer Ahmed with his team, in the public hearing on SSGCL's petition for Tariff determination of FY 2007-08 at Karachi

Table 4.3: SSGCL Request vis-à-vis OGRA Determination for FY 2007-08

(Rs. in Million)

Particulars	SSGCL Request	OGRA Determination	Difference
Sales Volume (BBTU)	404,884	404,884	-
Cost of Gas	75,427	78,003	2,576
Transmission & Distribution Cost and Others	5,857	5,426	(431)
UFG Disallowance	(186)	(300)	(114)
Depreciation	2,809	2,701	(108)
Return on Net Operating Fixed Assets	5,102	5,188	86
Total Revenue Requirement	**89,008**	**91,017**	**2,009**
Total Revenue Available	**89,570**	**90,907**	**1,338**
Surplus / (Shortfall)	**561**	**(110)**	**(671)**
Average Prescribed Price (Rs/MMBTU)	**210.66**	**212.31**	**1.66**

The Authority determined a total upward adjustment of Rs.1.66/MMBTU in the average prescribed price of SSGCL, taking into account all relevant factors, particularly constantly rising international price of crude and fuel oil.

4.2.8.4 Estimated Revenue Requirement of SNGPL for FY 2007-08

Table 4.4 shows comparison of OGRA's determination (of May 21, 2007) with SNGPL's request in respect of various components of estimated revenue requirement of SNGPL for FY 2007-08.

Managing Director, SNGPL, Mr. A. Rashid Lone with his team, in the public hearing on SNGPL's petition for Tariff determination of FY 2007-08.

The Authority readjusted the sales mix estimated by the petitioner thereby increasing the prescribed revenue by Rs.3.05/MMBTU. The Authority also increased the average prescribed price of SNGPL by Rs.1.79/MMBTU owing mainly to constantly rising international prices of crude and fuel oil impacting the cost of gas. The overall increase in average prescribed price therefore comes to Rs. 4.84/MMBTU, as shown in **Table 4.4**.

Table 4.4: SNGPL Request vis-à-vis OGRA Determination for FY 2007-08

(Rs. in Million)

Particulars	SNGPL Request	OGRA Determination	Difference
Sales Volume (BBTU)	559,016	559,003	(13)
Cost of Gas	100,898	104,108	3,210
Transmission & Distribution Cost and Others	8,134	8,036	(98)
UFG Disallowance	0	(5)	(5)
Depreciation	5,098	4,948	(150)
Return on Net Operating Fixed Assets	6,652	6,463	(189)
Total Revenue Requirement	**120,783**	**123,550**	**2,767**
Total Revenue Available	**120,790**	**122,554**	**1,764**
Surplus / (Shortfall)	**8**	**(996)**	**(1,004)**
Average Prescribed Price (Rs/MMBTU)	**211.98**	**216.82**	**4.84**

4.2.9 Historical Analysis (5 years)

4.2.9.1 Summary of Revenue Requirements

The determinations of the Authority are based on the principle of allowing only prudent and justified operating & capital expenditure and with a view to increase operational efficiency combined with better service quality to consumers. These measures have resulted in actual cost reduction of about Rs. 6.65 billion in five years (FY 2003-04 to FY 2007-08), benefit of which has been passed on to the consumers and Government. **Table 4.5** and **4.6** show behavior of SSGCL and SNGPL's cost items per MMBTU and other major elements of the revenue requirements. The trend of three major elements of revenue requirements have also been depicted in **Fig 4.5** and **4.6**.

Table 4.5: Summary of Revenue Requirement-Historical Comparison-SSGCL

(Rs. /MMBTU)

Particulars	2003-04 Actual	2004-05 Actual	2005-06 Actual	2006-07 Actual	2007-08 Estimated
Volume (BBTU)	310,628	329,359	338,126	335,363	404,884
Cost of Gas	124.63	142.13	176.40	188.56	192.66
T&D Cost and Depreciation	16.40	16.89	18.21	16.84	19.33
Return on Assets	8.23	8.40	9.37	11.10	12.81
Other Income	(5.64)	(7.63)	(13.47)	(16.61)	(12.49)
Average Prescribed Price	143.62	159.80	190.66	199.89	212.31
Average Sale Price	152.45	165.10	196.83	221.48	212.39
Gas Development Surcharge	8.83	5.30	6.17	21.59	0.08

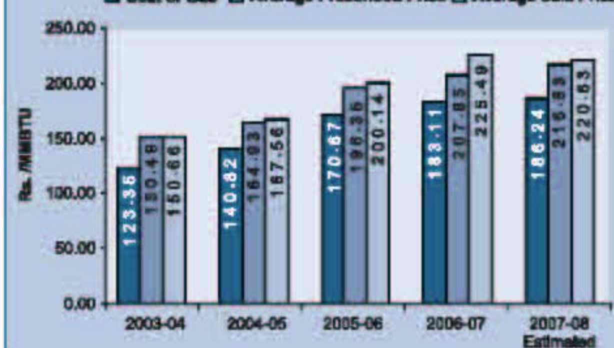
Table 4.6: Summary of Revenue Requirement-Historical Comparison - SNGPL

(Rs. /MMBTU)

Particulars	2003-04 Actual	2004-05 Actual	2005-06 Actual	2006-07 Actual	2007-08 Estimated
Volume (BBTU)	426,636	505,543	539,099	541,589	559,003
Cost of Gas	123.35	140.82	170.67	183.11	186.24
T&D Cost and Depreciation	20.19	17.59	18.51	17.94	23.23
Return on Assets	11.32	10.70	10.66	11.13	11.56
Other Income	(4.37)	(4.18)	(3.55)	(4.33)	(4.20)
Average Prescribed Price	150.49	164.93	196.35	207.85	216.82
Average Sale Price	150.66	167.56	200.14	225.49	220.63
Gas Development Surcharge	0.17	2.64	3.79	17.64	3.81

Fig 4.5: Major Elements of Revenue Requirement-SSGCL

Fig 4.6: Major Elements of Revenue Requirement-SNGPL



4.2.9.2 Cost of Gas (Historical Analysis)

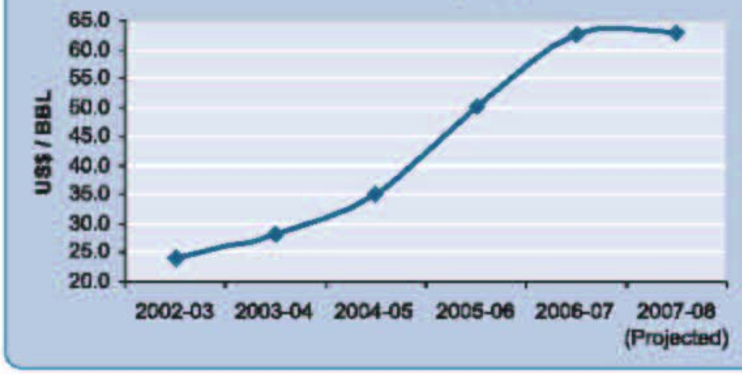
Table 4.7: Weighted Average C&F Price of Basket of Imported Crude Oil

Well-head Gas Price Effective Period	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08 (Projected)*
July-December ($/BBL)	22.22	28.35	32.35	43.98	60.85	60.08
January-June ($/BBL)	26.11	28.17	38.06	56.19	64.54	65.49
Average ($/BBL)	24.17	28.26	35.19	50.08	62.69	62.79
Increase ($/BBL) year to year	-	4.09	6.93	14.89	12.61	0.10
% Increase year to year	-	17%	25%	42%	25%	0.16%
Cumulative Increase %	-	17%	46%	107%	159%	160%

* *Projections were made in May, 2007 subsequent indications are that actual price increase may be much higher.*

The cost of gas i.e. the Well-head prices paid to the producers is a major part of the total prescribed price of the two utilities. Since it is indexed to the international price of crude oil/fuel oil, it has been rapidly growing in the past five years due to sharp increase in the world oil prices as shown in **Table 4.7**. It has, therefore, necessitated increase in the prescribed prices of the utilities.

Fig 4.7: International Crude Oil Prices (C&F)



The average international prices of crude oil have risen during last 5 years from US$ 24.17/BBL in FY 2002-03 to US$ 62.69/BBL in FY 2006-07, and were projected to increase to US$ 62.79/BBL in 2007-08 as shown in **Fig 4.7**. (This projection was made in May 2007. However, subsequent market behavior shows that actually the average price in 2007-08 could exceed US$ 72.0/BBL.)

The cost of input gas into SSGCL and SNGPL system is an uncontrollable factor which depends on the pricing parameters of various gas fields. **Table 4.8** shows the total revenue requirement demanded by both the utilities and saving to consumers, *excluding* cost of gas, owing to OGRA's intervention. These savings have also been graphically shown in **Fig 4.8**.

Fig 4.8: Savings due to OGRA Intervention

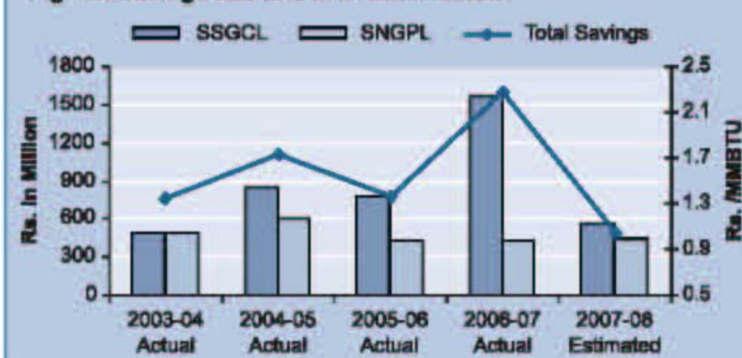


Table 4.8: Summary of Cost Reductions due to OGRA Intervention

(Rs. in Million)

	2003-04 Actual		2004-05 Actual		2005-06 Actual		2006-07 Actual		2007-08 Estimated	
	SNGPL	**SSGCL**	**SNGPL**	**SSGCL**	**SNGPL**	**SSGCL**	**SNGPL**	**SSGCL**	**SNGPL**	**SSGCL**
Demanded	8,144	8,144	14,900	9,181	16,182	10,151	16,179	10,934	19,885	13,581
Allowed	7,651	7,652	14,297	8,330	15,756	9,374	15,746	9,369	19,442	13,014
Saving	493	492	603	851	426	777	433	1,565	443	567
Total Savings		**985**		**1,454**		**1,203**		**1,998**		**1,010**
Savings Rs./MMBTU		**1.34**		**1.74**		**1.37**		**2.28**		**1.05**

4.2.10 Notification of Prescribed and Sale Prices (Natural Gas Sector)

Under the OGRA Ordinance, 2002 the Authority is required to notify the Prescribed Prices for each category of consumers of natural gas of both the gas companies in order to enable each licensee to achieve the revenue requirement as determined by the Authority. During the year under review, the Authority issued two notifications each of Prescribed Prices in respect of FY 2006-07 and FY 2007-08, on the basis of estimated Revenue Requirements of SSGCL and SNGPL.

Pursuant to the provision of the OGRA Ordinance, the Federal Government advised the sale prices for various categories of consumers, after adjustment of Gas Development Surcharge in the Prescribed Prices determined by the Authority. The Authority notified these sale prices on June 30, 2006 which remained effective from July 01, 2006 till January 31, 2007. The sale prices were then revised by the Government effective from February 01, 2007, and notified accordingly by OGRA.

4.2.11 Uniform System of Accounts (USOA)

Pursuant to Section 6(2) (c) of the OGRA Ordinance, 2002, OGRA had notified (Uniform Accounting) Regulations, 2003, on February 17, 2004, to be made effective from July 01, 2005. Under these Regulations, the utilities are obligated to file separate quarterly, half-yearly and annual accounts for transmission, distribution and sale activities, thus effectively ring-fencing their operations. The separation of accounts will enable OGRA to analyze the cost of each regulated activity separately. It will also ensure effective comparability of SSGCL and SNGPL owing to uniformity of accounting policies.

SSGCL has implemented the Oracle system and is generating reports from the system which are being vetted by OGRA, while SNGPL is in the process of implementing the Oracle based system.

4.2.12 Liquefied Petroleum Gas (LPG)'s Producer Pricing

The Federal Government, in December, 2006 approved the procedure/formula for fixation of maximum base-stock price of LPG to be determined and announced by OGRA, by 3rd day of every month, as under:

- FOB Saudi ARAMCO Contract Price (CP) for Propane and Butane, published in PLATTs for the previous month taking Propane-Butane ratio equal to 40:60.
- The LPG price as worked out in US Dollars under (i) above shall be converted into Pak Rupees for each month, using monthly average of the weighted average exchange rate compiled daily by the State Bank of Pakistan for the previous month.
- Custom duty on import of LPG should be deemed as zero-rated.

The Federal Government also decided that OGRA will monitor / take measures to keep the profit margin of middlemen at reasonable level. For this purpose, OGRA computes the reasonable consumer price of LPG per article 3.4.2 of LPG policy, based on the following:

- Import Parity Price
- Producer Price
- Audited accounts of LPG marketing companies for the last two years
- Marketing company's gross margin
- Retailer's gross margin and freight/ transport cost
- Mix of locally produced LPG Vs. imported LPG

Fig 4.9: LPG Price Comparison

The comparison of LPG prices i.e. Producer Price, Average Consumer Price and Reasonable Price during FY 2006-07 is show in Fig 4.9.

4.2.13 Oil Pricing

Federal Government mandated OGRA on March 02, 2006, to fix prices of petroleum products namely MS 87 RON, HOBC, Kerosene Oil, Light Diesel Oil, JP - 1 and JP-4, w.e.f. April 01, 2006, in accordance with the prescribed formula, under Section 6(2) (r) and Section 21(2)(b) of Oil and Gas Regulatory Authority Ordinance 2002, which are reproduced below:

A meeting of OGRA Officials with OMC's at OGRA Office, Islamabad

Section 6(2) (r): administer or establish prices for those categories of petroleum for which the Federal Government establishes prices and may delegate the function to the Authority from time to time, subject to :

(i) Section 21, and
(ii) Any existing contract or agreement specifying prices:

Section 21(1): The Federal Government may, as and when it considers necessary, issue policy guidelines to the Authority on matter of policy not inconsistent with the provisions of this Ordinance or the rules and the Authority shall comply with the policy guidelines in the exercise of its powers and functions and in making decisions.

Section 21(2) (b): pricing of petroleum including development surcharge as defined in Section 8 and the petroleum development levy as defined in the Petroleum Products (Petroleum Development Levy) Ordinance, 1961 (XXV of 1961)

The Federal Government has also issued policy guidelines to the Authority in respect of formulae for computing the said prices, and has, *inter-alia* advised that the ex-refinery and ex-depot prices will be notified after consultation with the Federal Government.

The consumer prices are being notified by OGRA on fortnightly basis, effective from 1st and 16th of each month.

Briefly, under the said pricing formula the ex-depot sale prices are being computed as under:

- Ex-refinery import parity price, computed per formula approved by ECC on Dec 23, 2000 (vis-à-vis the then formula) and the subsequent modifications made from time to time.
- Excise duty on petroleum products as per CBR notifications.
- Petroleum Development Levy (PDL) as notified by Ministry of Petroleum & Natural Resources (MP&NR).
- Inland Freight Equalization Margin (IFEM) as recommended by Oil Companies Advisory Committee (OCAC) under self-management system.
- The 3.5% Distribution Margin and Dealer Commission at 4% per formula decided by the Federal Government.
- General Sales Tax @ 15% of depot price on the amount including all above elements.

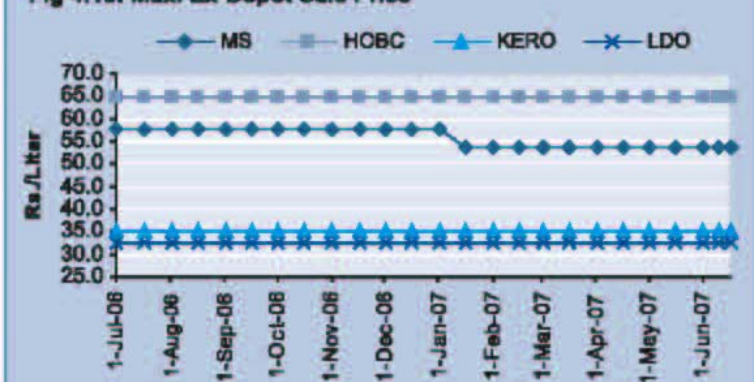
The Federal Government decides to increase / decrease / maintain the consumer prices by making adjustment in PDL through its notification issued under Petroleum Products (Petroleum Development Levy) Ordinance, 1961 (XXV of 1961).

PDL is an integral part of ex-depot prices of petroleum products. Federal Government advises PDL on fortnightly basis to OGRA. Federal Government uses PDL component to increase/decrease or maintain the petroleum product prices. The schedule of the PDL notified by Federal Government during 2006-07 is at **Appendix-IV**.

IFEM mechanism is used to equalize freight cost of regulated fuel products throughout the country despite disparity in transportation costs. Settlements between OMCs & Refineries under IFEM mechanism are being carried out through auditors on quarterly basis. OMCs pass refinery freight to refineries through fortnightly billing on uplifted products. OGRA has now directed OMC's / PARCO / ARL to furnish certificates of actual transportation cost for current months by the end of subsequent month, duly verified by their respective Chief Executives. OGRA has also decided that independent IFEM audit will also be conducted as and when required.

The price break up of ex-depot sale prices of petroleum products notified by OGRA during the 2006-07 is given in **Fig 4.10**.

Fig 4.10: Max. Ex-Depot Sale Price



4.2.14 Approval of Agreements

The following agreements of two gas utilities were received and approved by the Authority after necessary process:

4.2.14.1 Gas Sale Agreements (GSA) between Producers & Licensees

(a) Second amendment to Bhit field GSA between ENI Pakistan Limited and SSGCL.

(b) Gas Sale/Purchase Agreement for Pindori field between Pakistan Oil Field Limited (POL) and SNGPL.

(c) Gas Sale/Purchase Agreement for Turkwal field between POL and SNGPL.

(d) Gas Sale/Purchase Agreement for Dhulian field between POL and SNGPL.

(e) Gas Sale/Purchase Agreement for Pariwali field between POL and SNGPL.

(f) Amendment No.2 to Sawan Gas Sales Agreement between OMV and SNGPL.

(g) Term Sheet for Gas Sales and Purchase Agreement in respect of Bobi gas field between OGDCL and SSGCL.

4.2.14.2 Gas Sale/Supply Agreements between Licensees & Retail Consumers

(a) Gas Supply contract between SNGPL and D.G. Khan Cement Company Limited for its plant at Chakwal.

(b) Gas Sale Agreement between SSGCL and Tuwairqi Steel Mills Limited, Karachi.

(c) Gas Sale Agreement between SNGPL and Orient Power Company Limited for power plant at Pattoki, District Kasur.

(d) Gas Sale Agreement between SNGPL and Saif Power Limited for power plant at Sahiwal.

(e) Gas Sale Agreement between SNGPL and Sapphire Electric Company Limited for power plant near Muridke, District Lahore.

(f) Gas Sale Agreement between SNGPL and Halmore Power Generation Company (Private) Limited, for power plant at Bhikki, Punjab.

(g) Amendment No.1 to GSA between SNGPL and Pak American Fertilizer Limited.

(h) Gas Sale and Purchase Agreement between SNGPL and Engro Chemical Pakistan Limited.

4.2.14.3 Gas Contract between Associated Companies

Contract between SSGCL and SNGPL for Hot Tapping & Construction of SMS Assembly on 36" Dia SNGPL Transmission Main from Qadirpur Gas Field for Supply of gas to Ubauro Town, Distt, Jacobabad.

4.2.15 Projects Approved

Like previous years, both the gas licensees embarked on transmission and distribution activities this year in accordance with their plans. They conceived transmission pipeline projects, based on supply of gas from various sources and the demand of gas from different categories of consumers, and sought approval of the Authority under Rule 20 (xviii) of Natural Gas Licensing Rules, 2002. Evaluation of these projects was carried out to ensure prudence of the investment based on viability and economic efficiency extending maximum benefits to the system and consumers. The projects were approved in due time, with modifications where required.

As far as distribution is concerned, SSGCL and SNGPL undertook projects to expand their distribution network, increasing their respective customer base.

Details of the projects of SSGCL and SNGPL are as follows:

Projects of SSGCL

4.2.15.1 Transmission Projects

i) Pipeline from Zarghoon to Quetta

SSGCL submitted its 12" diameter x 64 Km Zarghoon-Quetta Pipeline Project, initially, as a component of its programme known as GIREP-II, for approval of the Authority. The delivery point of the field was to be finalized by the Federal Government. In September 2006, the Federal Government decided that field gate would be the delivery point subject to the condition that the producer would contribute US$ 4 million towards the pipeline cost. Zarghoon Gas Field is owned by Bolan Joint Venture-a consortium of Mari Gas Company Limited, SPUD (Australia), PKP Exploration Limited and Government Holding Private Limited. This pipeline will provide additional gas volume of 20-25 MMcfd to Quetta region which would help to cover the shortfall during winter season. The Authority approved the pipeline in November 2006 subject to (i) execution of the initialed Gas Supply Agreement and (ii) Contribution of US$ 4 million by Bolan Joint Venture under Pipeline Contribution Agreement with SSGCL.

Transmission line being lowered in trench

ii) Quetta Pipeline Capacity Expansion Project-III

As directed by the Authority in its determination for FY 2004-05 dated May 19, 2004, SSGCL formulated Quetta Pipeline Capacity Expansion Project-III (QPCEP-III) with the objective to overcome the pressure drop problem during winter season in the Quetta region and submitted in April 2006 for approval of OGRA. The project comprised of following components:

Sr. No	Quetta Pipeline Capacity Expansion Project Components	Phase	Increase in Capacity MMcfd
1.	Laying of 18" diameter of pipeline from Abe-e-gum to Mach	I	97
2.	Laying of 18" diameter pipeline from Mach to Kolpur Loopline and 18" diameter of pipeline from Dingra to Sibi and Revamping of Sibi Compressor	II	107
3.	Laying of 18" diameter of pipeline from Dhadar to Abe-e-gum	III	142
4.	Laying of 18" diameter of pipeline from Loop Shikarpur Regulator to Jaccobabad.	IV	159
5.	Laying of 18" diameter of pipeline from Jacobabad to Sibi	V (Part I)	191
6.	Additional Compressor at Sibi (Future Proposal)	V (Part II)	242

After evaluation and establishing the prudence of the project, the Authority formally approved Phase-I, Phase-II and Phase-III of the project at an estimated cost of Rs. 2,563 million with the direction to SSGCL that the company should make every effort to complete the approved phases on priority basis so that pressure drop problems confronted by the consumers of Quetta and adjoining areas could be resolved and benefits of augmented gas supply passed on to them as soon as possible. The Company had informed that Phase-IV and Phase-V would be reviewed in the light of availability of gas from Zarghoon Gas Field.

iii) Loopline from Bhit / Bajara to Karachi Terminal

SSGCL submitted this project initially in February 2005 for approval of the Authority. The loopline has been designed to absorb 240 MMcfd gas additionally available from Zamzama (150 MMcfd) and Bhit (90 MMcfd). The project entails laying of 200 Km of 24" diameter pipeline from Bajara to Karachi Terminal, thereby strengthening IRBP System which presently has 18" diameter and 20" diameter pipelines running from North to the South. As the evaluation of the project established its prudence, the Authority granted the approval of this

Work under progress at 24" diameter Bajara-Karachi Pipeline project in December 2005 at an estimated cost of Rs. 4,724 million. Out of this total cost, Rs. 3,600 million were included provisionally by the Authority in the determination of Estimated Revenue Requirement for FY 2006-07.

iv) Loopline from HQ2 (Nawabshah) to Tando Adam

This loopline is Phase-III of the Sanghar-Hyderabad-Karachi Pipeline. Originally, this Phase had been designed as Loopline of Sanghar-Hyderabad-Karachi Pipeline from HQ2 to Masu and from downstream of FJFC Offtake to Malir, to cater for additional 90 MMcfd of Sawan gas and 30 MMcfd gas from OGDCL's Sanjhoro gas field located in Sanghar area, at an estimated cost of Rs. 3,024 million. Out of this total estimated amount, a sum of Rs. 1,620 million, projected by the company in its petition for determination of Estimated Revenue Requirement for FY 2006-07, was provisionally allowed by the Authority. The Authority took up the matter with Federal Government for clarification regarding allocation of gas to SSGCL from Sawan Gas Field. The Federal Government clarified that SSGCL would be receiving 40 MMcfd gas from January 01, 2007 and not 90 MMcfd as expected by SSGCL over and above 80 MMcfd gas being supplied currently from Sawan Gas Field. On the basis of clarification of the Federal Government, the Authority held the allowed expense of Rs. 1,620 million in abeyance and directed SSGCL to submit the revised project keeping in view the changed gas availability scenario.

As directed by the Authority, the company submitted the revised project under the title "24" diameter x 84 Km Loopline from HQ2 to Tando Adam". The revised loopline has been planned to absorb 78 MMcfd gas including 40 MMcfd additional gas from Sawan Gas Field, 30 MMcfd from Sanjhoro Gas Field and 8 MMcfd from Bobi Gas Field. This change as a result of vigilance on part of OGRA helped to reduce the cost of the project from Rs. 3,024 million to Rs. 1,100 million. The Authority, after analysis of the revised project, granted approval.

Ditching Machine at work

4.2.15.2 Distribution Projects

i) 20" Diameter Spur-line from Khyaban-e-Ittehad to Desalination Plant

The company included this project in its petition for determination of Estimated Revenue Requirement for FY 2005-06 at an estimated cost of Rs. 292 million. As evaluation of the project established the prudence of the proposed project, the Authority allowed the expense of the project. The project envisaged to supply gas to the Desalination Plant at DHA, Karachi and beach front expansion to cater for the needs of the area. The company, later on, pended the project for one year and included this in its petition for determination of Estimated Revenue Requirement for FY 2006-07 at an estimated cost of Rs. 292 million as carry-over expenditure. The Authority allowed the same.

ii) Winder Pipeline, Hub

SSGCL envisaged this 12″ diameter x 54 Km Supply Main to meet gas demand of new customers in Winder Industrial Zone at an estimated cost of Rs. 552 million. The project will be financed jointly by GOP, Provincial Government, Industrialists and SSGCL, 25% each. The project will be completed in June 2008. Out of Rs. 552 million, the company projected Rs. 500 million in its petition for determination of Estimated Revenue Requirement for FY 2007-08. The Authority after necessary evaluation, approved the project, allowing 25% of the total cost i.e. Rs. 125 million as part of the rate base for FY 2007-08.

Projects of SNGPL

4.2.15.3 Transmission Projects

i) Hattar to Abbottabad/Mansehra Loopline

In pursuance of Rule 20(xviii) of the Natural Gas Licensing Rules 2002, SNGPL sought approval to augment its existing Hattar-Abbottabad/Mansehra transmission segment. Augmentation and rehabilitation is regular requirement of the operating companies to meet the growing demand of natural gas. The gas demand in Abbottabad region has gone up and existing pipeline capacity is not sufficient to cater for the demand, therefore gas consumers in the Abbottabad region are facing severe gas pressure drop situation, especially in the winter season. In view of this situation, the Authority approved the proposed augmentation plan of SNGPL.

ii) Project IX

SNGPL has envisaged its mega Gas Infrastructure Development Project-IX on the basis of commercial supplies (200-250 MMcfd) from Gurguri Gas Field (operated by MOL) and diverting gas supplies of South to consumers in and around Lahore by curtailing gas supplies to Kot Addu Power Plant and Muzzafar Garh Plant due to their low efficiency. The planned project will be executed in two phases.

Phase-I

Project IX (Phase-I) comprises laying a pipeline from Gurgury Gas Field to Kohat-Nowshera pipeline. The Authority, on the basis of cost effectiveness and viable internal rate of return, approved the construction of 24″ diameter-140 Km of Gurgury-Kohat-Nowshera pipeline with an estimated cost of Rs.3,222 million, which entails 200-250 MMcfd of commercial gas supplies to the SNGPL's transmission main grid. Major advantages of injection of gas from Gurgury gas field are :-

(i) Direct gas availability to Northern demand nodes for example: Peshawar, Mardan, Wah and Abbottabad.

(ii) Significant savings in cost of transmission and compression fuel obviating the need to transmit equivalent quantity of gas from South to North.

(iii) Operational flexibility in gas load management in northern areas of the country.

Phase-II

Project-IX Phase-II aims at enhancement of system capacity between Qadirpur- Rawan and Lahore, from 300 to 650 MMcfd, relocation and addition of gas compressors, on free flow basis to meet the consumption requirements of new IPPs in and around Lahore and to meet the additional load of Sunder Industrial Estate (Lahore). In the wake of increasing demand of natural gas in and around Lahore region and feasibility report submitted by the SNGPL based on gas free flow phenomenon, the Authority approved the project in March 2007 at an estimated cost of Rs.8,681 million. As the project has a mega infrastructure, the Authority further decided that for the purpose of Revenue Requirement, actual costs of various approved project components certified as having been prudently incurred by the company's external auditors along with a certificate to the effect that all materials have been procured in a competitive and transparent manner, in compliance with PPRA Rules, 2004, shall be adopted.

iii) Rawat-Murree Pipeline

On the directives of the President of Pakistan, SNGPL planned to lay 12 inch diameter, 60 Km pipeline from Rawat to Murree, having enough capacity to meet the gas demand of area for at least ten years. Present demand for Murree is being considered as 2.5 MMcfd whereas the pipeline has been designed to cater for 22 MMcfd demand. The Authority during evaluation of the Revenue Requirement for the year 2006-07, approved the SNGPL's plan to connect Murree with the company's main grid through 12 inch diameter 60 Km pipeline at an estimated cost of Rs. 472 million.

A view of ROW in Murree Hills

iv) Scrapping and Phasing out of Saturn Type Compressors

In order to maintain sustainable supply of gas at the door step of consumers under licence obligations, compression in gas transmission is applied. For this purpose, SNGPL purchased Saturn type Gas Turbines during the years (1967-70) to boost up and maintain the gas pressure in the system. As the technology had become obsolete, the vendors and Original Equipment Manufacturer (OEM) were hesitant to provide technical support. Hence, the operational reliability of these turbines had become questionable.

Keeping in view the operational requirements and need for sustainable supply of natural gas to the north of the country and to meet enhanced gas loads, OGRA, during November, 2006, had approved the company's proposal of scrapping and phasing out thirty seven (37) years old out-lived Saturn type gas compressors in three phases. During first phase (FY 2006-07 to FY 2007-08), the Authority has approved an amount of Rs.2,284 million in order to procure higher rating gas compressors on International Competitive Bidding (ICB) basis, which will replace existing fourteen Saturn type gas turbines.

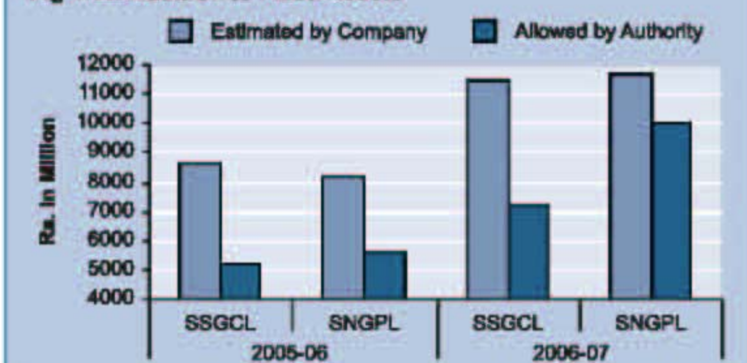
4.2.16 Addition of Network / Assets as Per Revenue Requirement

On the basis of the revenue requirement approval of the Authority, the licensees expand their transmission and distribution network, connect their system with new fields, towns and villages, thereby increasing their customer base. The gas utility companies spend a considerable amount of money for additions to Fixed Assets (including network). OGRA allows only such capital investments, which meet the criteria of efficiency, economy and prudence. Based on this principle, details of additions to fixed assets allowed by the Authority and increase in consumer base, during FY 2006-07, in respect of both the companies are given below.

4.2.16.1 Increase in Assets

OGRA allowed SSGCL and SNGPL increase in assets of Rs.7,174 million and Rs.9,987 million respectively against the companies' estimates of Rs.11,467 million and Rs.11,699 million respectively for FY 2006-07 in their Estimated Revenue Requirement. The increase in assets estimated by the companies and allowed by OGRA in the years 2005-06 and 2006-07 are shown in **Fig 4.11**

Fig 4.11: Addition to Fixed Assets



4.2.16.2 Addition in Transmission and Distribution Network

The transmission network of SSGCL and SNGPL has expanded by 228 Km and 485 Km and their distribution network by 2,290 Km and 5,424 Km respectively during FY 2006-07. **Fig 4.12** and **4.13** show the province-wise break-down of increase in transmission and distribution network of SSGCL and **Fig 4.14** and **4.15** of SNGPL, during FY 2006-07.

Fig 4.12: Addition in Transmission Network (Km)-SSGCL

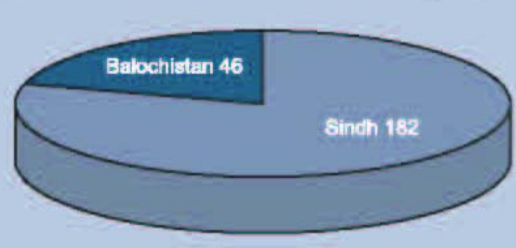


Fig 4.13: Addition in Distribution Network (Km)-SSGCL

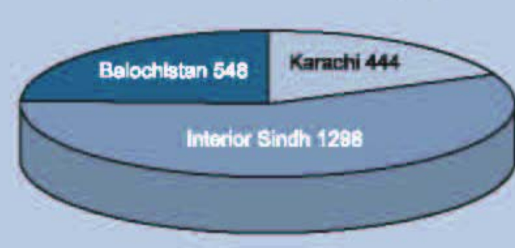


Fig 4.14: Addition In Transmission Network (Km)-SNGPL

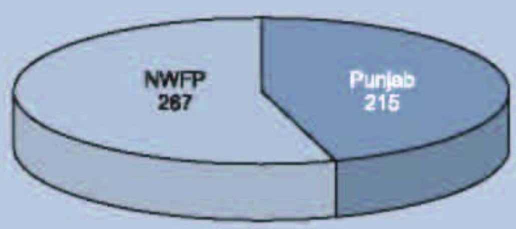
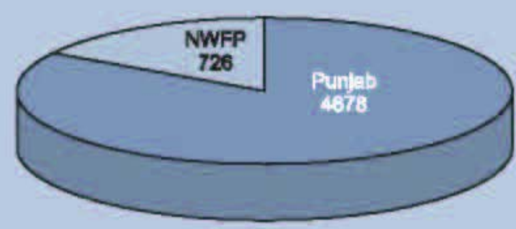


Fig 4.15: Addition In Distribution Network (Km)-SNGPL



4.2.16.3 Addition in Number of Consumers

During FY 2006-07, SSGCL has added 92,139 and SNGPL 238,942 consumers to their network. **Table 4.9** shows the increase in the number of consumers in their respective regions of operation, category-wise during FY 2006-07.

Table 4.9: Number of Consumers Added

(Number)

Company	SSGCL			SNGPL			Total
Category	**Karachi**	**Interior Sindh**	**Balochistan**	**Punjab**	**NWFP**	**AJK**	
Domestic	49,644	28,646	11,832	201,549	32,062	877	324,610
Commercial	1,322	268	130	3,253	440	19	5,432
Industrial	221	70	06	668	74	-	1,039
Total	**51,187**	**28,984**	**11,698**	**205,470**	**32,576**	**896**	**331,081**

4.2.16.4 New Towns and Villages Connected

During FY 2006-07 SSGCL and SNGPL have connected 220 and 182 new towns and villages to their respective networks. Region-wise break-down of new towns and villages is given in **Fig 4.16** and **4.17**.

Fig 4.16: New Towns and Villages Added-SSGCL

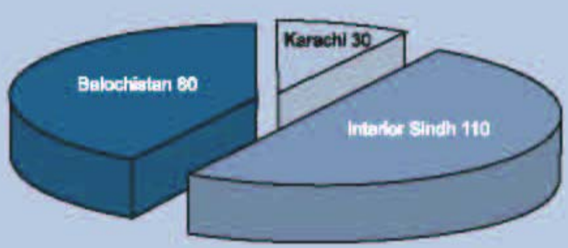
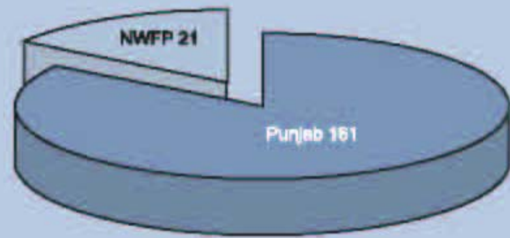


Fig 4.17: New Towns and Villages Added-SNGPL



4.3 Liquefied Petroleum Gas (LPG)

4.3.1 Regulation

The regulation of LPG activities was transferred to OGRA from Ministry of Petroleum and Natural Resources on March 15, 2003, empowering OGRA to carry out regulatory functions under the LPG (Production and Distribution) Rules 2001.

A view of the LPG Storage Tanks

The regulatory functions of OGRA include:-

- Grant of licence for construction of LPG production, storage & filling plants, and auto refueling stations.
- Grant of production licence for production/ extraction of LPG from Oil/Gas.
- Grant of marketing licence for sale and distribution of LPG.
- Grant of operational licence for auto refueling stations (filling LPG in automotive cylinders).
- Appointment of third party inspectors to verify conformity of LPG works to the laid down standards for the new licensees.
- Regular periodic inspection of LPG facilities to ensure their conformity with the laid down standards.
- Monitoring supply of mandatory quota of LPG to Northern Areas, FATA, Hilly areas, AJK and Balochistan.
- Monitoring and determination of reasonability of prices.
- Action against unauthorized activities like decanting, etc.
- Redressal of consumer complaints and resolution of disputes between or among the licensees.

4.3.2 LPG Licences and Operating Rules

OGRA is responsible for issuing licences to construct and operate LPG production, storage & filling facilities and refueling stations under the LPG (Production and Distribution) Rules, 2001. The licence is granted in two stages for an overall period of 15 years. A provisional licence is granted for one year for the construction of the LPG facilities. The licence for operation is granted after completion of works to the satisfaction of Authority.

4.3.3 Licensing Procedure

Any person can apply for grant of a licence to the Authority on the prescribed Form, available free of cost from

OGRA as well as on its website (www.ogra.org.pk), along with the requisite fee of Rs. 100,000/- and other related documents, as required under the rules.

Application for licence is evaluated on the basis of the following criteria/ requirements:

- Complete application on the prescribed proforma in triplicate.
- Pay Order/Bank Draft of Rs. 100,000/- in favour of Oil & Gas Regulatory Authority, as licence fee, (payable at Islamabad)
- Proof of registration of the company/firm (company incorporation certificate).
- Memorandum and Article of Association or Partnership deed/Sole proprietorship.
- Attested copies of ID cards of all Directors/Partners.
- Location of the tentative/proposed site.
- Financial Competence Certificate.
- Technical competence of the company supported by plant design, specifications and layout approved by OGRA's third party inspector, M/S Enar Petrotech Services (Pvt) Limited.
- Last three year's Audited Reports.
- Submission of Work Program to be executed.

A licence is initially granted for a period of one year and based on completion of work to the satisfaction of the Authority, the licence for operation of plant is granted under the LPG (Production and Distribution) Rules, 2001.

OGRA has simplified the procedure for grant of LPG licence and normally a licence is granted within four weeks. However it can be processed even in a shorter period provided all the requisite documents are furnished. Investors are further provided comfort through one window facility where prompt guidance and information is provided to the applicants.

4.3.4 Investment in the LPG Sector

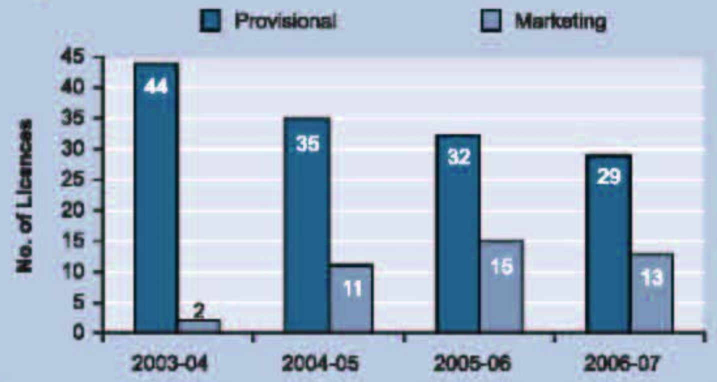
OGRA has played an impressive role in attracting investment in the LPG supply and distribution infrastructure. As of June 30, 2007, there were ten (10) LPG producing companies and sixty (60) LPG marketing companies operating in the country while sixtyone (61) licences for the construction of storage and filling facilities have been issued. An investment of approx. Rs.11 billion has so far been made in the sector. The investment is expected to increase

Night view of a LPG Plant

substantially in future, with the introduction of LPG in the automotive sector.

During the year, OGRA issued thirteen (13) licences for marketing of LPG while twenty nine (29) licences have been issued for construction of LPG storage and filling facilities at various locations. The progress in issue of LPG licences is given in Fig 4.18.

Fig 4.18: LPG Licences Issued



4.3.5 Regulatory Enforcement

One of the objectives of OGRA is to ensure safe and cost effective supply to consumers. To meet this objective, and the regulatory mechanism in general, the Authority took following steps during the year:

- A checklist of technical parameters for third party inspection for LPG storage and filling plants is provided to new licensee so that the requisite facilities are completed in accordance with the applicable standards.
- Regulatory Framework for use of LPG in motor vehicles was notified along with the amendments in LPG (Production and Distribution) Rules, 2001.
- All LPG marketing companies have been directed to ensure compliance of the laid down LPG standards at their distributor premises and the Provincial governments have also been provided with the checklist on important safety parameters to check the same through the respective DCO's.
- Action against illegal LPG decanting was initiated through the Provincial Governments and public awareness campaign launched in the print media to curb such malpractices. 132 FIR's have been registered against the offenders found involved in illegal decanting of LPG.
- Nineteen (19) inspections of LPG marketing and production facilities were carried out through third party inspectors.
- LPG supplies were monitored to ensure uninterrupted supplies to consumer.
- All LPG marketing companies were monitored to ensure compliance in respect of supply of mandatory quota of LPG according to GOP policy for AJK, FATA and Northern Areas. The quantity of LPG supplied to these areas by LPG marketing companies is forwarded to the concerned Provincial Governments in order to confirm the actual distribution of LPG quantities in the specified areas.
- LPG consumer prices of all LPG companies were monitored and the Authority intervened in accordance, with the provisions of LPG Policy, 2006 to fix reasonable consumer price of LPG, in October, 2006.

4.3.6 Use of LPG in Automotive Sector

The Regulatory Framework for use of LPG in automotive sector was notified after approval by the Federal Government. The salient features of Regulatory Framework are as under:

- Only licenced LPG marketing companies and OMC's (Oil Marketing Companies) are allowed to setup LPG auto refueling stations. A separate licence for each station shall be required. The LPG auto refueling stations shall meet international safety/technical standards (National Fire Protection Association, USA, NFPA-58).
- The auto refueling stations shall be located on a plot measuring not less than 10,000 sq.ft, located on roads/highways with minimum 60 feet width (compatible with standards for existing petrol pumps).
- Only brand new equipments duly authorized by OGRA in accordance with the LPG Policy shall be installed at the refueling stations. Similarly, conversion kits and cylinders, duly approved by OGRA, according to the LPG Policy shall be installed and each licensee shall certify the same.
- OGRA shall monitor the safety standards and other operational requirements to ensure public safety, on regular basis.

4.3.7 Performance of LPG Sector during FY 2006-07

The financial year ending June 30, 2007 was indeed an excellent year as OGRA succeeded in attracting substantial investment in LPG sector as a result of its prudent policies and efficient regulation. Some of the highlights of FY 2006-07 are tabulated below.

Performance of LPG Sector during FY 2006-07

Activity	2006-07
No. of Provisional Licences Issued	29
No. of Marketing Licences Issued	13
LPG Production (M.Tons/Day)	1,525

4.4 Compressed Natural Gas (CNG)

4.4.1 Regulation

Government of Pakistan introduced CNG as an alternative fuel in the country in 1992. CNG (Production & Marketing) Rules, 1992 covering *inter-alia* Safety Code of Practice, are in place for the construction and operation of CNG re-fuelling stations. The regulation of CNG sector was transferred to OGRA on March 15, 2003. OGRA has facilitated the process for grant of licences through simplification of licensing procedure and provision of one window facility for guidance to the investors. Salient regulatory functions of OGRA pertaining to CNG sector are as under:

- Grant of licence for construction of CNG station which *inter-alia* requires the licensee to obtain NOCs from the respective local departments i.e TMO, Civil Defense, Gas Company, Explosives Department etc. and construct/ install CNG station in accordance with the laid down standards.

A view of CNG Station

- Grant of licence for operation after certification of conformity to the laid down technical standards by the third party inspector appointed by the Authority.
- Regular periodic safety inspections of CNG stations.
- Redressal of consumer complaints in accordance with the Complaint Resolution Procedure Regulations, 2003.
- Impose penalties for contravention of the provisions of the OGRA Ordinance 2002, rules and regulations made thereunder, and terms and conditions of a licence or a direction of the Authority.
- Approval of CNG equipment after certification that the equipment meets the requirement of CNG Rules 1992, standard code of practice and any requirement set out as a policy guideline by the Federal Government.

4.4.2 Licensing Procedure

No person can, without first obtaining a licence from OGRA, undertake any activity for the purpose of storing, filling or distributing CNG. OGRA grants the CNG licence in two phases. The procedure for obtaining CNG licence is briefly explained below: -

4.4.2.1 Licence for Construction of CNG Station

Any person can apply for grant of licence to the Authority on the prescribed form available free of cost from OGRA as well as on OGRA website along with the requisite fee of Rs. 25, 000/-. The licence for construction of CNG station is granted under Rule 6 of the CNG (Production & Marketing) Rules, 1992, initially for a period of two years.

4.4.2.2 Licence for Operation/Marketing of CNG Station

The licensee, after the grant of licence for construction of CNG station, has to acquire NOCs from the concerned Federal/Provincial/Local authorities in light of Policy in vogue including a licence from Chief Inspector of Explosives under Rule 18 of CNG Rules 1992, before starting construction of the CNG station. The licensee is required to meet the requisite safety and technical standards as prescribed in the CNG Rules, 1992 for construction of CNG station and installation of equipment.

The licensee, after completing construction of CNG station, requests the Authority for appointment of third party inspector to verify conformity of the CNG works to Standard Code of Practice of CNG (Production & Marketing) Rules, 1992. The Authority appoints third party inspector, which is currently, Hydrocarbon Development Institute of Pakistan (HDIP). Licence for operation/marketing is issued for a period of 15 years after satisfactory report of the third party inspector.

In order to facilitate the applicants, OGRA has simplified the procedure for grant of CNG licence. The licence is normally granted within a fortnight as against the maximum prescribed time limit of one month set by the Government. Investors are further assisted by a one window facility where prompt guidance and information is provided. A total number of almost 6,500 visitors, during the year, were entertained and provided with CNG related information at the one window facility.

OGRA has given focussed attention on conducting effective third party inspections and standardization of CNG equipment to provide comfort to the investors to adhere to the requirements of Safety Code of Practice. The new CNG Rules have already been drafted to effectively regulate the sector in the light of the latest technological developments to ensure safe, reliable and competitive service to consumers.

4.4.3 Investment in CNG Sector

Fig 4.19: Investment and Employment in CNG Sector

In the past few years, petroleum prices have soared, compelling the nations to look for alternative fuels to fill the constantly increasing gap in energy demand and supply. For this reason and also due to the available price differential between CNG and gasoline, CNG sector has shown tremendous growth over the past five years. 1,080 operative CNG stations have been set up bringing investment of more than Rs. 45 billion as shown in **Fig 4.19**. As of 30th June, 2007, 1,450 CNG stations were operating in the country while about 900 were at various stages of completion. During FY 2006-07, the Authority has issued additional 2,218 licences for construction of CNG stations which means further investment of about Rs. 28 billion is in the pipeline.

Pakistan has taken a lead role in developing the CNG infrastructure due to investor friendly policy and regulatory framework, and at present, it is second in the world after Argentina, in terms of vehicle conversion to CNG. As of 30th June, 2007, about 1.2 million CNG vehicles were operating in the country. **Fig 4.20** and **4.21** reflecting the continuous increase in the number of CNG stations and CNG vehicles respectively. In FY 2005-06, the total number of operational CNG stations was 965 which increased to 1,450 in 2006-07 thus showing growth rate of 50% and similarly CNG vehicles rose to 1,200,000 with growth rate of 20% in the same period.

Fig 4.20: CNG Licences Issued

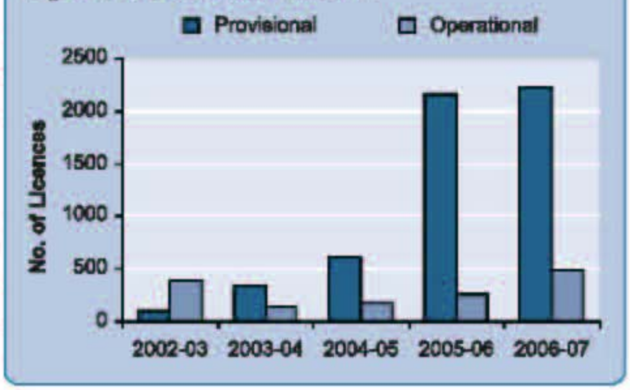
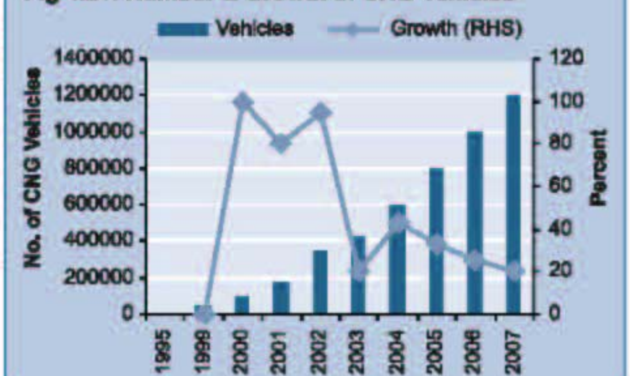


Fig 4.21: Number & Growth of CNG Vehicles



4.4.4 Regulatory Enforcement

a) The system of annual safety inspection of the CNG stations, through third party inspectors streamlined the monitoring process for rectification of safety-related deficiencies. The Authority is in the process of selection of additional third party inspectors in order to speed up the process of annual/pre-commissioning and re-inspection of CNG stations.

b) Fines/penalties were imposed under the CNG Rules 1992, on the licensees involved in repeated safety violations, in addition to disconnection of gas supplies.

c) Regulatory monitoring of conformance of standards for new brands of CNG cylinders and conversion kits as per applicable rules.

CNG Storage Bank

d) Public awareness campaign launched through print media to promote use of approved brands of CNG conversion kits and cylinders to ensure public safety.

e) Surprise inspections to check measurement and safety violations on specific complaints.

f) Meetings with OMCs to ensure compliance of safety regulations/procedures at CNG stations established at their retail outlets.

4.4.5 Local Manufacturing of CNG Equipments

The Authority has always welcomed local investment in manufacturing and assembling of CNG equipments, being a step towards national self reliance and foreign exchange saving. The local manufacturing of CNG equipments including CNG compressors, dispensers, priority panels and CNG conversion kits allows local industry to manufacture and compete with the imported brands. The Authority, during the last few years, has approved five different brands of CNG conversion kits for local manufacturing subject to stringent regulatory criteria. This also includes setting up of a state-of-the-art Kits assembling plant by M/s Landi Renzo, Pakistan under a joint venture agreement by a local company with M/s Landi Renzo, Italy. The Plant has been completed and is expected to start commercial production soon.

CNG Dispenser

4.5 Midstream and Downstream Oil Sector

4.5.1 Regulation

The Federal Government, enforced the provisions of Section 23(3) and 44(3)(a) and (b) of OGRA Ordinance, 2002 with effect from 15th March 2006, empowering the Authority to regulate mid and downstream oil sector in the country under the existing Pakistan Petroleum (Refining, Blending and Marketing) Rules 1971.

Night View of a Refinery

4.5.2 Powers and Functions

The powers and functions transferred to OGRA mainly pertain to the following areas:-

i) Grant of Licences to:

Cross Country Oil Pipeline View across River

- Construct or operate any refinery;
- Construct or operate any pipeline for oil;
- Construct or operate any oil testing facility; oil storage facility (other than storage associated with a refinery); oil blending facility;
- Construct or operate any installation relating to oil;
- Undertake storage of oil; or
- Undertake marketing of refined oil products.
- In consultation with the licensees, specify and review the standards for the equipment and the materials to be used in undertaking regulated activity.
- Promote effective competition and efficiency in the activities within the jurisdiction of the Authority.
- Resolve complaints and other claims against licensees for contravention of the provisions of OGRA Ordinance and rules or regulations, made thereunder.

- Enforce standards and specifications for refined oil products as specified by the Federal Government.

4.5.3 OGRA's Activities in Oil Sector

The details of the activities carried out by the Authority to regulate the mid and downstream oil sector are as under:

4.5.3.1 Formulation of New Draft Rules

During the year under report, the Authority developed the new Rules for the regulated oil sector viz Pakistan Oil (Refining, Blending, Transportation, Storage and Marketing) Rules and circulated them to all stakeholders for their views/comments. The draft Rules were then reviewed and revised based on the comments received from the oil industry and MP&NR, and sent to Federal Government for approval.

4.5.3.2 Enforcement of Technical Standards (Storages)

In order to ensure that the new Oil Marketing Companies observe contemporary international standards, they have been advised to follow the following latest codes for construction of oil terminals/storages, which would be subject to third party inspection by OGRA:

Oil Storage Tanks

- Pakistan Petroleum Act
- API 650 (for Storage Tanks)
- API 610 (for API Pumps)
- NFPA 70 National Electrical Code (for Electrical Installations)

- ISA (for Instrumentation Installation)
- ANSI B. 31.3 (for Piping Work)
- API 520 (for Pressure Relieving System)
- API 521 (for Pressure Relieving System)
- API RP 2001 (for Fire Fighting)
- API RP 2004 (for Fire Fighting)
- NFPA 20 (for Fire Pump)
- NFPA 30 (Flammable & Combustible Liquids)
- ASME Sec VIII (Boiler & Pressure Vessel Code)

4.5.3.3 Preparation of New Technical Standards

The Authority is also in the process of preparing new draft technical standards for oil refineries, oil pipelines, oil storage/terminals in consultation with the licensees.

4.5.3.4 New Licences for Oil Refineries

M/s. Trans Asia Refinery Limited (TARL) is in the process of setting up a refinery with the capacity of 100,000 barrels per day at Karachi, based on relocation of plant currently installed at Naples, Italy, that would bring about an investment of US$ 450 million. Pending issuance of formal licence under the new Oil Rules which are under finalization, the Authority issued regulatory guidelines for construction of the refinery after examining the proposal in light of the Ordinance, policy guidelines given in Import Policy Order 2006 and obtaining MP&NR's observation from policy perspective, *inter-alia* covering the following main areas:

(i) Follow GOP policy on relocation of complete second hand refinery as provided in the import policy order.

(ii) Clearance from the concerned Environmental Protection Agency and other Federal or Provincial agencies in accordance with the applicable laws /rules.

(iii) Compliance with all other applicable laws/ rules for establishment of refinery.

(iv) Conform to the petroleum products' specifications notified by the GOP from time to time and seek guidance from the GOP so as to design and configure the refinery to cater for future specifications/ requirements planned by the GOP.

(v) Compliance with the international safety standards.

(vi) Third Party Inspection of conformity to Technical/Safety Standard after completion of the project.

In addition, the case for issuance of regulatory guidelines to M/s. Indus Refinery Ltd. (IRL) is in process. M/s IRL intends to set up a refinery at Port Qasim with the capacity of 100,000 barrels per day. The project is again a relocation of a refinery from Canada. The estimated cost of the project is about US$ 750 million. Thus, both the projects (i.e. TARL and IRL) would bring estimated investment of US$ 1.2 billion, in the next about three years.

4.5.3.5 New Licences for Oil Marketing Companies

Four applicants, namely: M/s. Fateh Petroleum Ltd., M/s. Anoud Group, M/s. Masood Sons and M/s. Indus Refinery Ltd. applied for grant of licence for establishing new Oil Marketing Companies. The Federal Government has since issued the new criteria for setting up of new OMCs, which *inter-alia* envisages minimum upfront equity of Rs. 3 billion along with investment programme of more than Rs. 6 billion over a period of 3 years for the construction of requisite infrastructure. The applicants were not aware of the new criteria announced by the Government, and they have been advised of the same to enable them review their proposals.

Night View of Modern Retail outlet

4.5.3.6 New Licences for Lube Oil Blending/Reclamation Plants

Six applicants requested for registration of their Lube Oil Blending/Reclamation plants in accordance with Rule 16 of the Pakistan Petroleum (Refining, Blending and Marketing) Rules 1971. The Authority registered these plants after certifying, through HDIP, their conformity to the mandatory technical requirements under the said Rules.

4.6 Complaints Resolution

4.6.1 Complaint Resolution Procedure/Performance

OGRA deals with the complaints against the licensees and their dealers in accordance with the Complaint Resolution Procedure Regulations, 2003 (CRPR), framed under the OGRA Ordinance, 2002. For their expeditious resolution, a dedicated department has been created, which adopts one or more of the following processes:

a) Issuing appropriate directions to the utilities and consumers.

b) Mediating between consumer and service providers.

The nature of complaints mostly are:

- Delay in provision of gas connection.
- Excessive/Estimated billing.
- Low pressure of gas.
- Illegal/ unfair removal of gas meter.
- Alleged tampering / theft charges.
- Late delivery of gas bills and waiver of Late Payment Surcharge.
- Charges against alleged enhancement in delivery pressure.
- Demand of additional security.
- Safety practices.
- Quantity and quality of natural gas, oil, LPG or CNG being supplied.
- Construction of CNG station near residential area.
- Decanting of LPG.
- Discriminatory practices of the service provider.

In accordance with the procedure prescribed in the CRPR, the Authority has designated specific officers for handling complaints with specified jurisdictions. The complaint is first referred to the relevant agency for its comments within a stipulated timeframe. The comments from the agency are then provided to the complainant for his review with the advice that if he is not satisfied with the agency's response, he should give his counter-comments with supporting documents for review by the Designated Officer.

The Designated Officer decides the case taking into account viewpoint of both the parties and providing an opportunity of personal hearing/meeting to both the parties, if needed. Any person, aggrieved with the decision of the Designated Officer, may file an appeal before the Authority under Section 12 of the OGRA Ordinance and the

Authority decides the appeal after providing an opportunity of hearing to the parties, normally within 90 days.

OGRA has also taken the following steps in line with its public friendly approach:

- Follows "OPEN DOOR" Policy for complainants. Visitors can see the concerned officers without prior appointment.
- The affected parties are provided opportunity of hearing before deciding the matter.
- A focal person has been appointed to facilitate the public.
- OGRA publicizes the complaint resolution procedure through media, and also disseminates it on its website.
- The complainant is allowed to file application on plain paper, preferably in the prescribed format.
- The complainant is kept informed of the progress.
- The complainants are guided how to fill the Application form.
- Ensures the following facilities for the visiting public:
    - Reception
    - Seating arrangement
    - Safe drinking water
    - Other Public conveniences
- Treats every one with respect and dignity, irrespective of socio-economic status.
- Process are rule bound, not discretionary.
- Grievances redress procedure is in detailed form.

4.6.2 Complaints and Appeals

During 2006-07 OGRA received 1,743 complaints of which 1,554 were against natural gas, and the remaining 189 were against decanting of LPG, excessive LPG prices, production/sale of sub-standard Lube Oil etc. 1,343 complaints were resolved by the Designated Officers. The sector-wise incidence of Complaints and Appeals during 2006-07 is given in **Fig 4.22**. As natural gas is the most widely used fuel, about 90% of the complaints related to this sector. The status of complaints is given in **Table 4.10**.

Fig 4.22: Composition of Complaints Sector-wise (2006-07)

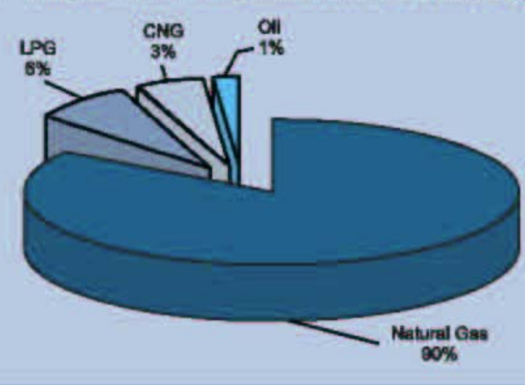


Table 4.10: Status of Complaints and Appeals during 2006-07

(Number)

Complaints Status	Natural Gas	LPG	CNG	OIL	Total
Complaints received	*1,554	105	66	18	1,743
Complaints resolved/disposed	1,195	89	46	13	1,343
Complaints under process	359	16	20	05	400
Appeals to the Authority against decisions of Designated Officer	36	-	-	-	36
Appeals decided by the Authority	23	-	-	-	23
Appeals to High Court against decisions of the Authority	02	-	-	-	02

** Includes 367 complaints carried forward from 2005-06 to 2006-07.*

On OGRA's intervention, gas utilities provided 167 gas connections during FY 2006-07, and relief of Rs. 15.146 million to consumers in gas billing. Further, on receiving complaint of non-provision of gas supply from the residents of a number of localities inhabited by weaker sections of the society. OGRA conducted investigations and found that in 21 cases, the delay was without justification. Therefore, necessary directions were issued and gas has been / is being provided to the people of these localities/areas by SNGPL.

Conscious of the fact that an individual consumer is the weaker party, OGRA strives to protect him from possible excesses by the service providers through the complaint resolution mechanism. OGRA is also persuading the service providers to improve their own complaint handling systems, provide gas connections within stipulated timeframe, improve billing accuracy, ensure expeditious delivery of bills, and provide un-interrupted supply of the right quality with right measurement.

OGRA intervention on consumer complaints resulted in direct benefit/relief to 414 complainants mostly the domestic consumers, during FY 2006-07. However, more important is the positive effect that it is having on companies' overall performance. They are continuously upgrading their own complaint resolution processes, improving the response to complaining consumers qualitatively as well as quantitatively. They have also improved greatly in compliance of prescribed rules and procedures. This is what the ultimate purpose of OGRA complaint redressal system is, and it is gratifying to state that much progress has been made in this direction.

Anticipated Developments Next Year

5. ANTICIPATED DEVELOPMENTS NEXT YEAR

5.1 Regulatory Framework

The Authority has laid a comprehensive regulatory framework of regulatory activities of Natural Gas, Oil, CNG and LPG sectors. The Authority would work on revision of some of the existing rules/regulations as well as formulation of new ones as required under the law. Following further progress is scheduled to be made during FY 2007-08.

5.1.1 Rules

(i) Notification of Pakistan Oil (Refining, Blending, Marketing and Transportation) Rules, 2005 by the Federal Government.

(ii) Submission of Natural Gas (Unauthorised Use) Rules to the Federal Government for approval/notification.

(iii) Submission of Fines and Recovery Rules to the Federal Government for approval/ notification.

(iv) Submission of draft Revised CNG (Production & Marketing) Rules for consultation with the stakeholders.

(v) Submission of Revised LPG (Production & Distribution) Rules for consultation with the stakeholders.

(vi) Submission of draft Fair Competition Rules for consultation with the stakeholders.

5.1.2 Regulations

(i) Formulation and notification of Technical Standards for LNG installations/facilities.

(ii) Circulation of draft Technical Standards in respect of downstream oil sector (refining, blending, storage and pipelines etc.) for consultation with the stakeholders.

(iii) Circulation of draft Regulation on Resolution of Disputes between licensees and between any person and a licensee for consultation with the stakeholders.

5.2 Revenue Requirement

Determination of the revenue requirement of natural gas utilities is one of the more important functions of the Authority. The Authority has recently completed the review of estimated revenue requirement of SSGCL and SNGPL for FY 2006-07 and the determination of their final revenue requirement for FY 2005-06. The Authority shall make the following determinations of both the utilities during next financial year.

(i) Estimated Revenue Requirements for FY 2008-09 after holding public hearings and consultation with all the stakeholders.

(ii) Review of estimated revenue requirements for FY 2007-08 under Section 8 (2) of the Ordinance after incorporating the actual changes in well-head prices of natural gas and other relevant factors on the basis of auditors' initialed accounts for the said financial year.

(iii) Final Revenue Requirement for FY 2006-07 based on the actual audited results.

5.3 Price Notifications

The process of determination and notification of well-head prices of natural gas under Section 6 (2)(w) and prescribed prices of gas companies, consumer prices under Section 8 of OGRA Ordinance will continue. Similarly, determination and notification of POL prices base-stock prices of LPG will also continue in accordance with the Government policy.

5.4 Licensing

5.4.1 Natural Gas

OGRA will continue to process applications for licences under Natural Gas (Licensing) Rules, 2002. Next year, application for gas storage for Lilla Town project is also expected.

5.4.2 LNG

Federal Government has notified Liquefied Natural Gas (LNG) Rules, 2007 on 24th May, 2007. OGRA expects applications for production, transportation and distribution of LNG from prospective investors next year.

5.4.3 LPG

A regulatory framework developed by OGRA for use of LPG in automotive sector has been approved by the Federal Government in July, 2006. Amendments in LPG (Production & Distribution) Rules, 2001 have been notified. This policy decision of the Government is likely to attract substantial investment in setting up of LPG refueling/filling stations. OGRA expects to grant about 20 provisional licences for construction of LPG facilities including automotive fueling stations all over the country during FY 2007-08.

There is considerable investor interest in this sector. Therefore, OGRA's strategy is to continue to promote enhancement of LPG production base, attract substantial investment and regulate the industry efficiently in greater public interest.

5.4.4 CNG

The consumption of CNG as an alternate fuel in automotive sector has increased from 38,886 million Cft in 2005-06 to 67,296 million Cft in 2006-07. This tremendous growth is due to the increase in number of CNG converted vehicles and CNG stations over the years. The Authority expects to grant about 1,000 new provisional licences for construction of CNG stations and more than 300 marketing licences for commercial operations. During FY 2007-08, the total numbers of operational CNG stations is expected to reach 1,800.

5.4.5 Midstream and Downstream Oil Sector

On current indications applications are expected from;

i) Indus Refinery Limited and other new oil refineries

ii) New Oil Marketing Companies including M/s. Fateh Petroleum Ltd., M/s. Anoud Group, M/s. Masood Sons and M/s. Indus Refinery Ltd.

iii) Lube Oil Blending/Reclamation Plants

5.5 Redressal of Public Complaints

One of the fundamental responsibilities of a public utility regulator is provision of cost free and expeditious mechanism of redressing public complaints against the service providers. With the increase in the number of consumers and increase in demand for provision of Natural Gas, Oil, CNG and LPG, public complaints would continue to rise in the coming years. It is anticipated that about 1,500 complaints will be received and processed during FY 2007-08 in accordance with OGRA's Complaint Resolution Procedure Regulations, 2003.

5.6 OGRA Automation Programme/Capacity Building

The Authority intends to lunch a comprehensive "OGRA Automation Programme" covering development of Data-base, Enterprise Resource Planning (ERP) System for all major activities and e-government modules beside other things. The project is aimed at strengthening the existing IT infrastructure to meet current as well as future requirements of the organization for data storage, quick access of information, prompt delivery of reports and availability of in-house data for internal and external use. The aim is to establish and maintain a reliable and consistent database on the energy sectors to have information on various variables at global, regional and local levels and improve credibility and usability of the periodical reports on State of the Regulated activities. The automation would streamline and increase OGRA's day to day operations, its dealing with government and utilities and its interface with public and other stakeholders.

OGRA attaches high priority to the development of its human resource through training to its officers in all relevant disciplines at home and abroad. In this regard, about 50 courses/seminars in technical, management, legal and financial disciplines in the leading institutions like LUMS, Pakistan Institute of Management Sciences etc, and abroad are expected to be attended by OGRA officers

Regulatory Framework

Appendix-I

Rules Notified/Adopted

Sr. No	Rules	Notification Date
(i)	Natural Gas (Licensing) Rules, 2002.	February 26, 2002
(ii)	Natural Gas (Tariff) Rules, 2002.	November 23, 2002
(iii)	Compressed Natural Gas (Production and Marketing) Rules, 1992*.	March 15, 2003
(iv)	Liquefied Petroleum Gas (Production and Distribution) Rules, 2001*.	March 15, 2003
(v)	Pakistan Petroleum (Refining, Blending & Marketing) Rules, 1971*	April 1, 2006
(vi)	Budget Committee Rules, 2004.	December 30, 2004
(vii)	Amendments in LPG (Production & Distribution) Rules, 2001	March 10, 2007
(viii)	Liquefied Natural Gas (LNG) Rules, 2007	May 24, 2007

Note: Rules No. (iii), (iv) and (v) notified by the Ministry of Petroleum and Natural Resources, were adopted under section 44(3) of the Ordinance from the dates given against each.*

Regulations/Standards Notified

Sr. No	Rules	Notification Date
(i)	Complaint Resolution Procedure (Natural Gas, CNG and LPG) Regulations, 2003.	September 3, 2003
(ii)	Performance and Service Standards for Gas Utilities.	September 3, 2003
(iii)	Natural Gas Uniform Accounting Regulations, 2003.	Feb 17, 2004
(iv)	Natural Gas Transmission (Technical Standards) Regulations, 2004.	August 5, 2004
(v)	Natural Gas Distribution (Technical Standards) Regulations, 2004.	August 5, 2004
(vi)	OGRA Financial Regulations, 2005.	January 11, 2005
(vii)	OGRA Service Regulations, 2005.	January 31, 2005

Natural Gas Licences Issued by OGRA

Appendix-II

Sr. No	Company	Type of Licence	Date of Issue
(i)	Sui Northern Gas Pipelines Limited (SNGPL)	Transmission, distribution and sale of natural gas in the province of Punjab, NWFP and Azad Jammu & Kashmir	September 3, 2003
(ii)	Sui Southern Gas Company Limited (SSGCL)	Transmission, distribution and sale of natural gas in the province of Sindh and Balochistan	September 3, 2003
(iii)	Mari Gas Company Limited (MGCL)	Sale of natural gas to Fauji Fertilizer Company Limited (FFCL), Engro Chemical Pakistan Limited (ECPL) and Central Power Generation Company Limited (CPGCL)	August 11, 2004
(iv)	Pakistan Petroleum Limited (PPL)	Sale of natural gas to Central Power Generation Company Limited (WAPDA)	November 23, 2004
(v)	Oil & Gas Development Company Limited (OGDCL)	Sale of natural gas from Bhal Syedan Gas Field	December 30, 2004
(vi)	OGDCL	Sale of natural gas from Nandpur and Panjpir Gas Fields.	December 30, 2004
(vii)	OGDCL	Sale of natural gas from Uch Gas Field.	December 30, 2004
(viii)	Fauji Fertilizer Company Limited*	Transmission of Natural Gas	April 7, 2005
(ix)	Engro Chemicals Pakistan Limited	Transmission of Natural Gas	April 7, 2005
(x)	Central Power Generation Company Limited**	Transmission of Natural Gas	April 14, 2005
(xi)	Fatima Fertilizer Company Limited	Transmission of Natural Gas	April 16, 2007
(xii)	Foundation Power Company Limited	Transmission of Natural Gas	August 27, 2007

* *Includes FFC-I, FFC-II, and unit acquired from Pak-Saudi Fertilizer.*

** *GENCO-II, WAPDA, Guddu Thermal Power Station, Kashmore.*

Appendix-III

Field-wise Well-head Gas Prices				
Sr. No	**Field Name**	**Units**	**Price Effective 01-07-06**	**Price Effective 01-01-07**
1	Adhi	Rs. per MMBTU	88.62	89.90
2	Bhangali	Rs. per MMBTU	124.62	126.06
3	Bhit	$ per MMBTU	3.4563	3.5379
4	Dakhani	Rs. per MMBTU	88.71	89.73
5	Daru	Rs. per MMBTU	77.99	78.89
6	Dhodak	Rs. per MMBTU	177.24	179.30
7	Dhurnal	Rs. per MMBTU	15.73	15.97
8	Hassan	$ per MMBTU	2.3395	2.3302
9	Kadanwari	$ per MMBTU	7.3465	6.9516
10	Kandkot	Rs. per MMBTU	87.62	97.66
11	Loti	Rs. per MMBTU	83.34	84.31
12	Mazarani	$ per MMBTU	1.75	1.75
13	Meyal / Dhulian	Rs. per MMBTU	77.55	78.59
14	Miano	$ per MMBTU	3.2179	3.2939
15	Missakiswal	Rs. per MMBTU	15.98	
16	Nandpur Panjpir	Rs. per MMBTU	224.50	227.10
17	Pariwali	$ per MMBTU	3.4563	3.5379
18	Pindori	$ per MMBTU	3.4563	3.5379
19	Pirkoh	Rs. per MMBTU	83.34	84.31
20	Qadirpur	Rs. per MMBTU	162.54	162.49
21	Sadkal	Rs.per MMBTU	274.22	251.37
22	Sara / Suri	Rs.per MCFT	87.58	88.61
23	Sari Hundi	Rs. per MMBTU	262.60	250.20
24	Sawan	$ per MMBTU	3.2179	3.2939
25	Sui	Rs. per MMBTU	87.62	97.66
26	Turkwal	$ per MMBTU	3.4563	3.5379
27	UCH	$ per MMBTU	3.9223	3.9223
28	Zamzama SNGPL (effective Nov 28, 06)	$ per MMBTU	3.1304	3.2064
29	Zamzama SSGCL	$ per MMBTU	3.0325	3.1088
	Zamzama SSGCL (effective Jan 27, 07)	$ per MMBTU		3.2039
30	Zamzama Wapda/Guddu (effective Nov 28, 06)	$ per MMBTU	3.1709	3.2469
31	Badin Compression	Rs. per MMBTU	128.07	130.04
32	Badin Non-Golarchi Non-Associated	Rs. per MMBTU	262.87	251.79

33	**Ratana**	Rs. per MMBTU	**236.34**	**238.61**
34	**Mari**	Rs. per MMBTU	**36.42**	
35	**Rehmat**	$ per MMBTU	**2.5215**	**2.5202**
36	**Manzalai**	$ per MMBTU		
37	**Chanda**	$ per MMBTU	**2.7168**	**2.7069**
	KHIPRO BLOCK			
38	**Niamat Basal-1 & Siraj South-1**	$ per MMBTU	**2.5295**	**2.5202**
40	**Bilal North - 1 & Bilal - 1**	$ per MMBTU	**2.2386**	**2.2304**
	MIRPURKHAS BLOCK			
42	**Kauser Deep-1, Usman, Umar & Ali-1**	$ per MMBTU	**2.5295**	**2.5202**
43	**Ahmad-1 (effective Dec 05, 2006)**	$ per MMBTU	**2.2386**	
44	**Badin Deep fields**	$ per MMBTU	**3.1225**	**3.1988**
45	**Badin-II, Badin-II Revised, Badin-III (Head of Agreement)**	$ per MMBTU	**3.1225**	**3.1988**
46	**Badar**	$ per MMBTU	**2.2595**	**2.2502**
47	**Makori**	$ per MMBTU	**2.6468**	

Petroleum Development Levy (2006-07)

Appendix-IV

(Rs./Liter)

Product	MS 87 RON	HOBC	KERO	LDO	JP-1	JP-4	JP-8
Period effective							
July 1, 2006	12.67	16.54	0.00	0.00	0.00	3.00	0.00
July 16, 2006	12.15	15.83	0.00	0.00	0.00	3.00	0.00
August 01, 2006	12.50	17.65	0.00	0.00	0.00	3.00	0.00
August 16, 2006	13.24	18.40	0.00	0.00	0.00	3.00	0.00
September 1, 2006	15.08	19.77	0.00	0.00	0.00	3.00	0.00
September 16, 2006	17.30	22.03	0.00	0.00	0.00	3.00	0.00
October 1, 2006	18.94	23.69	0.00	0.00	0.00	3.00	3.00
October 16, 2006	18.88	23.63	0.00	0.00	0.00	3.00	3.00
November 1, 2006	18.86	23.61	0.00	0.00	0.00	3.00	3.00
November 16, 2006	18.60	23.35	0.00	0.00	0.00	3.00	3.00
December 1, 2006	17.79	22.43	0.00	0.00	0.00	3.00	3.00
December 16, 2006	15.86	19.37	0.00	0.00	0.00	3.00	3.00
January 1, 2007	15.75	19.30	0.00	0.00	0.00	3.00	3.00
January 16, 2007	14.85	21.46	0.00	0.00	0.00	3.00	3.00
February 1, 2007	15.35	22.07	0.01	0.26	0.00	3.00	3.00
February 16, 2007	13.30	20.00	0.00	0.00	0.00	3.00	3.00
March 1, 2007	11.77	18.39	0.00	0.00	0.00	3.00	3.00
March 16, 2007	8.40	14.49	0.00	0.00	0.00	3.00	3.00
April 1, 2007	8.36	14.36	0.00	0.00	0.00	3.00	3.00
April 16, 2007	6.71	12.70	0.00	0.00	0.00	3.00	3.00
May 1, 2007	6.22	12.31	0.00	0.00	0.00	3.00	3.00
May 16, 2007	6.19	13.74	0.00	0.00	0.00	3.00	3.00
June 1, 2007	5.19	12.59	0.00	0.00	0.00	3.00	3.00
June 10, 2007	6.07	13.47	0.00	0.00	0.00	3.00	3.00
June 16, 2007	8.18	15.57	0.00	0.00	0.00	3.00	3.00

Oil & Gas Regulatory Authority
Civic Center, Sector G-6, Islamabad - Pakistan
Tel: +92 51 9221715-23 Fax: +92 51 9221714
E-mail: secretary@ogra.org.pk
Website: www.ogra.org.pk